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## Role of Dividend Policy in Relation to Profitability, Liquidity and Firm Value in Non-Financial Companies in Indonesia

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### **Abstract:**

*Good corporate value is a company achievement to increase shareholders' wealth. Investors use financial statements as one of the information to assess whether investment is feasible or not. The purpose of this study is to look at the role of dividend policy as a mediating variable between the relationship of profitability, liquidity and firm value. The population in this study was 463 non-financial companies listed on the Stock Exchange in 2014-2017 with a sample of 56 companies.*

*The researcher used panel data regression as a data analysis technique.*

*The results of the study show the effect of profitability, liquidity, dividend policy on firm value have a positive significant effect. In addition, profitability and liquidity influence the value of the company better if through dividend policy. This research contributes to the importance of dividend policy in relation to profitability, liquidity, and firm value for investors to make their investment decisions.*

**Keywords:** Profitability, liquidity, dividend policy, firm value

### **1. Introduction**

The value of the company is the achievement of the company from the public trust in the performance of the company through a long process of activities from the company's establishment to date (Mayogi, 2016). Of course investors will choose companies with good corporate value to invest their capital. According to Brigham and Houston (2010), maximizing company value is the company's main goal. the purpose of financial statement analysis is to see the calculation of ratios to assess the state of the company in the past, present, and future possibilities (Sundjaja and Barlian, 2001). That is, the hope of investors using the analysis of financial statements is to find out the prospects of the company when investors invest in the company. Profitability analysis is one of the main parts in financial statement analysis to see the extent to which a company generates profits (Tandelilin, 2001; Wild et al, 2005).

All companies use their debts to fund their companies. According to Tampubolon (2005) liquidity ratios are used to assess the level of companies that are able to meet financial obligations on time. Besides paying attention to the level of profit and the level of the company paying dividends, investors also consider dividend benefits. Financial statements are also used to forecast earnings and dividends in the future. According to Horne (1994) in addition to the percentage of dividend payments, investors are also interested in the stability of dividends. Dividend stability is maintaining a position in a trend, and a trend that is leaning up is the best. Liquidity is the company's consideration in making dividend decisions (Brigham and Houston, 2013)

In 2018, economic news gives appreciation to companies that have successfully increased stock trading and financial performance well. This appreciation is expected to be able to inspire and motivate business people in Indonesia. Warta Ekonomi's research team uses quantitative research by utilizing financial performance reports and stock trading activities over the past three years. There are three categories in the 2018 Indonesia Public Company Award namely "Indonesia Outstanding Public Company 2018", there are only 2 companies from 11 companies. for the "Indonesia Excellent Public Company 2018" category there are 6 financial sector companies from 25 companies, while there are 2 financial sector companies from 33 companies included in the "Indonesia Very Good Public Company 2018" category. The last is the category "2018 Fastest Growing New Public Company" occupied by non-financial companies. This shows that the growth of non-financial companies has skyrocketed rapidly (Economic News, 31 July 2018).

Research by Osazuwa and Ayoib (2016), and Striflier (2018) found that there is a positive influence between profitability and firm value. however, the research found no relationship between company value and profitability. Osazuwa and Ayoib (2016) also stated that liquidity had a negative effect on firm value. this result is different from the research conducted by Putra and Putu (2016) found that liquidity has a positive and significant influence on firm

value. Tengjono (2017) states that the Dividend Payout Ratio has a significant positive effect on firm value. Baker and Sujata's study (2015) added that Dividend Policy affects the Value of the Company. Furthermore Powell and Kent (2012) found that one of the main factors influencing managers to pay dividends is to look at the level of profit and income stability. Indonesian company managers revealed that dividend policy affects the value of the company. This is confirmed by his research Abor (2014) who found that the consistency of dividend payment decisions is influenced by the level of profitability.

Amar et al (2017) found that the relationship of liquidity and profitability to dividend policy was significantly positive. Furthermore, Thakur and Kannadhasan (2018) added that profitability is a key variable in determining dividend policy. Then his research by Baker et al (2018) added that liquidity only has a small role for dividend policy, but institutional investors consider dividend policy as an integral part of business strategies that affect company value. The results of Zhiwiang Ye et al (2015) show that liquidity has a negative effect on dividend policy. This study was also supported by Kayed (2017) found that in conventional banks, profitability, liquidity, and growth were significantly negatively related to dividend policy. Based on the above explanation, so the researchers want to conduct research on "Role of variable policy in relation to profitability, liquidity, dividend policy, and corporate value to non-financial companies on the Indonesia Stock Exchange".

### 1.1. Hypothesis

- Hypothesis 1: Profitability, Liquidity and Dividend Policy have a positive effect on Company Value
- Hypothesis 2: Profitability and Liquidity have a positive effect on Dividend Policy
- Hypothesis 3: Profitability and Liquidity affect Company Values through Dividend Policy

## 2. Methods and materials

This study is an explanatory research, namely the objective assessment, and the statistical significance of the regression coefficients used by each independent variable (Hair et al, 2011). Technical analysts in this study used technical panel data regression analysis. Panel data is a combination of times series and cross section data (Ghozali, 2013). The variables in this study are independent variables (Profitability and Liquidity), dependent variable (Firm Value), and mediating variables (Dividend Policy)

### 2.1. Population and Samples

In this study the population is non-financial companies listed on the Indonesia Stock Exchange in 2014 to 2017. The results of the population were 463 companies. by using purposive sampling technique, researchers got a sample of 55 companies. purposive sampling technique is a sampling technique taken based on the criteria of the researcher. Furthermore, data collection is obtained from the Indonesia Stock Exchange (site [www.idx.co.id](http://www.idx.co.id)).

### 2.2. Variable Measurements

The measurement of profitability variables, which are often used are the Net Profit Margin (NPM) Ratio, Control Ratio on Equity (ROE), and Ratio of Asset Returns (ROA) (Hanafi and Halim, 2012; Harahap, 2009; Brigham and Houston, 2013; Syamsuddin, 2009). Furthermore, the researcher uses Current Ratios, Cash Ratios, and Quick Ratios to measure liquidity variables (Brigham and Houston, 2013; Ralona, 2006; Variable liquidity is an indicator to see the company's ability to pay all its financial term obligations at maturity using its current assets (Syamsuddin, 2009). Furthermore, the dividend variable is proxied using the Dividend Payout Ratio (Suharti, 2007; Brigham and Houston, 2011; Tambupolon, 2005). The dividend payout ratio shows the percentage of corporate profits paid to shareholders (Horne, 1994). The last variable is the Firm Value variable measured using Price Book Value (Anzalina and Rustam, 2013; Brigham and Houston, 2010).

### 2.3. Research Model

Based on exposure to the hypothesis and the formulation of the problem in this study, the research model is as follows:

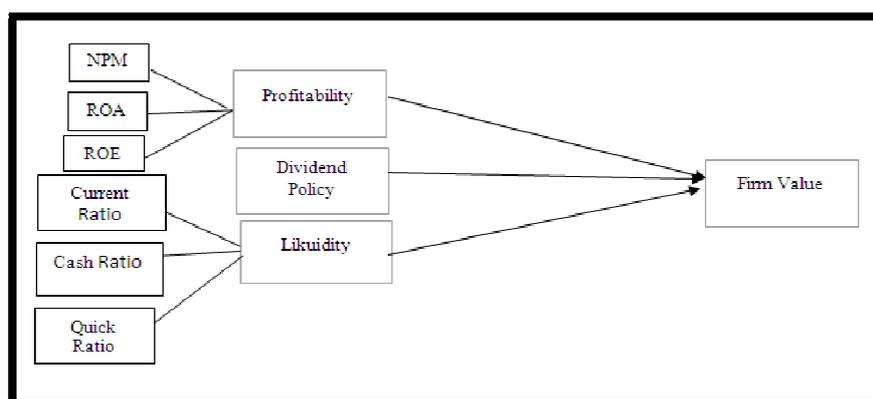


Figure 1: Model 1

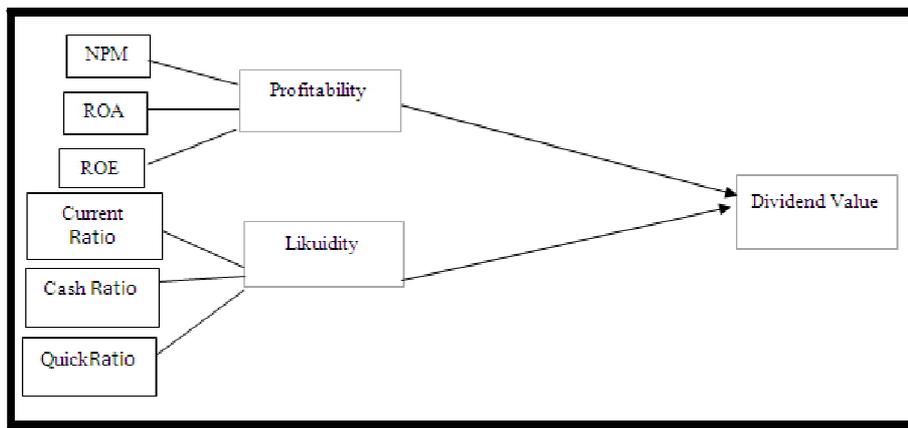


Figure 2: Model 2

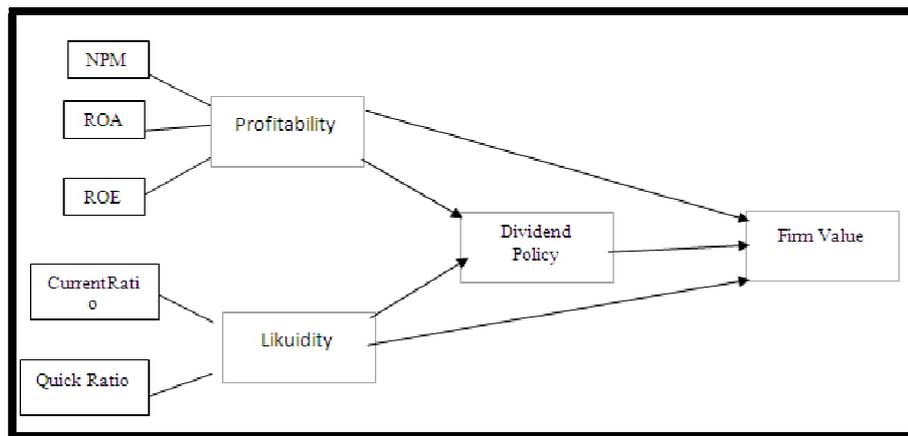


Figure 3: Model 3

Based on the 3 models in this study, we can make the equation of the research model as follows:

Equation model 1 =

$$Y = \partial + \beta_1X_1 + \beta_2X_1 + \beta_3X_1 + \beta_1X_2 + \beta_2X_2 + \beta_3X_2 + \beta Z + e$$

Equation model 2

$$Y = \partial + \beta_1X_1 + \beta_2X_1 + \beta_3X_1 + \beta_1X_2 + \beta_2X_2 + \beta_3X_2 + e$$

Information:

Y (equation 1): Firm Value

Y (equation 2): Dividend Policy

$\partial$ : Constant

X1: Profitability

X2: Liquidity

Z: Dividend Policy

$\beta_1, \beta_2, \beta_3$ : Independent variable coefficients

e: error

Equation model 3

$$Y = \partial + \beta_1X_1 * Z + \beta_2X_1 * Z + \beta_3X_1 * Z + \beta_1X_2 * Z + \beta_2X_2 * Z + e$$

Remarks =

Y: Firm value

X1: Profitability

X2: Liquidity

Z: Dividend Policy

$\beta_1$ : Path X<sub>1</sub> (1) to Z

$\beta_2$ : Path X<sub>2</sub> (2) to Z

$\beta_3$ : Coefficient of Z Path to Y

$\beta_4$ : Path X<sub>1</sub> Coefficient (1) to Y

$\beta_5$ : Path X<sub>2</sub> Coefficient (2) to Y

### 3. Results

	PBV	NPM	ROA	ROE	CURRENT	CASH	QR	DPR
Mean	3.540273	11.57841	8.682182	16.18618	309.3191	1.395818	2.043773	96.91200
Median	1.860000	7.990000	6.965000	13.30500	168.2250	0.410000	1.040000	26.41000
Maximum	82.44000	67.12000	38.16000	135.8500	6337.000	62.02000	62.25000	1835.000
Minimum	0.010000	0.420000	0.200000	0.690000	12.99000	0.010000	0.130000	0.900000
Std. Dev.	7.767384	10.81828	6.976105	16.34472	665.6176	4.968599	5.002765	196.1079

Table 1: Data Description  
Data Is Processed by Researchers

Based on the results of the description of the data analysis from 55 non-financial companies showed the highest average value was in the Profitability variable obtained ROE (Return On Equity) value with an average value of 16,186, then the average NPM or Net Profit Margin of 11,57, and ROA or Return On Asset of 8.68. Liquidity variables are measured by Current Ratio, Cash Ratio, and Quick Ratio. The results of the descriptive analysis show that the average of each is the Current Ratio of 309.32, the Quick Ratio is 2.043, and the Cash Ratio is an average of 1.395. Furthermore, the Dividend Policy Variables measured by the DPR or the Dividend Payout Ratio obtained the total average value of 96.91. And the last for the firm value variable as measured by PBV or Price Book Value as a variable size obtained by the average value of PBV (Price Book Value) of 3.54.

#### 3.1. Panel Regression Analysis

##### 3.1.1. Effect of Profitability, Liquidity, and Dividend Policy on Firm Values

Variabel		Coefficient	Std.Error	t-Statistic	Prob.
Profitabilitas	NPM	0,347102	0,028233	12,29407	0,0000
	ROA	0,424264	0,028704	14,78062	0,0000
	ROE	0,315112	0,023405	13,46363	0,0000
Likuiditas	Current Ratio	0,134332	0,012760	10,52767	0,0000
	Cash Ratio	0,047026	0,052490	0,895902	0,3713
	Quick Ratio	0,606815	0,079152	7,666501	0,0000
Kebijakan Dividen	DPR	0,215940	0,016594	13,01331	0,0000

Table 2: Data Description  
Data Is Processed By Researchers

Based on the results of the analysis in table 2, it was found that the probability value of the variable profitability measured by NPM, ROA, and ROE of 0,000 was smaller than 0.05, and the value of the coefficient was positive, so it can be concluded that the variable profitability has a positive effect on firm value. then the liquidity variable measured Current Ratio and Quick Ratio has a probability value of 0,000 which is smaller than 0.05 and a positive coefficient, but for the liquidity variable measured by a cash ratio has a probability value of more than 0.05 or 0.373, so the researcher concludes that variable liquidity as measured by the current ratio and quick ratio which has a positive effect on the value of the company. The last variable is dividend policy with a probability value of 0.0000 and a coefficient of 0.2159. The researcher draws the conclusion that dividend policy has a positive effect on the value of dividends.

##### 3.1.2. Effect of Profitability and Liquidity on Dividend Policy

Variabel		Coefficient	Std.Error	t-Statistic	Prob.
Profitabilitas	NPM	0,347102	0,028233	12,29407	0,0000
	ROA	0,424264	0,028704	14,78062	0,0000
	ROE	0,315112	0,023405	13,46363	0,0000
Likuiditas	Current Ratio	0,134332	0,012760	10,52767	0,0000
	Cash Ratio	0,047026	0,052490	0,895902	0,3713
	Quick Ratio	0,606815	0,079152	7,666501	0,0000
Kebijakan Dividen	DPR	0,215940	0,016594	13,01331	0,0000

Table 3: Model 2 Panel Regression  
Data Is Processed By Researchers

Based on the results of the analysis in table 3, the probability value of the variable profitability measured by NPM, ROA, and ROE of 0,000 is smaller than 0.05, and the value of the coefficient is positive, so that this shows the profitability variable has a positive effect on Dividend Policy. then the liquidity variable measured by Current Ratio and Quick Ratio has a probability value smaller than 0.05 and a positive coefficient, but for the liquidity variable measured by the cash ratio has a probability value smaller than 0.05 but the coefficient value is -0.8061, so that the researcher concluded that the variable liquidity as measured by the current ratio and quick ratio had a positive effect on dividend policy.

### 3.1.3. Effect of Profitability and Liquidity on Company Values through Dividend Policy

Profitability variable as measured by NPM or Net Profit Margin shows the results of multiplication between the coefficient of influence of profitability (NPM) on dividend policy and the coefficient value of the influence of dividend policy on firm value found a coefficient of 0.317. The number of indirect effects is equal to the sum of 0.317 with the direct effect of profitability (measured by NPM) on the company value of 0.347 to 0.664. Furthermore, the variable profitability as measured by ROA, indirect effects obtained a value of 0.787. The dimensions of profitability measures using ROE obtain an indirect effect of 0.605. By exposing the data above, the researcher concludes that the variable profitability as measured by NPM (Net Profit Margin); ROA (Return On Asset); and ROE (Return On Equity) on company value is better if through dividend policy. Finally, the hypothesis in this study was accepted.

Furthermore, the variable liquidity as measured by the current ratio and quick ratio shows the number of indirect effects of 0.792 and 0.819. The results of the coefficient of indirect influence are both greater than the direct effect. That is, we can conclude that the effect of liquidity has a better effect on company value if through dividend policy.

## **4. Discussion**

The results of this study prove that profitability has a positive effect on firm value. This is also in line with the findings of Putra and Putu (2016), namely increasing the company's profitability causes the company's value to increase. Profit will be shared if the company is profitable, so if the profitability of the company is high then it can increase the value for the company (Striflier, 2018). High profitability represents that the prospect of the company is good so that it can attract investors in increasing stock demand, when demand for shares rises will also increase the value of the company (Nurhayati, 2013). The findings in this study also mention the positive relationship between liquidity and firm value. Another finding from Osazuwa and Ayoib (2016) states that high liquidity indicates that funds are available to pay dividends, finance company operations and investments so that investors' assessment of the company's performance is getting better and the demand for shares increases. With the increasing demand for shares, the value of the company will also increase. The findings of Putra and Putu (2016) prove that liquidity has a positive and significant effect on firm value.

These findings find that dividend policy in non-financial companies also has a positive influence on company value. Powell and Baker (2012) stated that IDX company managers stated that dividend policy affected the value of the company. Because dividend decisions affect the value of the company and shareholders' wealth, the dividend policy in the company must get the attention of the company's management. Abor et al (2014) found that companies in Ghana and Nigeria pay dividends to shareholders to give a signal of value that the company is a company that is feasible to invest, and has positive fundamentals. Dividend policy in companies in India proves that dividend policy affects the value of the company. Dividend policy can affect company value and shareholder wealth, so that it deserves the company's attention (Baker and Sujata, 2015). Furthermore, institutional investors in India consider dividend policy to be a key factor in their investment decisions and view dividend policy as an integral part of business strategy because of its influence on corporate value.

These findings also prove that profitability and liquidity have a positive influence on firm value. Previous research found evidence on managers' perceptions of dividend payments of companies listed on the Indonesia Stock Exchange that according to him, the stability of corporate earnings is a determinant of dividend policy (Powell and Baker, 2012). Companies in South Africa set dividend payments as a reflection of the company's fundamental financial improvement (Abor et al 2014). Companies in Nigeria share their dividends when changes in company earnings are stable and sufficient. The research conducted by Amar et al (2017) strengthens the consistency of Signal Theory which shows the manager's high motivation to manage his income by highlighting the company's ability to distribute its dividends to shareholders. ADR companies prove that increasing profitability can reduce the risk that ADR companies will reduce their dividends (Perretti et al, 2013). Furthermore, the findings of Yusuf and Suhaiza (2016); Thakur and Kannadhasan (2018) find income has a significant positive effect on dividend policy. Research conducted by Amar et al (2017) found that the liquidity of non-financial companies in France had a positive influence on dividend policy. Liquidity as measured by Quick Ratio (QR) in manufacturing sector companies in India is a determinant in the company's dividend policy (Thakur and Kannadhasan, 2018).

High profitability represents the company having sufficient funds to pay dividends to shareholders. That is, if the higher the profitability, the dividends that will be obtained by investors will also be high. This can be used to attract investors to invest, so it will increase the demand for shares. With the increase in demand for shares will result in increasing the value of the company. The high level of liquidity influences investors' decisions in investing their capital, this will have an impact on the value of the company and investors consider that the company has a good performance. In line with that, liquidity is used by companies to be taken into consideration in determining the dividend policy that will be shared by shareholders. Some of the studies described above support the results of this study which prove that the relationship of profitability, liquidity and company value will be better if through dividend policy. Thus, non-financial companies need to maintain income stability and maintain the consistency of corporate dividend distribution, because this will increase the value of the company.

Theoretically, the results of this study have implications for the development of investment theory concepts. As well as the results of this study add insight into science in the field of management, especially financial management. The implementation of this theory has proven to be applicable to several companies, and the results of research contribute to providing additional investors in their investment decisions in companies to invest their capital. For future research, researchers need to consider a lot of data from other sector companies both in Indonesia and abroad, allowing for different research results.

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