

# Analysis Managerial Ownership, Free Cash Flow And Debt On Dividends For Transportation And Infrastructure Companies In Indonesia

Husaini<sup>1,\*</sup> Nurlela<sup>2</sup> Marzuki<sup>3</sup>

<sup>1</sup>Faculty of Economics and Business, University of Malikussaleh

<sup>2</sup>Faculty of Economics and Business, University of Malikussaleh

<sup>3</sup>Faculty of Economics and Business, University of Malikussaleh \*Corresponding author. Email [husaini@unimal.ac.id](mailto:husaini@unimal.ac.id)

## ABSTRACT

This study examines the effect of managerial ownership, free cash flow and debt on dividends in transportation and infrastructure companies in Indonesia. Sampling method use purposive and gotten 27 companies from 2015-2020. The data analysis method uses the Panel Data Regression analysis. The results of this study find that managerial ownership has a positive and significant effect, FCF has a negative and significant effect, while leverage proxy by DER has no significant effect on dividends. The results of this study indicate the occurrence of type I agency conflict in transportation and infrastructure companies in Indonesia.

**Keywords:** Dividend, Managerial Ownership, FCF and Debt

**DOI :** 10.29103/icospolhum.v3i.61

## 1. INTRODUCTION

Determination of dividend policy often leads to frequent disagreements between managers and shareholders. Managers are more likely to make dividends as internal funds while investors want dividends as compensation for their investment in the company. This difference in interests will trigger a conflict between managers and shareholders, which is better known as type I agency conflict, Jensen and Meckling (1976).

In this study, the variables used to analyze dividend policy are managerial ownership, free cash flow and the level of leverage owned by the company. Previous studies that tested the Free Cash Flow (FCF) and Leverage variables include Sari, & Budiasih (2016), Muchtar, et al (2021), (Wulandari, 2020), (Wahyuliza, 2019), Cahyono, et al, 2016), Gunawan, 2019), Jabbouri, 2016), (Le, et al, 2019). Researchers who use

managerial ownership variables include (Wuisan. et al, 2018), (Jayantia & Puspitasari, 2017), (Gunawan & Harjanto, 2019), (Widiari & Putra, 2017) and (Ullah & Khan 2012).

From the results of this study, there are still differences between researchers that provide an opportunity for re-examination of infrastructure and transportation companies in Indonesia with an observation period from 2015 to 2020. The results of this study will provide an overview of how the role of managerial ownership in companies is related to policy. dividend. Ideally, managerial ownership will reduce agency costs and minimize information asymmetry (Rozeff, 1982), (Easterbrook, 1984) (La Porta et al., 2000), (Denis & Osobov, 2008), (Eije & Megginson, 2008), (Brockman & Unlu, 2009). With reduced information asymmetry, corporate governance is getting better so that the dividend payout ratio is bigger. Empirically this research will describe how to treat dividends with the managerial ownership.

In addition, the presence of FCF in the company can also have positive and negative effects on dividend policy in the company. When there are many FCFs, it will provide opportunities for managers to waste (Laporta,

2000). Therefore, investors will force managers to pay dividends so that agency costs will be reduced from the FCF (Jensen, 1986) and Mollah et al, 2002). Another way to reduce agency costs and reduce conflicts related to FCF is to increase debt. When debt increases, it will indirectly force managers to reduce FCF by paying interest on debt or debt installments (Powel, 2012). However, the result of increasing debt will reduce the ratio of dividend payments to investors, Saxena (1999), Gill., et al (2010), Benavides (2016). The results of previous studies that used the FCF and Debt variance to study dividend policy were also found to be contradictory, therefore the authors re-examined these variables in this study.

## 2. LITERATURE REVIEW

### 2.1 Agency Theory

Agency theory initiated by Jensen and Meckling (1976) explains that in agency theory there is a separation of rights and obligations between managers and investors. As a result of this separation, there are often differences in interests, resulting in conflicts. Conflict occurs because the manager does not hold a significant portion of the total ownership. Agency problems also arise when decisions are made that are not in the interests of shareholders (Li, J, 2016). Agency problems that occur can cause agency costs (Krisdiana & Subardjo, 2018). Agency costs are costs incurred for monitoring the activities of managers to ensure the manager's performance is in accordance with the contract agreement.

In running the company, managers have the authority to use the company's cash. Free cash flow is considered to be one of the triggers for agency conflicts. Free Cash Flow is generally defined as the free cash flow remaining after the company pays for its operational activities. Krisdiana & Subardjo (2018) argue that managers want free cash flow to be used for investment, with the aim of increasing company growth which will have an impact on increasing positions, status and salaries. While investors expect Free Cash Flow to be reduced so that the dividend payout ratio increases.

### 2.2 Dividend Policy

Dividend policy is a decision on how much profit is paid as dividends rather than retained earnings for reinvestment (Brigham & Houston, 2011). The dividend payout ratio determines the amount of profit to be retained in the company as a source of funding (Sari & Budiasih, 2016). When holding profits, the amount of money left to pay dividends becomes small (Baker & Powel, 2012). In agency theory, dividend distribution will reduce agency costs associated with the separation between ownership and control of the company (Goyal & Muckley, 2013). While Bird-in-the-hand theory explains that investors prefer cash on hand rather than promises of future profits due to lower risk, (Baker & Kapoor, 2015).

### 2.3 Managerial ownership

Managerial ownership is a condition where the manager owns shares in the company or in other words the manager is also a shareholder of the company, Tarigan (2016). High managerial ownership is seen as reducing agency costs so that companies can use excess funds to be distributed as dividends (Sari & Budiasih, 2016). Managerial ownership has a positive influence on dividend policy (Nyonna, 2012). If management owns some shares in the company, this will affect managers in making decisions, managers will be motivated and be more careful in making policies. Management ownership is the proportion of shareholders from the management who actively take part in decision making for the company, (Duhri & Diantimala, 2018), (Ni Putu 2016), (Sonya (2016). The existence of managerial ownership becomes an interesting thing if it is associated with agency theory, managerial ownership is positively correlated with

dividends (Florackis et al, 2015)

### 2.4 Leverage

Leverage is a ratio used to determine the company's ability to pay all debts, both short-term debt and long-term debt. Leverage is the ratio of total debt to total equity, the results of the ratio calculation can be used as managers to assess the risks that will be faced by the company (Krisardiyansah & Amanah, 2020). The correlation between the level of debt and dividend payments is explained in the pecking order theory and the trade off theory (Trang, 2012). In the pecking order theory, it is explained that companies tend to use internal funds (retained earnings) to finance investments, as a result, the amount of dividends given to investors will decrease. The trade off theory explains that companies tend to use external funds (debt) to finance investments.

On the other hand, debt (Debt) is one of the mechanisms used to control agency conflicts (Powel 2012). Firms with more leverage and more investment opportunities tend to pay less dividends (Benavides at al, 2016). Companies with high leverage tend not to want to give high dividends and get more loans with the aim of limiting the risk of default (Trang, 2012).

### 2.5 Free Cash Flow

Free cash flow (FCF) is the remaining cash flow after optimal capital budgeting decisions (Muckley, 2013), (Keiso, 2018). FCF is used to check the financial flexibility of a company. Consistent with the theory of free cash flow, empirically shows that by reducing free cash flow under managerial control (Lucyanda and Lilyana, 2012). Managers must be controlled to use free cash flow appropriately. FCF restrictions are one way to control or discipline managers (Darmawati, et al, 2018).

FCF restrictions can be done by dividing dividends so that the amount of free cash available will be reduced (Benavides et al, 2016). Previous studies that tested the dividend relationship used cash flow as a proxy, because dividends were paid out of cash (Botoc & Pirtea, 2015).

From previous research (Le, et al (2019), (Patra et al. 2012), (Jabbouri, 2016). It was found that there is a negative correlation between free cash flow and dividends. The results of Harun, Sulfikram (2018) research state that the free variable cash flow has a

negative effect on the dividend payout ratio, meaning that the greater the level of free cash, the smaller the level of dividends to be paid by the company.

### 3. METHODOLOGY

#### 3.1 Population and Sample

The population in this study is Infrastructures, totaling 57 companies and Transportation & Logistics 28 companies with an observation period of 2015-2020. The data is obtained from reports published on the Indonesia Stock Exchange with a web page

(www.idx.co.id). The sampling was conducted using the purposive sampling method, namely companies that publish continuously during the observation period and distribute dividends to investors. Companies that do not pay dividends will be excluded in this study.

#### 3.2 Variable Operational Definition

The dependent variable in this study is the dividend estimated by the DPR, namely the comparison between dividends per share and earnings per share (Gumanti, 2013).

The independent variable used is Managerial Ownership where share ownership is from the management who participates in making company decisions. Managerial ownership can be measured by the percentage of shares owned by management divided by the total shares outstanding (Widiari & Putra, 2017). Then leverage is measured by the Debt to Equity Ratio, which is the comparison between total debt and total equity (Saputro and Hindasah, 2017; Ayu, 2013). The variable Free Cash Flow is the remaining cash flow after deducting investment activities, operating expenses and net working capital, (Atmawati, 2010; Basuki, 2017; Putri and Chabachip, 2013).

#### 3.3 Model Regression

The panel data regression model focuses on analysis with a combination of time series and cross section data, which are popularly known as pooled time series. A special feature of the time series is that it is a numerical sequence in which the interval between observations on a number of variables is constant and fixed. Meanwhile, cross section data is a unit of analysis at a certain point with observations on a number of variables.

Model selection in econometric analysis is an important step in addition to the formation of theoretical and predictable models, estimation of hypothesis testing, forecasting, and analysis of the policy implications of the model. Selection of the right model using the Chow test and Hausman test. The estimation of an economic model is needed in order to know the actual condition of an observed object. The general estimation model in this study is as follows:

$$DPR_{it} = \alpha + \beta_1 KM_{1it} + \beta_3 Debt_{2it} + \beta_4 FCF_{4it} + \epsilon_{it}$$

Where are:

$DPR_{it}$  : Dividen Payout Ratio periode

$t \ i$  : 1,2,3...N (cross section) t

: 1,2,3...T (time series)

$\epsilon_{it}$  : Error Term pada perusahaan i periode t

Constant, 1-3 : Regression coefficient

KM : Managerial Ownership,

DER = Debt (Leverage), FCF = Free

Cash Flows it : Error Term in

company i period t.

## 4. RESEARCH RESULT

### 4.1 Statistical Descriptive Analysis

Descriptive statistical analysis is used to determine the description of a data seen from the value of the frequency distribution and percentage, as well as the maximum, minimum, and average value (mean). The results of descriptive analysis in this study can be seen in the table below:

**Table 1** Statistical Descriptive Analysis

	Y	KM	DER	FCF
Mean	-0.762443	3.126957	0.264683	11.13833
Median	-0.556408	4.034241	0.255657	0.000000
Maximum	2.340493	4.441710	3.568563	31.85527
Minimum	-5.165569	0.000000	-6.480666	0.000000
Std. Dev.	0.916992	1.651217	1.041089	13.19760
Observations	189	189	189	189

Source: Processed Data, 2022

Based on Table 1, it can be seen that the number of observations made for dividend policy (Y) in this study were 189 observations. The average value of dividend policy in this study is -0.762443 with a standard deviation of 0.916992. The average value is smaller than the standard deviation value which indicates that the dividend policy of the Transportation and Infrastructure Sector Companies during the 2015-2021 period has high fluctuations.

Furthermore, Managerial Ownership has an average value of 3.126957 with a standard deviation of 1.651217.

The average value is higher than the standard deviation value which indicates that the managerial ownership of the Transportation and Infrastructure Sector Companies during the 2015-2021 period has low fluctuations. Leverage has an average value of 0.264683 with a standard deviation of 1.041089. The average value is smaller than the standard deviation value which indicates that the leverage of the Transportation Sector and Infrastructure Sector Companies during the 2015-2021 period has high fluctuations. Free Cash Flow has an average value of 11,13833 with a standard deviation of 13,19760. The average value is smaller than the standard deviation value which indicates that the free cash flow of Transportation Sector and Infrastructure Sector Companies during the 2015-2021 period has high fluctuations.

### 4.2 Correlation Analysis

Correlation analysis aims to see how big the relationship between the independent variables to the dependent variable. The results of the correlation analysis in this study are as follows:

**Table 2** Correlation Analysis

Correlation t-Statistic				
Probability	Y	KM	DEBT	FCF
Y	1.000000			
KM	0.010571		1.000000	
	0.144565		-----	
	0.8852		-----	
DEBT	0.197362	1.000000	-0.231665	
	2.753030	-----	-3.256558	
	0.0065	-----	0.0013	
FCF	-0.270232	0.079984	-0.031866	1.000000
	-3.838160	1.097281	-0.435977	-----
	0.0002	0.2739	0.6634	-----

Source: Processed Data, 2022

Based on the table above, it can be seen that all the correlation values (relationships) of the variables used in this study. To see the correlation between the independent variables (KM, Debt and FCF on the dependent variable (Dividend Policy) it can be seen in the dividend policy column (Y). The results of the correlation analysis of the independent variables and the dependent variable in this study are DER has no significant positive correlation at the 1%, 5% and 10% levels with a dividend policy of 0.010571. Managerial Ownership has a positive and significant correlation at the 5% level with a dividend policy of 0.197362. and Free Cash Flow has a negative and significant

correlation at the 5% level with a dividend policy of 0.270232.

### 4.3 Model Selection Technique

In order for panel data regression analysis to get a good model, a model selection technique is needed. Panel data regression consists of 3 models, namely Common Effect Model (CEM), Fixed Effect Model (FEM) and Random Effect Model (REM). To determine the best model and in accordance with this study, the tests carried out were the Chow test and the Hausman test. The results of the Chow test and Hausman test in this study are as follows:

#### Chow test

Chow test (Chow test) is a test conducted to select the best model between the Common Effect Model (CEM) and Fixed effect model (FEM). Gujarati and Porter (2012) say that the basis for making decisions on the Chow test is by looking at probability. If the results of the Chow test are significant (probability < 0.05), the model chosen is FEM and if the results of the Chow test are significant (probability > 0.05), the model chosen is CEM. The results of the Chow test in this study are as follows:

**Table 3.** Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1.690300	(26,157)	0.0269
Cross-section Chi-square	46.645088	26	0.0077

Source: Processed Data, 2022

Based on the table above, it can be seen that the probability value in the Chi Square line is 0.0077. This value is within the standard error tolerance value in this study, which is 0.05. Therefore, based on the results of the Chow test the best model in this study is the Fixed effect model (FEM), so it is necessary to carry out the Hausman test to choose the best model between the Fixed effect model (FEM) and the random effect model (REM).

#### Hausman test

Hausman test is used to compare the Fixed effect model (FEM) and the Random Effect Model (REM). Decision making by looking at the probability value (p) for random cross-sections. If the p value > 0.05 then the selected model is REM. But if p < 0.05 then the chosen model is FEM. The results of the Hausman test in this study are presented in Table 4 below:

**Table 4.** Hausman test results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.

Cross-section random	5.584121	5	0.3488
----------------------	----------	---	--------

Source: Processed Data, 2022

Based on the table above, the Hausman test shows the probability value of  $p = 0.3488 > 0.05$ . In other words, the Hausman test chose the random effect model (REM) as the right modality, so that the data estimation and hypothesis testing in this study used panel data regression with the random effect model (REM).

#### 4.4 Regression Data Panel

Based on the results of the model selection that has been done, the model that is suitable for this research is the random effect model (REM). The results of panel data regression with the random effect model (REM) can be seen in the table below:

**Table 5.** Results of Panel Data Regression with Random Effect Model (REM).

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Managerial				
Ownership	0.131964	0.049968	2.640955	0.0090
DER	0.062346	0.072117	0.864512	0.3884
FCF	-0.021603	0.004956	-4.359155	0.0000
C	-9494.871	1931.582	-4.915593	0.0000
R-squared	0.119300	Mean dependent var	-5726.358	
Adjusted Rsquared	0.095237	S.D. dependent var	8738.740	
S.E. of regression	8312.206	Sum squared resid	1.26E+10	F-statistic
	4.957831	Durbin-Watson stat	1.369083	
Prob(F-statistic)			0.000279	

Source: Processed Data, 2022

Based on the table above, the regression equations that can be arranged in this study are as follows:

$$Y = (-9494.871) + 0.131964KM + 0.062346DER - 0.021603FCF$$

#### 4.5 Effect of DER on Dividend Policy (DPR)

Based on Table 5 Estimation of Panel Data Regression with Random Effect Model, it can be seen that leverage has a tcount value of 0.864512 with a probability value of 0.3884. The probability value is not statistically significant at 5%. So it can be concluded that the leverage variable has no significant positive effect on dividend policy (DPR) in

transportation and infrastructure sector companies during 2015-2021.

The results of this study are in line with the findings of Rizqia et al (2013), Nisa (2017) and Harun (2018) who found that leverage (DER) had no significant effect on the DPR. However, this contradicts the findings of Mawarni & Ratnadi (2014), Firdaus at al (2020) and Saragih at al (2021) who found that leverage (DER) had a significant effect on dividend policy (DPR).

The results of this study identify that leverage has a positive and insignificant effect, the higher a company's leverage indicates that the higher the level of debt ratio owned by the company. High leverage does not reduce the amount of dividends to be paid by the company to shareholders because the company is still able to pay its obligations and interest smoothly with its cash.

#### 4.6 Effect of Managerial Ownership on Dividend Policy (DPR)

Based on Table 8 Estimation of Panel Data Regression with Random Effect Model, it can be seen that managerial ownership has a tcount value of 2.640955 with a probability value of 0.0090. The probability value is statistically significant at 5%. So it can be concluded that the managerial ownership variable has a positive and significant effect on dividend policy (DPR) in transportation and infrastructure sector companies during 2015-2021.

The results of this study are in line with the findings of Rizqia et al (2013) who found managerial ownership has a significant effect on the DPR. However, this contradicts the findings and findings of Johannes et al (2021), who found managerial ownership had no significant effect on the DPR. The results of this study identify that managerial ownership has a positive and significant effect. The high managerial ownership of a company will affect the company's dividend payments, in other words, high managerial ownership will increase the dividends paid by the company to shareholders. This happens because managerial ownership is still not so dominant in the transportation sector and infrastructure sector, the average level of managerial ownership in the two sectors is 45.36% where this value has a low portion.

#### 4.7 Effect of Free Cash Flow on Dividend Policy (DPR)

Based on Table 8 Estimation of Panel Data Regression with Fixed Effect Model, it can be seen that free cash flow has a tcount value of (-4.359155) with a probability value of 0.0000. The probability value is statistically significant at 5%. So it can be concluded that

the free cash flow variable has a significant effect on dividend policy (DPR) in transportation and infrastructure sector companies during 2015-2021. In other words, H5 in this study can be rejected.

The results of this study are in line with the findings of Harun (2018) who found free cash flow to have a significant negative effect on the DPR. However, this contradicts the findings of Sari & Buadiah (2016), Widiari & Putra (2017), Krisdiana & Subardjo (2018), Adiwibowo & Larasati (2020) and Firdaus et al (2020) who found that free cash flow had a significant positive effect on dividend policy (DPR).

The results of this study indicate that free cash flow has a negative and significant effect. High free cash flow in a company can reduce the amount of dividends to be paid to shareholders because the company chooses a policy that some of the free cash flow owned by the company will be retained as retained earnings to be used on investment opportunities that generate high profits.

## 5. Conclusion

Based on the results of data analysis that has been carried out on transportation and infrastructure companies, it can be concluded that managerial ownership has a positive and significant effect on dividend policy. Meanwhile, DER has no significant effect on dividend policy but has a positive relationship. Then FCF has a negative and significant effect on dividend policy. This means that a high FCF of a company can reduce dividend distribution. This condition indicates that there is a type I agency conflict in transportation and infrastructure companies in Indonesia.

## Suggestion

Based on the results of the research conducted, it provides information that there are indications of conflicts between managers and investors in transportation and infrastructure companies. Therefore, it is recommended for investors to take steps so that potential conflicts can be handled. For further research, it is recommended to add investment variables, so that the detection of conflicts becomes even stronger. In addition, it is necessary to expand the sampling to see the potential for conflict as a whole in the Indonesia Stock Exchange.

## ACKNOWLEDGMENT

In carrying out this research, the authors obtained sources from the PNB of Malikussaleh University in 2022. Therefore, I would like to thank the leadership of Malikussaleh University for making this policy so that the intensity of research and lecturer publications increases significantly.

## REFERENCES

- [1] Adiwibowo, A., Larasati, O., & Nurmala, P. (2020). Pengaruh Free Cash Flow dan Investment Opportunity Set Terhadap Kebijakan Dividen. *Jrka* 7(2). 20-43.
- [2] Agrawal, A., & Nasser, T. (2018). Corporate Financial and Investment Policies in the Presence of a Blockholder on the Board. *Quarterly Journal of Finance*, 8(03), 1850012.
- [3] Alamsyah, A. R. (2018). Pengaruh Struktur Kepemilikan, Struktur Modal, dan Ios terhadap Nilai Perusahaan dengan Kebijakan Dividen sebagai Variabel Intervening pada Perusahaan Manufaktur Terdaftar di Bei. *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 12(1), 9-16.
- [4] Baker, H.K. and S. Kapoor, 2015. Dividend policy in India: New survey evidence. *Managerial Finance*, 41(2): 182-204. Available at: <https://doi.org/10.1108/mf-01-2014-0024>.
- [5] Baker, H. K., & Powell, G. E. (2012). Dividend policy in Indonesia: survey evidence from executives. *Journal of Asia Business Studies*.
- [6] Benavides, J., Berggrun, L., & Perafan, H. (2016). Dividend payout policies: evidence from Latin America. *Finance Research Letters*, 17, 197-210.
- [7] Brigham, Eugene F. dan Houston, Joel F. (2013), *Dasar-dasar Manajemen Keuangan*, Edisi 11 : Salemba Empat, Jakarta.
- [8] Boțoc, C., & Pirtea, M. (2014). Dividend payout policy drivers: Evidence from emerging countries. *Emerging Markets Finance and Trade*, 50(sup4), 95-112.
- [9] Cahyono, D. D., Andini, R., & Raharjo, K. (2016). Pengaruh komite audit, kepemilikan institusional, dewan komisaris, ukuran perusahaan (Size), leverage (DER) dan profitabilitas (ROA) terhadap tindakan penghindaran pajak (tax avoidance) pada perusahaan perbankan yang listing BEI periode tahun 2011–2013. *Journal Of Accounting*, 2(2).
- [10] Chang, M., Chang, B., & Dutta, S. (2020). National culture, firm characteristics, and dividend policy. *Emerging Markets Finance and Trade*, 56(1), 149-163.
- [11] Duhri, R., & Diantimala, Y. (2018). The Influence of Institutional Ownership, Individual Ownership, and Managerial Ownership Toward Dividend Payout Ratio at Non-Financial Companies

- Registered in Indonesia Stock Exchange in 20122016. *International Journal of Social Science and Economic*, 3(3), 786-801.
- [12] Diana, N., & Hutasoit, H. (2017). Pengaruh Free Cash Flow dan Kepemilikan Institusional Terhadap Kebijakan Dividen dengan Profitabilitas sebagai Variabel Moderating. *Jurnal Akuntansi Manajerial (Managerial Accounting Journal)*, 2(2), 77-89.
- [13] Febrianti, D., & Zulvia, Y. (2020). Pengaruh Struktur Kepemilikan, Leverage, Ukuran Perusahaan Terhadap Kebijakan Dividen Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2013-2017. *Jurnal Ilmiah Mahasiswa Ekonomi Manajemen*, 5(1), 201-219.
- [14] Firdaus, S. N., Mujino, & Rinofah, R. (2020) Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional, Arus Kas Bebas dan Leverage Terhadap Kebijakan Dividen. *Jurnal Ilmiah Manajemen Bisnis*, 6(1), 77-85.
- [14] Florackis C., Kanas, A., & Kostakis, A. (2015). Dividend policy, managerial ownership and debt financing: A non-parametric perspective. *European Journal of Operational Research*, 241(3), 783-795.
- [15] Goyal, A., & Muckley, C. (2013). Cash dividends and investor protection in Asia. *International Review of Financial Analysis*, 29, 31-43.
- [15] Ghozali, Imam. (2012). *Aplikasi Analisis Multivariate Dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- [16] Gujarati, D., & Porter, D. (2012) *Dasar-Dasar Ekonometrika*. Salemba Empat.
- [17] Gunawan, A., & Harjanto, K. (2019). Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan, Pertumbuhan Perusahaan dan Struktur Kepemilikan terhadap Kebijakan Dividen. *Ultima Accounting: Jurnal Ilmu Akuntansi*, 11(1), 81-107.
- [18] Harakeh, M. (2020). Dividend policy and corporate investment under information shocks. *Journal of International Financial Markets, Institutions and Money*, 65, 101184.
- [19] Harun, S. (2018) Pengaruh Profitabilitas, Free Cash Flow, Leverage, Likuiditas dan Size Terhadap Dividend Payout Ratio (DPR) Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia. 1-13.
- [20] Ibrahim, Y., Uddin, M. M., Taufil Mohd, K. N., & Minai, M. S. (2013). Agency costs and the longrun performance of debt issuers. *Asian Academy of Management Journal of Accounting and Finance*, 9(1), 67-87.
- [21] Jabbouri, I. (2016). Determinants of Corporate Dividend Policy in Emerging Markets: Evidence from MENA Stock Markets. *Research in International Business and Finance*, 37, 283–298. <https://doi.org/10.1016/j.ribaf.2016.01.018>
- [22] Jayanti, I. S. D., & Puspitasari, A. F. (2017). Struktur Kepemilikan dan Kebijakan Dividen pada Perusahaan Manufaktur di Indonesia. *The Indonesian Journal of Applied Business*, 1(1), 113.
- [23] Jiraporn, P., Kim, J. C., & Kim, Y. S. (2011). Dividend payouts and corporate governance quality: An empirical investigation. *Financial Review*, 46(2), 251-279.
- [24] Johanes, S. R., Hendiarto, R. S., & Nugraha, H. M. (2021). The Effect Of Institutional Ownership, Managerial Ownership and Company Siza to Dividend Policy. *International Journal Of Trends in Accounting Research*, 2(1), 87-96.
- [25] Krisardiyansah, & Amanah, L. (2020) Pengaruh Free Cash Flow, Profitabilitas, Likuiditas dan Leverage Terhadap Kebijakan Dividen. *Jurnal Kajian Akuntansi Dan Bisnis Terkini*, 1(1), 131148.
- [26] Krisdiana, E., & Subardjo, A. (2019) Invesment Opportunity Set Sebagai Pemoderasi Pengaruh Free Cash Flow dan Profitabilitas Terhadap Kebijakan Dividen. *Jurnal Ilmu dan Riset Akuntansi*, 8(2), 1-21.
- [27] Le, T. T. H., Nguyen, X. H., & Tran, M. D. (2019). Determinants of Dividend Payout Policy in Emerging Markets: Evidence from the ASEAN Region. *Asian Economic and Financial Review*, 9(4), 531-546.
- [28] Li, J. (2016). Ownership structure and board composition: A multi-country test of agency theory predictions. *Managerial and Decision Economics*, 15(4), 359-368.
- [29] Limbong, G. F., & Darsono, D. (2021). Pengaruh Karakteristik Perusahaan Dan Karakteristik Dewan Komisaris Terhadap Kebijakan Dividen. *Diponegoro Journal of Accounting*, 10(2).
- [30] Lucyanda & Lilyana. (2012). Pengaruh Free Cash Flow dan Struktur Kepemilikan Terhadap Dividend Payout Ratio. *Jurnal Akuntansi*, 4(2). 129138.
- [31] Mawarni, L. F.I., & Ratnadi, N. M. D. (2014) Pengaruh Kesempatan Investasi, Leverage, dan Likuiditas Pada Kebijakan Dividen Perusahaan anufaktur Yang Terdaftar di BEI. *E-Jurnal Akuntansi Universitas Udayana*, 1, 200-208.

- [32] Neswari, P. P. A. (2017) Faktor-Faktor Yang Mempengaruhi Kebijakan Dividen Perusahaan Manufaktur di BEI. *Jurnal Ilmu Dan Riset Akuntansi*, 6(April), 5-24.
- [33] Nisa, H. (2017) Pengaruh Kepemilikan Institusional dan Leverage Terhadap Kebijakan Dividen Dengan Free Cash Flow Sebagai Variabel Moderasi Pada Perusahaan Manufaktur di BEI Periode 2011-2015. *Jurnal Online Mahasiswa Fakultas Ekonomi Universitas Riau*, 4(1), 387-401.
- [34] Patra, T., S. Poshakwale and K. Ow-Yong, 2012. Determinants of corporate dividend policy in Greece. *Applied Financial Economics*, 22(13): 1079-1087. Available at: <https://doi.org/10.1080/09603107.2011.639734>.
- [35] Putra, A. D., & Yusra, I. (2019). Peran profitabilitas dalam memoderasi pengaruh free cash flow terhadap kebijakan dividen di Indonesia.
- [36] Rizqia, D. A., Aisjah, S. & Sumiati (2013) Effect of Managerial Ownership, Financial Leverage, Profitability, Firm Size and Investment Opportunity on Dividend Policy and Firm Value. *Research Journal of Finance and Accounting* 4(11), 22222847.
- [37] Rusli, E., & Sudiarta, G. M. (2017). Pengaruh Struktur Kepemilikan, Leverage, Pertumbuhan Perusahaan dan Efektivitas Usaha Terhadap Kebijakan Dividen. *E-Jurnal Manajemen Unud*, 6(10), 5348-5376.
- [38] Roos, N.M., & Manalu, E. Stefany. (2019). Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional dan Kesempatan Investasi Terhadap Kebijakan Dividen Dengan Likuiditas Sebagai Variabel Moderasi. *Journal of Accounting and Business Studies*, 4(1), 24-39.
- [39] Saragih, J. L., Purba, B., & Simangunsong, E. (2018). Faktor-Faktor Yang Mempengaruhi Kebijakan Dividen Pada Perusahaan Industri Barang Dan Konsumsi Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Manajemen dan Bisnis*, 15(1), 1518.
- [40] Sari, N. A., & Budiasih, I. A. (2016). Pengaruh Kepemilikan Manajerial, Kepemilikan Institusional, Free Cash Flow Dan Profitabilitas Pada Kebijakan Dividen. *Jurnal Akuntansi Universitas Udayana*, 2439-2466.
- [41] Serly, S., & Susanti, M. (2021). Pengaruh atribut tata kelola dan karakteristik perusahaan terhadap kebijakan dividen pada perusahaan di BEI. *Jurnal Ekonomi Modernisasi*, 17(3), 196-215.
- [42] Silaban, D. P., & Purnawati, N. K. (2016). Pengaruh profitabilitas, struktur kepemilikan, pertumbuhan perusahaan dan efektivitas usaha terhadap kebijakan dividen pada perusahaan manufaktur. *E-Jurnal Manajemen Unud*, 5(2), 12511281.
- [43] Subramaniam, R. K. (2011). Investment opportunity set and dividend policy in Malaysia: some evidence on the role of government ownership, family ownership, board size and board composition (Doctoral dissertation, University of Malaya). 131.
- [44] Sumartha, E. (2016). Pengaruh struktur kepemilikan terhadap kebijakan dividen pada perusahaan manufaktur. *Jurnal Economica*, 12(2), 167-182.
- [45] Sutanto, J., Marciano, D., & Ernawati, E. (2017). Pengaruh Kepemilikan Institusional pada Kebijakan Dividen. *Jurnal Ilmiah Mahasiswa Universitas Surabaya*, 6(2), 966-981.
- [46] Trang, N. T. X. (2012). Determinants of dividend policy: The case of Vietnam. *International Journal of Business, Economics and Law*, 1(1), 48-57
- [47] Trisna, I. K. E. R., & Gayatri, G. (2019). Ukuran Perusahaan Memoderasi Pengaruh Free Cash Flow dan Leverage Terhadap Kebijakan Dividen. *E-Jurnal Akuntansi*, 26(1), 484.
- [48] Ullah, H.; A. Fida; dan S. Khan. 2012. The Impact of Ownership Structure on Dividend Policy Evidence from Emerging Markets KSE-100 Index Pakistan. *International Journal of Business and Social Science*. Vol. 3, No. 9, hlm. 298-307.
- [49] Ulfa, M., Wijaya, A. L., & Ubaidillah, M. (2021, June). Pengaruh Profitabilitas, Likuiditas, Kebijakan Hutang, Free Cash Flow Terhadap Kebijakan Dividen Dengan Ukuran Perusahaan Sebagai Moderasi (Studi Kasus Pada Sektor Perusahaan Industri Barang Konsumsi yang Terdaftar di BEI 2015-2018). In *SIMBA: Seminar Inovasi Manajemen, Bisnis, dan Akuntansi* (Vol. 2).
- [50] Wahyuliza, S., & Fahyani, R. (2019). Pengaruh Pertumbuhan Perusahaan, Ukuran Perusahaan, Struktur Modal dan Return on Equity Terhadap Kebijakan Dividen Pada Perusahaan Manufaktur yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Benefita*, 4(1), 78-86.
- [51] Widiari, N. N. O., & Putra, I. W. (2017). Pengaruh Kepemilikan Manajerial dan Kepemilikan Institusional pada Kebijakan Dividen dengan Free Cash Flow sebagai Pemoderasi. *E-Jurnal Akuntansi Universitas Udayana*, 20(3), 2303-2332.
- [52] Widyawati, R. (2018). Pengaruh Kesempatan Investasi, Profitabilitas dan Likuiditas Terhadap



Kebijakan Dividen Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia.

- [53] Wulandari, S. (2020). Karakteristik dan Kebijakan Dividen Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Akuntabilitas*, 13(1), 11-22.
- [54] Wuisan, F., Randa, F., & Lukman, L. (2018). Pengaruh Struktur Kepemilikan Terhadap Kebijakan Dividen Perusahaan. *SIMAK*.