The Determinants of Dividend Policy (an Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange 2016-2019 Period)

Nurni Arrina Lestari[1], Ade Sudarma[2], Antony[3]

[1] Correspondence Author : nurniarrinalestari@ummi.ac.id
[1] Universitas Muhammadiyah Sukabumi, Cikole, Cikole Sub-district, Sukabumi City, West Java, Indonesia
[2] Universitas Muhammadiyah Sukabumi, Cikole, Cikole Sub-district, Sukabumi City, West Java, Indonesia
[3] Universitas Muhammadiyah Sukabumi, Cikole, Cikole Sub-district, Sukabumi City, West Java, Indonesia

A B S T R A C T
This research aims to analyze the factors that affect the company's opportunities to distribute dividends, and based on those opportunities, this research further identifies the factors that affect the size of dividends to be distributed by the company. The research sample was taken from manufacturing companies listed on the Indonesia Stock Exchange for 2016-2019. The regression models used were logistic regression to analyze the variables affecting the company's opportunities of dividends and multiple linear regression to analyze the variables affecting the size of the dividends to be distributed. This research finding revealed that the variables affecting the company's opportunities of distributing dividends were profitability, liquidity, and company size. However, of the three variables, only profitability affected the size of the dividend distributed by the company.

A B S T R A K
Penelitian ini bertujuan untuk menganalisis faktor apa saja yang mempengaruhi peluang perusahaan dalam membagikan dividen dan dari peluang itu, faktor apa saja yang mempengaruhi besar kecilnya dividen yang akan dibagikan oleh perusahaan. Sampel dalam penelitian ini menggunakan perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia periode 2016-2019. Model regresi yang digunakan yaitu regresi logistik untuk menganalisis variabel mana saja yang mempengaruhi peluang perusahaan dalam dividen dan regresi linear berganda untuk menganalisis variabel mana saja yang mempengaruhi besar kecilnya dividen yang akan dibagikan. Hasil penelitian ini menunjukkan bahwa variabel yang mempengaruhi kemungkinan perusahaan dalam membagikan dividen adalah profitabilitas, likuiditas, dan ukuran perusahaan. Dan dari ketiga variabel tersebut hanya profitabilitas yang mempengaruhi besar kecilnya dividen yang dibagikan perusahaan.

INTRODUCTION

The dividend policy is still the most debated topic in financial literature. The dividend policy is regarded as a significant factor since it is a repeated decision taken by the company, which will affect the decision of its capital structure. Moreover, the dividend policy is related to the interest of many parties; thus, the proportion of dividend payment should be an absolute consideration from all management parties (Lestari, 2019).

One of the company's aims is to prosper the shareholders as the company's holders, such as distributing a part of the company's profit into the dividend. However, this aim is often not realized yet because the company's capital decreases when the dividends are shared with the shareholders. Meanwhile, the company needs this capital for operational and investment needs. Hence, the profit resulted from the company is not distributed into the dividend, but it will be held for the company's capital (Anggraini & Wihandaru, 2015).

Besides, this research finds differences in the previous studies relating to the relevance of dividend policy. Modigliani & Miller stated that the shareholder's prosperity is not related to

dividend distribution. Myron Goridn & John Lintner also said that the investors prefer the dividend paid in the present since the dividend paid in the future will be considered a risky choice. On the other hand, in their research, Litzenberger & Ramaswamy asserted that the investors prefer the capital gain to the dividend distribution since the dividend tax is higher than the capital gain's tax (Gumanti, 2013).

This research is a research development from Yumita Rahmawati & Bambang Sudiyatno's research under the title *"the Factors which Affect the Dividend Policy on Mining Company Registered in Indonesian Stock Exchange."* This recent research differs from the previous research in the year of observation, research object, the addition of company's size variable, use of logistic regression model to identify the factors affecting the probability of dividend payment, and use of multiple linear regression to find the variables affecting the size of dividend distribution.

In this research, many factors are considered to influence the dividend policy, such as profitability, asset growth, capital structure, liquidity, and company size. Previously, much research has used those factors to examine the effects on dividend policy. The previous research has resulted in various findings on this issue. The profitability refers to a significant negative result (Dewi, 2008), a significant positive result (Arilaha, 2009; Hadianto, 2012; Budiarso, 2014; Anggraini & Wihandaru, 2015; Simbolon & Sampurno, 2017, Satmoko, 2021), and an insignificant positive result (Sari & Sudjarni, 2015) on the dividend policy. The asset growth refers to a significant negative result (Sari & Sudjarni, 2015; Simbolon & Sampurno, 2017) and an insignificant negative result (Nur 'Ihza & Ardini, 2020) on the dividend policy. The capital structure refers to a significant negative result (Putri, 2013; Anggraini & Wihandaru, 2015; Sari & Sudjarni, 2015; Simbolon & Sampurno, 2017), an insignificant negative result (Arilaha, 2009), and a significant positive result (Hadianto, 2012; Satmoko, 2021) on the dividend policy. The liquidity refers to a significant negative result (Nurhayati, 2013), a significant positive result (Sari & Sudjarni, 2015; Nengsih & Lestari, 2020), and an insignificant positive result (Arilaha, 2009) on the dividend policy. Meanwhile, the company's size refers to an insignificant negative result (Ulfa & Yuniati, 2016), a significant positive result (Anggraini & WIhandaru, 2015; Satmoko, 2021), and an insignificant positive result (Simbolon & Sampurno, 2017) on the dividend policy.

The dividend distribution still contains many disagreements, uncertain size, and measurement. Some are distributing dividends while some are not, some are distributing a high amount of dividend while some are distributing a low amount of dividend, and some are stable in the dividend distribution while some are irregular every year. Based on this consideration, the researchers find a research gap that encourages them to research further the relation between dividend policy and profitability, asset growth, capital structure, liquidity, and company size. Therefore, this research is conducted and written under the title, *"the Determinants of Dividend Policy (an Empirical Study on Manufacturing Companies Listed on the Indonesia Stock Exchange 2016-2019 Period)"*.

LITERATURE REVIEW
Dividend

A dividend is a compensation received by the shareholders in addition to their capital gain. This compensation is given based on earning a profit from the company, but not all profit will be distributed in the form of a dividend. There are several controversies regarding dividend policy. Modigliani & Miller argued that the dividend policy did not influence the company's value, while the other arguments said that a high dividend would raise the company's value, and the last argument asserted that a low dividend would raise the dividend value (Hanafi, 2018).

Factors Affecting Dividend Policy
Profitability
The profitability ratio shows how much the company can profit compared to its capital or asset ownership (Sartono, 2008). The profitability ratio is measured in ROA or ROE. ROA aims to compare the profit with assets owned by a company, while ROE aims to compare the profit gained by the company with equity or own capital (Hanafi, 2018).

Growth
The company's growth is seen from the increase of sales or assets owned by the company. The company in the growth process will undoubtedly need a significant amount of funds to expand the company (Sartono, 2008). The funds can be obtained from either internal or external funds. External funds are used when the internal funds cannot fulfill the need; moreover, this fund can also be derived from the company's debt or liability (Restuti, 2012).

Capital Structure
The capital structure refers to a fund proportion used by the company. This proportion results from debt or own capital (Sartono, 2008). The use of debt can also raise the company's profit because of the capital increase owned by the company; however, the use of debt is also risky for the main debt and interest that must be paid (Hanafi, 2018).

Liquidity
Liquidity is a company's ability to pay short-term obligations (Hanafi, 2018). A company with good liquidity means that company can pay the current debt from its current assets, so its cash funds can be distributed to the shareholder in the form of a dividend. Then, agency conflicts can be avoided. On the other hand, a high current ratio can indicate excess cash, which may be referred to as two interpretations: a considerable amount of profits that have been collected or a consequence for the ineffective use of the company's finances.

Company's Size
The company's size is a scale that can be categorized as large or small in various ways: total assets, sales, years, number of employees, and many other aspects (Suwito & Herawati, 2005). A large company will have easy access to acquire loan funds from outside of the company, and the large company is considered more stable than the small one (Sawir, 2005).

Hypotheses
The Effects of Profitability on Dividend Policy
The profitability observes how much the company's ability to result in profit from the owned total assets. The higher amount of profit will enable the company to distribute the dividend; the greater the profit, the greater the dividend. This statement is in line with a bird in the hand theory, which asserts that the investors prefer the dividend distribution because it is regarded as more specific than the capital gain. The dividend distribution has also been deemed a signal about the company's condition and forecasting its good condition in the future. Hence, the higher profitability will determine the greater possibility of the company to pay the dividend and the greater dividend to be distributed. This hypothesis is supported by the previous research done by Arilaha (2009), Hadianto (2012), Budiarso (2014), Anggraini & Wihandaru (2015), and Satmoko (2021), which found that profitability affected the dividend policy positively.

The Effects of Asset Growth on Dividend Policy
The asset increase can be one of the indicators of a company's growth. The higher level of a company's growth will determine the higher need for funds to finance the total assets of a company; therefore, it can decrease the level of the company's dividend distribution (Sari &

Sudjarni, 2015). The previous research is also supported by Simbolon & Sampurno (2017), which stated that the greater the probability of a company's growth, it would determine its probability to distribute fewer dividends since the company's profit priority is used for investment or expansion. This result aligns with the residual dividend theory, which proposes that the dividend will be paid if the remaining profit from investment or expansion funds is found. Then, asset growth can negatively affect the dividend policy.

The Effects of Capital Structure on Dividend Policy

The capital structure indicates how large the proportion of the company's capital is derived from the debt. The debt is the following sequence when the company needs funds not fulfilled by their capital. However, the use of debt puts the company at risk, particularly the debt interest paid. Moreover, the company which takes too much debt will be at risk of bankruptcy, and this condition will make the company prioritizing the use of capital for the payment of main debt and interest; thus, the company which has a large amount of debt tends not to distribute the dividend or distribute it in a small quantity (Putri, 2013; Anggraini & Wihandaru, 2015; Sari & Sudjarni, 2015l; Simbolon & Sampurno, 2017). In short, the capital structure can negatively affect the dividend policy.
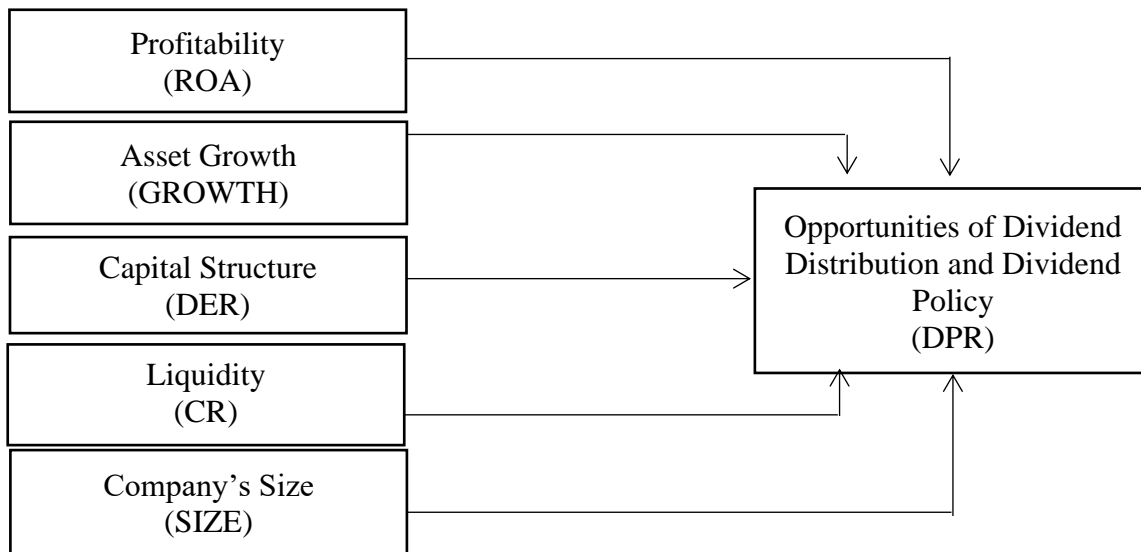
The Effects of Liquidity on Dividend Policy

Liquidity refers to how much the current assets can cover a short-term debt (Hanafi, 2018). The low level of liquidity shows that the company is not liquid, and it is worried to be in difficulties in paying the short-term debt, while the high-level liquidity is worried to turn too many inefficient funds. The investors expect the high liquidity to be distributed in the form of a dividend to minimize the inefficient funds to be put in a high-risk investment. This step is also taken to reduce the manager's opportunistic attitude to manage the remaining available funds. This statement corroborates with the research carried out by Sari & Sudjarni (2015) that the higher level of liquidity will illustrate a good company's performance, and the company will be easier to fulfill the obligation of dividend payment, so it can turn the higher probability for the company to distribute dividend. Therefore, liquidity can positively affect the dividend policy, which means that greater liquidity will determine the greater dividend distribution (Nengsih & Lestari, 2020).

The Effects of Company's Size on Dividend Payment

The company's size refers to the scope and extent of the company. The company's size is measured from the assets owned by the company. The large company will be more popular and trusted by the investors, so the large company will have easier access to the capital market and use the assets owned to increase the dividend distribution (Anggraini & Wihandaru, 2015). The increase in dividend distribution is also beneficial to reduce agency problems and agency fees definitely (Satmoko, 2021). Besides, a large company is supposed to be more stable in its financial condition. Hence, the large company can have a greater chance to pay the dividend or do that in a large amount. Shortly, the company's size can positively affect the dividend policy.

Research Model

```
┌─────────────────────┐
│   Profitability     │────────────────────────┐
│      (ROA)          │                        │
└─────────────────────┘                        │
┌─────────────────────┐                   ┌────▼────▼────────────┐
│   Asset Growth      │───────────┐       │                     │
│     (GROWTH)        │           │       │ Opportunities of     │
└─────────────────────┘           ▼       │ Dividend             │
┌─────────────────────┐                   │ Distribution and     │
│  Capital Structure  │──────────────────►│ Dividend             │
│      (DER)          │                   │ Policy               │
└─────────────────────┘                   │ (DPR)                │
┌─────────────────────┐                   │                     │
│     Liquidity       │───────────────────►                     │
│       (CR)          │                   └────▲────▲────────────┘
└─────────────────────┘                        │
┌─────────────────────┐                        │
│  Company's Size     │────────────────────────┘
│      (SIZE)         │
└─────────────────────┘
```

RESEARCH METHOD

The research object was taken from manufacturing companies listed on the Indonesia Stock Exchange 2016-2019 period. This research exerted secondary data, which were derived from the annual report. The research data were taken through the purposive sampling technique, with the following criteria: the company experiencing the growth of sales, profit gain, and no deficit of own capital. The operational definition of each term is defined in the following Table 1:

Table 1. Operational Definition of Research Variables

Variable	Formula
Dividend	Dummy: the scoring 0 (zero) and 1 (one). The zero (0) score is for the companies that do not pay a dividend, and one score (1) is for the companies that pay a dividend (Ghozali, 2011).
	$$DPR = \frac{DPS}{EPS} \ (Hanafi, 2018)$$
Profitability	$$ROA = \frac{Net\ Profit}{Assets} \ (Hanafi, 2018)$$
Asset Growth	$$GROWTH = \frac{(Current\ Assets - Assets\ of\ Last\ Year)}{Assets\ of\ Lats\ Year} \ (Hanafi, 2018)$$
Capital Structure	$$DER = \frac{Debt}{Equity} \ (Hanafi, 2018)$$
Liquidity	$$CR = \frac{Current\ Debt}{Current\ Assets} \ (Hanafi, 2018)$$
Company's Size	$$SIZE = Ln\ (Total\ Assets) \ (Ghozali, 2011)$$

Analysis Instruments

To identify the variables affecting the opportunities of dividend payment, this research used the logistic regression analysis method. This logistic regression was exerted to see the probability of dependent variables by predicting independent variables (Ghozali, 2011).

$$Ln\ p/(1-p) = b0 + b1\ ROA - b2\ GROWTH - b3\ DER + b4\ CR + b5\ SIZE + e$$

Explanation:

p	= the company's probability to pay dividend
1-p	= the company's probability not to pay dividend
b0	= regression constant

b1, b2, b3, b4, b5 = regression coefficient
e = standard error

RESEARCH RESULTS AND DISCUSSION

The research object was taken from manufacturing companies listed on the Indonesia Stock Exchange from 2016 to 2019. Through the purposive sampling technique, this research obtained 132 companies that fulfilled the requirements. In addition, the descriptive statistical test aimed to describe the condition of data used in this research. The mean profit from the total asset of 132 samples was 10.95%, with a standard deviation of 10.11%. For the asset growth, the mean of 132 samples was 15.48%, with a standard deviation of 18.47%. Then, the mean debt from the equity of 132 samples was 76.72%, with a standard deviation of 62.18%. For the current debt from the current asset of 132 samples, the mean was 52.88%, with a standard deviation of 32.13%. Lastly, the mean company size in the industrial level due to the total asset of 132 samples was 22.2142, with a standard deviation of 1.5089.

Research Results

The first was logistic regression, which aimed to identify which variables could affect the company's probability or opportunity to distribute the dividend. The logistic regression should fulfill the following testing requirements:

Model Eligibility Testing

The testing of model eligibility employed Hosmer & Lemeshow's Goodness of Fit Test and -2Log Likelihood, presented on the following Table 2 and Table 3:

Measured by Hosmer & Lemeshow Test

Table 2. Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	3.811	8	.874

Source: *Result of Data Analysis*

Measured by -2Log Likelihood

Table 3. Result of -2Log Likelihood Test

-2 Log Likelihood	Value
Initial (*block number* = 0)	65.712
Final (*block number* = 1)	40.516

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	25.196	5	.000
	Block	25.196	5	.000
	Model	25.196	5	.000

The model testing used two techniques: Hosmer and Lemeshow's Goodness of Fit Test and -2Log Likelihood. Hosmer and Lemeshow's Goodness of Fit Test value referred to 0.847 (more than 0.05). Thus, it was regarded as a fit model, which could be accepted if the value was appropriate to the observational data. Next, the -2Log Likelihood test was exerted by comparing the difference of -2Log Likelihood value, 0 and 1. The results indicated a decrease of -2Log Likelihood value (the initial value was 65.712 and turned into 40.516) and supported by the sig value 0.000 (below 0.05) on Omnimbus Test. Therefore, it was concluded that adding an independent variable was significant to fix the model (Ghozali, 2011).

Determinant Coefficient

Table 4. Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	40.516[a]	.174	.443

a. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.

Nagelkerke R Square value showed how far the dependent variable could be explained by the independent variable (Ghozali, 2011). The testing result referred to the value of 44.3%. Therefore, it was concluded that the total of five independent variables could explain the dependent variables by 44.3%.

Classification Matrix

Table 5. Results of Classification Matrix Test

Observed		Predicted		
		DIVIDEND		Correct percentage
		The companies that did not pay a dividend	The companies that paid a dividend	
Dividend Step 1	The companies that did not pay a dividend	0	9	0.0
	The companies that paid a dividend	0	123	100.0
	Overall percentage			93.2

Source: Result of Data Analysis

The classification matrix referred to the strength of data prediction from the regression model used to predict the probability of dividend payment (Ghozali, 2011). Based on the classification matrix testing, this research obtained an overall classification accuracy result of 93.2%.

Hypothesis Testing

The partial test basically shows how far the explanatory or independent variable's effect is to define the variation of the dependent variable individually (Ghozali, 2011). The hypothesis was approved when the p-value (sig) < alpha 5% and a regression model was in accordance with the hypothesis direction.

Table 6. Variables in the Equation

		B	Sig.
Step 1[a]	ROA	16.506	.032
	GROWTH	-.382	.836
	DER	.646	.496
	CR	-7.319	.023
	SIZE	1.081	.018
	Constant	-17.647	.054

Source: Result of Data Analysis

$$\text{Ln } p/(1-p) = -17,647 + 16,506 \text{ ROA} - 0,382 \text{ GROWTH} + 0,646 \text{ DER} - 7,319 \text{ CR} + 1,081 \text{ SIZE} + e$$

The constant score was -17.647, which referred that if no changes appeared in the independent variables (the five independent variables were equal to zero (0)), then the dividend policy (DPR) as a dependent variable was valued at -17.647 (the companies that did not pay a dividend). This result also stated that from those five independent variables examined in this research, only three variables could influence the company's probability to distribute dividends: profitability (ROA), liquidity (CR), and company size (SIZE). In comparison, the other two independent variables (asset growth (GROWTH) and capital structure (DER)) could not influence the company's probability of distributing dividends.

In this study, the asset growth could not be used as a standard regarding the company's condition. This condition was because the increase of assets was caused by the company's increase in debt amount to fund the assets. This research result is in line with the research done by Nur'Ihza & Ardini (2020) that asset growth could not affect the company's probability of distributing the dividend. It signified that the company's ability to increase asset growth was not merely used to increase the dividend distribution. Further, the asset growth from period to period could only see how great the company's asset growth level gained. Hence, the asset growth was only used to value the success level of company management.

The capital structure did not affect the probability of the company's dividend distribution. Since the company had its capital structure, consisting of creditors and shareholders, the company would not only consider the debtholder's interest by paying off the obligations but also regard the shareholder's interest by distributing the dividend. Moreover, the contracting efficiency perspective asserted that the manager tended to choose a policy that could minimize agency fees, so both the shareholder and management could accept the policy taken. Thus, the company certainly has a consideration of comparative proportion between debt and capital that would be used to determine the company's capital structure. As well as the dividend policy, the company already has its consideration relating to the need for dividend distribution, then the size of debt size would not influence the opportunity for dividend distribution. This result is reinforced by the research result stated by Arilaha (2009) that the company would not only regard the debtholder's interest to pay off the debt but also regard the investor's interest to pay the dividend.

In line with the hypothesis proposed in this research, profitability could affect the company's probability of distributing dividends. As much as the dividend was a part of profit distributed by the company to the investors and in accordance with the company's goal to prosper the shareholders, the company with a considerable amount of profit would definitely distribute part of the profit to the investors in the form of a dividend. This research finding aligns with Budiarso (2014) and Anggraini & Wihandaru (2015), who argued that high profitability would increase the company's probability of distributing dividends. The company would signal this case to all shareholders by distributing the profit in the form of a dividend. The dividend distribution could not only contain the information that the company was in good condition but also forecast the company's good condition in the future. Besides, the dividend distribution would also strengthen the company's position to seek additional funds from the capital market, so the company's performance would be monitored by the capital market supervisory team. This supervision would encourage the manager to attempt to maintain the performance quality; in short, this strategy would decrease agency conflicts (Arilaha, 2009).

Moreover, the liquidity rate would also affect the company's probability of distributing dividends. Nevertheless, in this recent research, the high liquidity rate precisely minimized the company's probability of distributing dividends to investors. The company with a high level of liquidity tended to prioritize internal capital to fulfill the fund need and use a small amount

of debt. Therefore, the company decided to prioritize the available cash not to be distributed in the form of a dividend but to fulfill the operational needs. This result corroborates with the previous research by Pertiwi & Darmayanti (2018), which uncovered that the higher liquidity would turn the company to prioritize the use of internal data rather than the use of debt to fulfill the funds need. Nurhayati (2013) also found a similar finding in her research that during the global crisis, which turned the company's position into weak liquidity because most of the funds were used to fulfill the company's short-term obligations, the company's ability to distribute the dividend was minimal.

Undoubtedly, the large company would attempt to maximize the company's goal to prosper the shareholders, for instance, through the dividend distribution. The larger the company, the greater company's probability to distribute the dividend. This result is in accordance with the research result stated by Anggraini & Wihandaru (2015) that the large company had easy access to get into debt so that they could get a greater amount of profit from the assets owned. The dividend distribution was aimed to cut agency problems from the uncertainty of asset use (Satmoko, 2021).

Shortly, it was summed up that the profitability, liquidity, and company's size could influence its probability of distributing dividends. Next, from the three variables, this research exerted a regression model to identify variables affecting the size of dividends distributed by the company. The multiple linear regression was then employed to find which variables that could affect the dependent variables through the following regression formula:

$$DPR = b_0 + b_1\ ROA + b_2\ CR + b_3\ SIZE + e$$

Classic Assumption Test

Table 7.
Heteroscedasticity Test by Exerting Harvey Test

F-statistic	0.776132	Prob. F(3,109)	**0.5098**
Obs*R-squared	2.363358	Prob. Chi-Square(3)	0.5005
Scaled explained SS	1.831222	Prob. Chi-Square(3)	0.6082

Source: Result of Data Analysis

The heteroscedasticity test was exerted to test whether the inequality of variance between the residuals of one observation and other observations occurred in the regression model. The proper data were data in which the variance of the disturbance variable was constant or homoscedasticity (Ghozali, 2011). This research used the Harvey test and resulted in a significance value of 0.5098. Since the value was higher than 0.05, the result was not significant. Thus, it could be concluded that heteroscedasticity did not occur.

Table 8. Multicollinearity Test

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.007954	27.83557	NA
ROA	0.090569	2.710253	1.177532
CR	0.008876	4.366378	1.187876
SIZE	4.21E-05	37.13353	1.380625

Source: Result of Data Analysis

The multicollinearity test was aimed to identify the correlation among independent variables. The good data were referred to as uncorrelated data among the independent variables (Ghozali, 2011). The test result showed that all centered VIF (variance inflation factor) values

were lower than 10 for all independent variables. Briefly, no correlation was found among independent variables (multicollinearity did not occur in this research).

Table 9. Autocorrelation Test

Dl	du	dw	4-du	4-dl
1.6391	1.7480	1.8021	2.252	2.3609

Source: Result of Data Analysis

The autocorrelation test was aimed to test whether the correlation between confounding error in the current t period and previous t period occurred in the regression model (Ghozali, 2011). The test result referred that dw score (1.8021) was between du score (1.7480) and 4-du score (2.252). In brief, the regression model would pass the autocorrelation test.

Hypothesis Test

Table 10. Hypothesis Testing

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.181833	0.089185	2.038840	0.0439
ROA	1.380913	0.300947	4.588553	0.0000
CR	0.013276	0.094212	0.140912	0.8882
SIZE	-0.001027	0.006485	-0.158329	0.8745
R-squared	0.181919			
Adjusted R-squared	0.159403			
F-statistic	8.079537			
Prob(F-statistic)	0.000066			

Source: Result of Data Analysis

$$DPR = 0,181833 + 1,380913 \text{ ROA} + 0,013276 \text{ CR} - 0,001027 \text{ SIZE}$$

F-test was aimed to observe whether a regression model was eligible and worthy to be examined (Ghozali, 2011). Moreover, the test result revealed that the value of the F-test was 0.000 or fewer than the sig value of 0.05; thus, it was concluded that the model in this research was eligible and qualified to be examined. The determinant coefficient would point how much the independent variable could explain the variance of dependent variables (Ghozali, 2011). The adjusted R^2 value was 0.159403, meaning that the approximately 15.94% dividend policy (DPR) could be described through three independent variables: profitability (ROA), liquidity (CR), and company size (SIZE). Meanwhile, 84.06% could be described through other variables outside the model.

Further, the t-test was used to find each effect of independent variables on dependent variables (Ghozali, 2011). The profitability variable was reflected by return on assets (ROA), which referred to the regression coefficient value of 1.380913 (positive), and the sig value was 0.000 or less than the assigned significance value of 0.05. It was defined that ROA could affect positively and significantly the DPR variable. The higher profit resulted by a company, the higher dividend that would be paid to the investors. This research result supports a bird in the hand theory and signaling theory. Based on a bird in the hand theory, the investors prefer the dividend distribution in a large amount because the dividend is more definite than capital gain. Meanwhile, based on signaling theory, the dividend distribution can be used by investors as a source of information about the current and future company's condition. Moreover, the higher dividend distribution signifies that the company is in good financial condition. Therefore, they can distribute the dividend in a large amount and still be able to fulfill their operational needs. This research result is reinforced by the studies conducted by Arilaha (2009), Hadianto (2012), Budiarso (2014), Anggraini & Wihandaru (2015), and Satmoko (2021). In addition, a company

with a stable profit would be able to establish the dividend payout rate in certain decisions and signal the quality of the company's profit. Next, the dividend payout would signify a positive signal of the company's prospect. Hence, if the company could increase the dividend payout, the investors would regard that the company's condition at the current and future time was relatively good, and vice versa. On the other side, the increase of dividends would reinforce the company's position to obtain additional funds from the capital market; therefore, the company's performance would be monitored by the supervisory team of the capital market. This kind of supervision could encourage the manager to maintain the quality of the company's performance, decreasing agency problems in the future.

Meanwhile, the liquidity variable was represented by the current ratio (CR) that referred to the regression coefficient value of 0.013276 (positive), and the sig value was 0.8882 or greater than the assigned sign value of 0.05. It indicated that CR could not significantly affect DPR. According to residual theory, the dividend will be paid off after all operational needs are fulfilled. In this research, the liquidity used the current ratio as the proxy, in which this proxy would compare the current debt and current assets owned by the company. The higher current assets owned by the company compared to current debt would denote that the company was in a liquid condition and able to fulfill the short-term needs. The more liquid the company owns, the higher the remaining funds; thus, based on the residual theory, the funds could be used to pay the dividend.

On the other hand, this research result disclosed that the company's liquidity level would only affect the company's probability of distributing dividends but not the amount of dividend distribution. This condition was because the selection of proxy was less specific. The company's high rate of current assets might be caused by the company's high level of inventory or credit, so it could not be used to pay out the dividend. This research finding aligns with Arilaha's (2009) research, which asserted that liquidity could not influence the dividend policy. This result signified that the level of company liquidity was insignificant to affect the size of dividend payout.

At last, the company's size variable was represented by log natural of total assets (SIZE), which referred that the coefficient value was -0.001027 (negative), and sig value was 0.8745 or higher than the assigned sig value of 0.05. This result indicated that SIZE could not significantly affect DPR. Each company would certainly expect the company to keep growing. No exception for the large or small company, they would prioritize the funds needed for the expansion. Then, the greater assets owned by the company would not guarantee the company's ability to distribute the dividend in a large amount. This research result corroborates with the previous research by Ulfa & Yuniati (2016), which found that the company size would not influence the dividend policy. The majority of companies decided to prioritize the profit to be used for operational need fulfillment and investment in the company development. In short, a company with a large size would decrease the rate of dividend distribution.

CONCLUSION AND SUGGESTION

This research successfully collected 132 samples of manufacturing companies listed on the Indonesia Stock Exchange in 2016-2019. The research exerted a logistic regression model to identify the effects of profitability, asset growth, capital structure, liquidity, and company size. Based on the determinant test, this research resulted in Nagelkerke's R2 value of 0.443, which indicated that 44.3% of the company's probability of distributing the dividend could be described by five variables, while the rest of 55.7% could be described by the other variables outside the model. Next, multiple linear regression was used to analyze which variables from those three variables could affect the dividend distribution size. This research result revealed that from the variables of profitability, liquidity, and company's size, only the profitability could affect the size of dividend paid off by the company. Based on the determinant test, the

Adjusted R2 value was 0.159403, meaning that 15.94% of dividend policy could be described through the three independent variables, while the rest of 84.06% could be described through the other variables outside the model.

The researchers then wrote some suggestions for several parties relating to this research issue. The company should observe and regard the dividend policy. The dividend can be used to measure the company's position within the industrial competition. The higher ratio of dividend payout will reflect the higher company's ability in the market competition. Therefore, if the company has a better dividend increase, the investors will be interested in investing.

Moreover, the company must also regard the variables of profitability, liquidity, and company's size because those three factors have significant positive effects on the amount of dividend distribution. This suggestion is referred that the company is expected to increase the profit to maximize the invested capital into a large amount of return for the investors in the form of a dividend. Second, the investors should regard and observe the variables of profitability, liquidity, and company size because the three factors significantly affect the company's probability of paying off the dividend. The profitability variable is significant to be observed due to its significant positive effect on the amount of dividend distribution. Later, the information of three factors can be exerted as a consideration basis for the investors to decide on investment in the company. Third, the successive researches are expected to add and expand the research objects (the object might be taken from non-financial companies in a great quantity), extend the period of observation, add the other independent variables that have not been examined yet in this research, and use the other instruments to measure the variable of dividend policy (to change the proxy of dividend payout ratio into dividend yield). Hopefully, future research findings can get better results.

REFERENCES

Anggraini, D. A. D., & Wihandaru, W. (2015). Pengaruh Ukuran Perusahaan, Pertumbuhan Perusahaan, Free Cash Flow, Leverage, Profitabilitas dan Struktur Kepemilikan Terhadap Kebijakan Membayar Dividen. *Jurnal Manajemen Bisnis*, *6*(2), 397-318.

Arilaha, M. A. (2009). Corporate Governance Dan Karakteristik Perusahaan Terhadap Kebijakan Dividen. *Jurnal Keuangan dan Perbankan*, *13*(3).

Budiarso, N. S. (2014). Mengapa Perusahaan Membayar Dividen?. *Going Concern: Jurnal Riset Akuntansi*, *9*(3).

Dewi, S.C. (2008). Pengaruh Kepemilikan Managerial, Kepemilikan Institusional, Kebijakan Hutang, Profitabilitas, dan Ukuran Perusahaan Terhadap Kebijakan Dividen. *Jurnal Bisnis dan Akuntansi*, Vol.10, No.1, hal.47-58.

Ghozali, Imam (2011). Aplikasi Analisis Multivariate dengan Program IBM SPSS 19 (Edisi 5). Semarang, Indonesia: Badan Penerbit Universitas Diponegoro.

Gumanti, Tatang Ary (2013). *Kebijakan Dividen Teori, Empiris dan Implikasi*. Yogyakarta, Indonesia: UPP STIM YKPN.

Hadianto, B. (2012). Prediksi Arus Kas Bebas, Kebijakan Utang, Dan Profitabilitas Terhadap Kemungkinan Dibayarkannya Dividen Studi Empirik Pada Emiten Pembentuk Indeks Kompas 100 Di Bursa Efek Indonesia. *International Research Journal Of Business Studies*, 3(1).

Hanafi, M. M. (2018). Manajemen Keuangan (Edisi Kedua). Yogyakarta, Indonesia: BPFE.

Lestari, N. A., Surwanti, A., & Pribadi, F (2019). Dynamic Model of Dividend Payout Companies in Indonesia. *The International Journal of Business Management and Technology*, Vol.3

Nengsih, Y. R., & Lestari, T. (2020). Pengaruh Likuiditas, Profitabilitas, Dan Ukuran Perusahaan Terhadap Kebijakan Dividen Pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi Yang Terdaftar Di Bursa Efek Indonesia (BEI). *Jurnal PROFITA: Akuntansi dan Bisnis*, *1*(1), 47-56.

Nur'Ihza, I. D., & Ardini, L. (2020). Pengaruh Net Profit Margin, Growth, Cash Position Terhadap Kebijakan Pembayaran Dividen. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, *9*(3).

Nurhayati, M. (2013). Profitabilitas, Likuiditas Dan Ukuran Perusahaan Pengaruhnya Terhadap Kebijakan Dividen Dan Nilai Perusahaan Sektor Non Jasa. *Jurnal Keuangan & Bisnis Program Studi Magister Manajemen Sekolah Tinggi Ilmu Ekonomi Harapan*, *5*(2), 144-153.

Pertiwi, N. K. N. I., & Darmayanti, N. P. A. (2018). Pengaruh Profitabilitas, Likuiditas, Struktur Aktiva dan Kebijakan Dividen Terhadap Struktur Modal Perusahaan Manufaktur di BEI. *E-Jurnal Manajemen Universitas Udayana*, 7(6).

Putri, D. A. (2013). Pengaruh Investment Opportunity Set, Kebijakan Utang Dan Ukuran Perusahaan Terhadap Kebijakan Dividen Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia (BEI). *Jurnal manajemen*, 2(02).

Rahmawati, Y. (2018). Faktor-Faktor yang Mempengaruhi Kebijakan Dividen pada Perusahaan Pertambangan yang Terdaftar di Bursa Efek Indonesia. *Dinamika Akuntansi Keuangan dan Perbankan*, 7(1).

Restuti, M. I. M. D. (2012). Pengaruh Pertumbuhan Perusahaan Terhadap Peringkat Dan Yield Obligasi.

Sari, K. A. N., & Sudjarni, L. K. (2015). Pengaruh Likuiditas, Leverage, Pertumbuhan Perusahaan, dan Profitabilitas terhadap Kebijakan Dividen pada Perusahaan Manufaktur di BEI. *E-jurnal Manajemen*, 4(10).

Sartono, Agus. (2008). *Manajemen Keuangan Teori dan Aplikasi (Edisi 4)*. Yogyakarta, Indonesia: BPFE.

Satmoko, A. (2021, April). Model Logistic Regression Dalam Penentuan Kebijakan Dividen Perusahaan Di Indonesia. In *Conference In Business, Accounting, And Management* (CBAM) (Vol. 1, No. 1, pp. 47-59).

Sawir, A. (2005). *Analisis Kinerja Keuangan Dan Perencanaan Keuangan Perusahaan*. Jakarta : PT. Gramedia Pustaka Utama.

Simbolon, K., & Sampurno, R. D. (2017). Analisis Pengaruh Firm Size, DER, Asset Growth, ROE, EPS, Quick Ratio dan Past Dividend terhadap Dividend Payout Ratio (Studi pada Perusahaan Manufaktur yang Terdaftar di BEI Tahun 2011-2015). *Diponegoro Journal of Management*, *6*(3), 315-327.

Suwito, E., & Herawaty, A. (2012). Analisis Pengaruh Karakteristik Perusahaan Terhadap Tindakan Perataan Laba Yang Dilakukan Oleh Perusahaan Yang Terdaftar Di Bursa Efek Jakarta.

Ulfa, L. M., & Yuniati, T. (2016). Pengaruh Kinerja Keuangan, Asset Growth dan Firm Size Terhadap Dividend Payout Ratio. *Jurnal Ilmu dan Riset Manajemen (JIRM)*, *5*(5).