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Revista de Antropología, Ciencias de la Comunicación y de la Información, Filosofía,  
Linguística y Semiótica, Problemas del Desarrollo, la Ciencia y la Tecnología

Año 36, 2020, Especial N°

# 27

Revista de Ciencias Humanas y Sociales

ISSN 1012-1587/ ISSNc: 2477-9385

Depósito Legal pp 198402ZU45



Universidad del Zulia  
Facultad Experimental de Ciencias  
Departamento de Ciencias Humanas  
Maracaibo - Venezuela



## **Indonesia Stock Exchange: What Affects the Dividend Policy on Mining Companies?**

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### **Abstract**

Mining companies have a major influence on Indonesia's economic growth so that good capital management is needed regarding investment. Dividend policy is a problem that often debated by shareholders and the company because it is considered to signal the company's financial condition. This study analyzed factors (Cash Ratio, Debt to Equity Ratio, Return of Asset and Firm Size) that influence dividend policy in mining companies in Indonesia. Cash ratio and Debt to Equity Ratio were partially tested against negative dividend policies which were not significant ( $p>0.05$ ) while Return on Assets and Firm Size partially showed significant ( $p<0.05$ ).

**Keywords:** Dividend policy, Cash ratio, Debt to equity ratio, Return of asset, Firm size.

## **Bolsa de Indonesia: ¿Qué afecta a la política de dividendos para las empresas mineras?**

### **Resumen**

Las compañías mineras tienen una gran influencia en el crecimiento económico de Indonesia, por lo que se necesita una buena gestión Del capital con respecto a la inversión. La política de dividendos es UN problema que a menudo debaten los accionistas y la empresa porque se considera que indica la situación financiera de la empresa. Este estudio analizó los factores (índice de efectivo, índice de deuda a capital, retorno Del activo y tamaño de la empresa) que influyen en la política de dividendos en las empresas mineras en Indonesia. La razón de efectivo y la razón de deuda a capital se probaron parcialmente con políticas de dividendos negativos que no

fueron significativas ( $p > 0.05$ ), mientras que el rendimiento de los activos y el tamaño de la empresa mostraron parcialmente ( $p < 0.05$ ).

**Palabras clave:** Política de dividendos, Índice de efectivo, Índice de deuda a capital, Retorno de activos, Tamaño de la empresa.

## 1. INTRODUCTION

The success of maximizing the value of the company will make a meaningful contribution to the all social environment (WIDI HIDAYAT, 2019). One effort to maximize the value of the company is with the opportunity of stock investment. The opportunity for investment in shares in Indonesia is now getting bigger and wider. There are 533 companies have traded shares on the Indonesia Stock Exchange, thus could be the opportunities for investors to invest in long-term investments and trading needs. One of the opportunities for stock investment is in mining companies because Indonesia has adequate resources. In the process of development, mining companies need high funding so that many companies become go public and are involved in the Indonesian stock exchange. At this point, there are 41 companies in the mining sector that have been listed on the Indonesia Stock Exchange.

Investors invest their capital in order to obtain returns as dividends or profits derived from the capital gains, the difference between a selling price and a purchasw price, over the proportion of their ownership of certain capital groups (Indonesian Accounting Association (IAI), 2015). Dividend policy is an important aspect, as

evidenced by the large amount of money involved and the attention that companies, security analysts, and investors give to dividends (H. KENT BAKER, ROB WEIGAND, 2015). Dividend policy and dividend records will affect the value of the company as happened in Indonesia (H. KENT BAKER, 2012, 2019). The increased company value indicates that shareholder value has also increased. The value of the company in a company that has gone public can be indicated through the market value of its shares since the market value of the company's stock reflects the investor's assessment of each equity owned by the company (HENDRIANTO, 2015).

The problem that occurs is the investors have difficulty predicting the rate of return on these dividends. This is because dividend policy for company management is the most difficult policy that has to be determined. Companies that will distribute dividends, take a lot of consideration (BRIGHAM, E, F and WESTON, J, 2005). Due to this policy, there are several parties with different interests, namely the interests of shareholders, creditors, and the company. Late payment of dividends, profitability, cash flow, and life cycle are determinants of dividend policy (JASIM Al-AJMI, 2011). Dividend policy relates to determining the amount of dividend payout ratio, which is the amount of the percentage of net profit after tax that is distributed as dividends to shareholders (SUDANA, 2011). The value of the dividend payout ratio will affect the investment decisions of shareholders and, on the other hand, affect the financial condition of the company (MARDALENI, 2014).

Various considerations in dividend policy are influenced by many factors that have been reviewed in previous studies at other research sites and different methods. This study aimed to survey managers of dividend payers companies listed on the Indonesia Stock Exchange (IDX), in order to observe the factors that influenced dividend policy, dividend issues, and explanations for dividend payments (KEN BAKER, 2009). Dividend payments are cash outflows that reduce the company's cash (VAN HORNE, 2007). If the company's cash balance is huge, the company is able to pay dividends. Thus, the measurement of liquidity level in this study used a cash ratio, which is dividing cash into current debt. Leverage is the ability of a company to fulfill its long-term obligations. A high level of leverage indicates that more funding sources come from external sources of debt. Increased debt will in turn affect the size of net income, so the company will focus more on paying its long-term and short-term debt than distributing dividends to shareholder cans. In this study, the researchers measured the level of leverage using an indicator of debt to equity ratio, which is dividing total debt to total equity. Profitability is the level of net profit that the company can achieve when operating the business. The greater the profits obtained, the greater the company's ability to pay dividends (NURHAYATI, 2013). In this study, the researchers measured the return on asset ratio, which is dividing net income after tax on total assets. Another factor that is considered to influence the dividend policy is the firm size or size of the company. A large, well-established company will have an easy access to the capital market compared to the small ones.

This study used financial ratio variables in determining dividend policy because the ratio is one of the analyses needed to measure the condition and efficiency of the company's operations in achieving company goals. Factors obtained will support improvements in the company's dividend policy scheme. Thus, this study aimed to analyze factors, such as Cash Ratio, Debt to Equity Ratio, Return on Assets, and Firm Size that influence dividend policy in mining companies in Indonesia.

## **2. METHODOLOGY**

This was a quantitative study that examined the correlation between Cash Ratio, Debt to Equity Ratio, Return on Assets, and Firm Size to Dividend Payout Ratio. The data used were panel data between time series data and cross section. Secondary data used were from the financial statements of mining companies that had been published on Indonesia Stock Exchange (IDX) in the period of 2011-2015 through the website and literature study. Eight mining companies listed on the Indonesia Stock Exchange met the criteria in the purposive judgment sampling method. The criteria were listing on the Indonesia Stock Exchange with the period 2011-2015, mining companies that report financials for 5 consecutive years, and companies that distributed dividends during the 2011-2015 period. Data were analyzed using the method of multiple linear regression analysis partial test  $t$  with  $\alpha = 0.05$  through SPSS software. In addition, the determination coefficient (R<sup>2</sup>) was also analyzed. Analysis was carried out after the regression

model was free from classic assumption test violations. Classical assumption test was done through normality test (Kolmogorov Sminov Test), multicollinearity (tolerance value and Variance Inflation Factor-VIF test), Durbin Watson (DW) test autocorrelation, and heteroscedasticity. Multiple linear regression models can be formulated as follows:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon \quad (1)$$

Annotation: Y = Dependent Variable of Dividend Payout Ratio,  $\alpha$  = Constants,  $\beta_1$  = regression coefficient of Cash Ratio,  $\beta_2$  = Regression coefficient of Debt to Equity Ratio,  $\beta_3$  = Regression coefficient of Return on Asset,  $\beta_4$  = Regression coefficient of Firm Size, X1 = Independent variable of Cash Ratio, X2 = Independent variable of Debt to Equity Ratio, X3 = Independent variable of Return on Asset, X4 = Variable independent of Firm Size,  $\varepsilon$  = Error

### **3. RESULTS and DISCUSSION**

A total of 40 samples were recorded from 8 companies over a period of 5 years (2011-2015). However, after a statistical test, 3 samples did not meet one of the classic assumption tests, namely the normality test. So the samples became 37 people. The result from the Cash Ratio ratio, the highest during the study period was 3.551 in 2011, and the lowest was 0.113 in 2011. The result from the debt to equity ratio, the highest was during the study period of 3.945 in 2012.



In contrast, the lowest DER ratio was 0.409 in 2011. Meanwhile the result of ROA ratio, the highest during the study period was 0.346 in 2011. Conversely, the lowest was -0.064 in 2015.

The result from SIZE variable, the highest during the study was 22.630 in 2013. On the contrary, the lowest was 17,658 in 2011. If we see through the result of dividend payout ratio, the highest during the study was 1.195 in 2012. In contrast, the lowest was -0,677 in 2011. Financial ratios used in this study, namely Cash Ratio (CR), Debt to Equity Ratio (DER), Return on Assets (ROA), Firm Size (SIZE), and Dividend Payout Ratio (DPR) are presented in Table 1.

Table 1: The effect of determinant factors on the Dividend Payout Ratio

Variable	Minimum	Maximum	Mean	t	Sig
Cash Ratio	0.113	3.551	0.80443	-.725	0.473
Debt to Equity Ratio	0.409	3.945	1.44420	-.028	0.978
Return of Asset	-0.064	0.346	0.08443	2.424	0.021*
Firm Size	17.658	22.630	20.41734	2.602	0.014*
Dividend Payout Ratio	-0.677	1.195	0.36666		

Annotation: \*shows significance at  $\alpha = 0.05$

Test for normality through the Kolmogorov Smirnov one-sample test obtained a number of 0.117 with a significance level of

0.200. This significance value was greater than 0.05, which means that the data were normally distributed. Multicollinearity test through tolerance value and Variance Inflation Factor (VIF) showed no symptoms of multicollinearity because all independent variables had tolerance numbers  $>0.10$  and VIF values  $<10$ . Autocorrelation test through Durbin-Watson test results obtained DW value of 1.445 with a ratio of  $1.249 \leq 1.445 \leq 1.723$  indicated that there was no autocorrelation. The heteroscedasticity test showed homoscedasticity.

Formula formed from the results of regression tests is:  $DPR = -2,214 - 0,072 CR - 0,002 DER + 2,050 ROA + 0,121 SIZE + \varepsilon$

The constant value was -2.214, indicating that if all the independent variables of Cash Ratio (CR), Debt to Equity Ratio (DER), Return on Assets (ROA) and Firm Size (SIZE) were 0, then the dividend policy predictive value were down by 2.214. Regression coefficient ( $\beta$ ) shows varied signs, positive and negative.

The regression coefficient value of the variable cash ratio (CR) was 0.072, meaning that if the cash ratio changes one-unit, then the dividend policy in mining companies listed on the Indonesia Stock Exchange in 2011 to 2015 will change by 0.072. A negative sign indicates the direction of change which is the opposite of the variable cash ratio to the dividend payout ratio. If the cash ratio (CR) is increased by one unit, the Dividend Payout Ratio (DPR) will decrease by 0.072, and vice versa. If the cash ratio (CR) is reduced by one unit,

then the Dividend Payout Ratio (DPR) will increase by 0.072, assuming the other independent variables do not change.

The regression coefficient of the debt to equity ratio (DER) variable was 0.002, meaning that if the debt to equity ratio changed one-unit, then the dividend policy in mining companies listed on the Indonesia Stock Exchange in 2011 to 2015 would change by 0.002. A negative sign indicates the direction of the opposite change between the variable debt to equity ratio to the dividend payout ratio. If the debt to equity ratio (DER) is increased by one unit, the debt to equity ratio (DER) will decrease by 0.002, and vice versa. If the debt to equity ratio (DER) is reduced by one unit, the Dividend Payout Ratio (DPR) will increase by 0.002 with the assumptions of other independent variables do not change. This variable has the smallest influence on the Dividend Payout Ratio (DPR) compared to other independent variables because it has the smallest coefficient value.

Regression coefficient value variable return on assets (ROA) was 2.050, meaning that if return on assets changes one-unit, then the dividend policy in mining companies listed on the Indonesia Stock Exchange in 2011 to 2015 will change by 2.050. A positive sign shows the direction of the change in direction between the return on asset variable and the dividend payout ratio. If the return of assets (ROA) is increased by one unit, the Dividend Payout Ratio (DPR) will increase by 2.050, and vice versa. If the return of assets (ROA) is reduced by one unit, the Dividend Payout Ratio (DPR) will decrease by 2.050, assuming the independent variable others do not change. This variable

has the greatest influence on the Dividend Payout Ratio (DPR) compared to other independent variables because it has the largest coefficient value.

The regression coefficient of firm size (SIZE) variable was 0.121, meaning that if the firm size changes one-unit, then the dividend policy in mining companies listed on the Indonesia Stock Exchange in 2011 to 2015 will change by 0.121. A positive sign shows the direction of change in the direction of the variable firm size to the dividend payout ratio. If the firm size (SIZE) is increased by one unit, the Dividend Payout Ratio (DPR) will increase by 0.121, and vice versa. If firm size (SIZE) is reduced by one unit, the Dividend Payout Ratio (DPR) will decrease by 0.121, assuming the other independent variables do not change.

The hypothesis testing aims to prove the significance of the effect of the cash ratio, debt to equity ratio, return on assets, and firm size on dividend policies measured through the dividend payout ratio. Tests were carried out partially using the t-test. The coefficient of determination test showed the effect of the independent variables on the dependent variable which can be explained by this equation model as much as 27.7%. This shows that the influence of the cash ratio variable, debt to equity ratio, return on assets and firm size on dividend policy that can be explained by this equation model is 27.7%, and the remaining 72.3% is influenced by other variables that are still many are not found in this regression model.

The partial test (t-test) showed different results and is presented in Table 1. The value of t count for the variable cash ratio (CR) for dividend policy was -0.725 with a significance value of 0.473. The cash ratio (CR) partially had a negative and not significant effect on dividend policy. This means that the increase or decrease in the cash ratio does not have a significant effect on dividend policy. The value of t calculated for the variable debt to equity ratio (DER) to dividend policy was -0.028 with a significance value of 0.978. The partial debt to equity ratio (DER) had a negative and not significant effect on dividend policy. This means that an increase or decrease in the debt to equity ratio does not have a major effect on dividend policy.

Cash Ratio (CR), Debt to Equity Ratio (DER), Return on Assets (ROA), and Firm Size (SIZE) have different impacts on the Dividend Payout Ratio (DPR). This study showed that each company has its own considerations regarding dividend policy. There is no set of universal factors that are suitable for all companies because dividend policy is sensitive to many factors, including company characteristics, market characteristics, and forms of dividend substitution. Universal or one-size theory or explanation for all reasons why companies pay dividends is too simple (H. Kent Baker, Sujata Kapoor, 2015). Companies have dividend policies that are more flexible because they are willing to cut or pass dividends when profits decline and not pay dividends when losses are reported (Jasim Al - Ajmi, 2011).

The variables described in this study were only able to reach 27.7%, so there were still many other factors in it. Many other factors

that influenced dividend policies need to be considered given the most important determinants of dividends as income stability and current and expected levels of income in the future (H. KENT BAKER, 2012). Several factors such as profit, debt, size, investment, and the largest shareholders have an influence on dividend policy, with income, firm size, and disclosed investment having a positive influence, while debt and the huge shareholders have a negative influence (YUSNILIYANA YUSOF, 2016). Decisions of past dividends or payments, profitability and investment opportunities are a common set of determinants with good implications for the tendency to pay dividends and payments (N. JAYANTHA DEWASIRI, 2019).

Firm size, industry impact, corporate governance, free cash flow, income, past dividends, profitability, investment opportunities, net working capital, concentrated ownership structure, and investor preference are the most important determinants of dividends (H. KENT BAKER, ROB WEIGAND, 2015). Earnings and debt management, company risk and liquidity can affect the company's dividend policy (ANIS BEN AMAR, OLFA BEN SALAH, 2018).

Cash ratio had a negative and not significant effect on dividend policy. Cash ratio is one ratio to measure the liquidity of a company. Liquidity refers to the company's ability to fulfill its short-term obligations. In this study, it is not in line with the hypothesis that the greater the cash ratio, the higher the company's policy in distributing dividends. This negative relationship between cash ratio and dividend policy showed that the greater the company's liquidity, the smaller dividends paid even though the ability to pay dividends increased. This is

because companies that have high liquidity they are able to cover their short-term liabilities.

However, the results of this study found that the negative relationship was not significant, indicating that companies with high liquidity were not always followed by small dividend payments. This means that the company does not pay too much attention to the liquidity factor in determining dividend policy. Cash ratio has a negative and significant effect on the dividend payout ratio (HENDRIANTO, 2015). Companies can only pay cash dividends if the level of company liquidity is sufficient. The higher the level of company liquidity, the greater the cash dividend that the company can afford to pay to shareholders (SUDANA, 2011).

Debt to equity ratio had a negative and not significant effect on dividend policy. Debt to equity ratio is one ratio to measure company leverage. The size of the capital structure is used as a filter tool. If the debt to equity capital ratio is relatively small, there are no problems with the financial condition of the company. In this study, it was not in line with the hypothesis that the greater the debt to equity ratio, the higher the company's policy in distributing dividends. The results of this study were incompatible with signaling theory. The theory revealed that managers use more debt as a signal that they cannot be trusted. Its increasing debt indicates that the company is seen as a prospect for the company not convincing in the future. Debt to equity ratio has a negative and significant effect on dividend payout ratio (HENDRIANTO, 2015). The effect of negative debt to equity ratio on dividend payout ratio indicates that profitable companies have more earnings available for investment and

tend to build their equity relative to debt. Increased debt will basically affect the size of the net income available to shareholders, including dividends to be received, because these obligations are prioritized rather than dividend distribution. The greater the ability of the company to borrow money, the greater the dividends paid to shareholders (SUDANA, 2011).

Return on assets had a positive and significant effect on dividend policy. Return on assets is one ratio to measure a company's profitability. In this study, it was in line with the hypothesis that companies which have higher profitability are more likely to pay dividends. With high profits, companies are able to pay more dividends. Return on assets had a positive and significant effect on dividend payout ratio (HENDRIANTO, 2015).

Firm size had a positive and significant effect on dividend policy. Firm size is one factor that considers investors in investing. In this study, it was in line with the hypothesis that large companies and liquid companies are indeed more likely to pay larger amounts of dividends. This shows that the size of the company has the strongest contribution in making dividend payment decisions. Small-sized, medium-sized, large-sized and overall companies in all industries depend on dividend policy (Ramachandran and Packki

#### **4. CONCLUSION**

From the results of study, we can conclude that Cash Ratio, Debt to Equity Ratio, Return of Asset and Firm Size showed different



effects on dividend policy, but Return of Asset and Firm Size were involved in small-scale policy making. This study was limited to the internal information of each company based on the company's financial statements, a relatively short period of time and one type of industry.

## **IMPLICATION**

The results showed that firm size and return on assets had a significant effect on the dividend payout ratio, so the company should focus on increasing these two factors in order to increase the amount of dividend payments. For investors who expect dividends from companies, they should pay attention to companies that have strong fundamentals such as firm size and return on assets.

## **RECOMMENDATION**

Further study is suggested to use the company's external information, a longer and broader observation period in other research sectors so that broader coverage can be obtained.

## **REFERENCES**

- AMAR, A. B., SALAH, O. B., & JARBOUI, A. 2018. "Do discretionary accruals affect firms' corporate dividend policy? Evidence from France". **Journal of Financial Reporting and Accounting**, 16(2), pp. 333–347.

- BAKER, H. K., & WEIGAND, R. 2015. "Corporate dividend policy revisited". *Managerial Finance*. 41(2), pp. 126–144.
- BAKER, H. K., DEWASIRI, N. J., KORALALAGE, W. B. Y., & AZEEZ, A. A. 2019. "Dividend policy determinants of Sri Lankan firms: a triangulation approach". ***Managerial Finance***, 45(1), pp. 2–20.
- BAKER, H. K., WEIGAND, R., & KAPOOR, S. 2015. "Dividend policy in India: new survey evidence". ***Managerial Finance***, 41(2), pp. 182–200.
- BRIGHAM, E.F., & DAN WESTON, J, F. 2005. **Dasar-dasar Manajemen Keuangan**. 9th edn. Jakarta: Erlangga.
- HENDRIANTO, S. 2015. "Analisis Cash Ratio, Debt to Equity Ratio, Return on Asset, Growth, dan Pengaruhnya terhadap Dividend Payout Ratio pada Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia", ***Journal Tekun***, 2(1).
- IKATAN AKUNTANSI INDONESIA (IAI) 2015. **Pernyataan Standar Akuntansi Keuangan (PSAK )**. Jakarta: Salemba Empat.
- JASIM AL-AJMI, H. A. H. 2011 "Corporate dividends decisions: evidence from Saudi Arabia", ***The Journal of Risk Finance***, 12(1), pp. 41–56. doi: , <https://doi.org/10.1108/15265941111100067>.
- JAYANTHA DEWASIRI, N., ET AL. 2019. '**Determinants of dividend policy: evidence from an emerging and developing market**', *Managerial Finance*. doi: <https://doi.org/10.1108/MF-09-2017-0331>.
- MARDALENI 2014. "Analisis Pengaruh Return On Equity, Debt Equity Ratio dan Current Ratio Terhadap Dividen Payout Ratio Pada Perusahaan Property dan Real Estate yang Terdaftar di Bursa Efek Indonesia Periode 2010 - 2012.", ***Journal Apresiasi Ekonomi***, 2(2).
- NURHAYATI, M. 2013. "Profitabilitas, Likuiditas, dan Ukuran Perusahaan Pengaruhnya terhadap Kebijakan Dividen dan Nilai Perusahaan Sektor Non Jasa", ***Journal Keuangan dan Bisnis***, 5(2).

- RAMACHANDRAN, A., & PACKKIRISAMY, V. 2007. "The Impact of Firm Size on Dividend Behaviour: A Study With Reference to Corporate Firms across Industries in India", **Managing Global Transitions**, 8(1), pp. 49–78.
- SUDANA, I. M. 2011. **Manajemen Keuangan Perusahaan: Teori dan Praktik**. Jakarta: Erlangga.
- VAN HORNE, J. C. DAN J. M. W. 2007. **Prinsip-Prinsip Manajemen Keuangan. Buku Dua. Edisi Keduabelas**. Jakarta: Salemba Empat.
- WIDI HIDAYAT, ET AL. 2019. "Variables Affecting the Book Value of Manufacturing Companies : The Case of Indonesia", **International Journal of Economics and Business Administration**, VII(1), pp. 76–84.
- YUSNILYANA YUSOF, S. I. 2016. "Determinants of dividend policy of public listed companies in Malaysia", **Review of International Business and Strategy**, 26(1), pp. 88–99. doi: <https://doi.org/10.1108/RIBS-02-2014-0030>.





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Revista de Ciencias Humanas y Sociales

Año 36, Especial N° 27 (2020)

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia.

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