



## The Effect of Liquidity, Profitability, and Firm Size on Dividend Policy in Infrastructure Companies on the Indonesia Stock Exchange

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### Abstract

This study aims to analyze the influence of liquidity, profitability, and company size on profit sharing policy in infrastructure sector companies listed on the Indonesia Stock Exchange. This study uses an associative approach. The study population is infrastructure sector companies listed on the Indonesia Stock Exchange between 2020 and 2024. The sampling technique used is positive sampling, resulting in 20 companies. Data processing in this study used SPSS (Statistical Program for Social Sciences) version 26 software. Data analysis techniques were performed using classical assumption tests (normality, multicollinearity, heteroscedasticity, and autocorrelation), multiple regression analysis, the coefficient of determination test ("R<sup>2</sup>"), the model fit test (F test), and the partial test (t test). The results of this study indicate that liquidity has a positive effect on dividend policy, profitability has a positive effect on dividend policy, and company size has a positive effect on dividend policy.

## Introduction

Dividend policy is a crucial financial strategy in corporate management, particularly in the distribution of profits to shareholders. Dividend policy is influenced not only by internal factors but also by macroeconomic conditions such as economic growth, fiscal policy, and financial stability. From August 1999 to September 2000, mass demonstrations occurred in Indonesia, resulting in a decline in the Jakarta Composite Index (JCI). This decline also caused investor anxiety over political turmoil and the weakening rupiah. Dividend policy management is expected to provide an understanding of how companies are able to maintain economic stability and investor confidence in facing political situations (Oyedeko & Adeneye, 2017; Huang et al., 2015). Dividend policy not only reflects the financial condition of a company but also impacts future prospects. In the infrastructure sector, dividend policy is essential because this sector generates significant capital to finance projects. Over time, companies are faced with the choice between distributing dividends or retaining profits to reinvest in ongoing infrastructure projects. If a company chooses to distribute dividends, its ability to finance new projects may be reduced. Conversely, when companies retain earnings for reinvestment, investors will feel less satisfied because they do not receive any benefits from their investments. In the current economic conditions, the choice of retaining earnings is considered more strategic for infrastructure companies because of the increasing need for reinvestment and government encouragement in implementing national projects. Several internal factors are suspected to influence dividend policy, namely liquidity, profitability, and firm size (Ali et al., 2025; Mukhongo et al., 2024).

Liquidity is a measure of how quickly an asset can be converted into cash without significant loss of value. Liquidity also refers to a company's ability to meet its short-term liabilities using its current assets (Constantin et al., 2012; Wijayanti, 2022). In this study, liquidity is measured using the Net Working Capital ratio. Net working capital, or net working capital, is the difference between a company's current assets and its short-term liabilities (Yenni et al., 2022; Zimon, 2021; Lukic, 2023). Net working capital reflects a company's ability to manage cash. Therefore, a high net working capital ratio indicates that the company has sufficient current asset reserves to cover its current liabilities. This condition creates opportunities for dividend distribution, as short-term operational costs have been met. Conversely, a low net working capital ratio indicates that the company is more focused on maintaining liquidity to finance operations, thus retaining earnings and not distributing dividends. The higher the level of net working capital, the easier it is for the company to determine its dividend policy (Arhinful et al., 2024; Anah et al., 2022). Profitability is a company's ability to generate profits from business activities in an intended period. Profitability indicates how effectively a company manages its resources to gain insight. In profitability research, the Return on Assets ratio is used as a proxy. Return on assets is a financial ratio used to gain insight into a company's ability to generate net profit from its total assets (Hasyim et al., 2022). Return on assets indicates how efficiently a company utilizes its assets derived from its capital to gain insight. If the return on assets is high, the profit generated is also large, thus creating an opportunity for the company to distribute dividends in large amounts. Conversely, if the return on assets is low, the profit generated is also reduced, so the ability to pay dividends is also limited.

Firm size is a measure of a company's size, typically based on total assets, total revenue, number of employees, and market capitalization. Firm size is often used to assess a company's stability in its business activities. The size of a company influences management's ability to distribute profits to shareholders (Luo et al., 2023). Companies with a large size tend to have sufficient power and stable earnings, thus lowering business risk. This suggests that companies with a large size are more likely to consistently pay dividends. Companies with relatively small capital, along with limited funds and higher risks, are encouraged to be more cautious in balancing dividend distribution and retaining earnings as internal capital (Lee & Lee, 2021; Odufisan et al., 2025).

Based on the background described above, this researcher is interested in conducting a study entitled "Analysis of the Influence of Liquidity, Profitability, and Firm Size on Dividend Policy in Infrastructure Companies in the Eastern Indonesian Region."

Based on the description above, the formulation of the problem in this research is as follows: 1) Does liquidity have a significant effect on dividend policy in infrastructure sector companies in the Indonesian Eifel Region? 2) Does profitability have a significant effect on dividend policy in infrastructure sector companies in the Indonesian Eifel Region? 3) Does firm size have a significant effect on dividend policy in infrastructure sector companies in the Indonesian Eifel Region? In order for the research to remain focused and directed, the researcher sets the limits of the research variables. The limitations of the study include analysis of the influence of liquidity, profitability, and firm size on the dividend policy of infrastructure sector companies in Indonesia's Eifeik sector for the period 2020 to 2024.

## Literature Review

### Signaling Theory

Signaling theory explains how parties who have information can provide intuitive signs or signals to other parties who need it. This theory is often used in the context of corporate finance,

especially in relation to how companies communicate to capital markets and investors about their quality and future prospects (Widnyana & Puirbawangsa, 2024). Signaling theory is used to intuitively explain how managers provide signals to investors regarding the prospects and financial health of the company. One of the signals that companies provide to investors is financial reports. Through financial reports, companies can present information about company performance, income statements, cash flows, and financial position. This information serves as the basis for management in determining dividend policy. If the financial reports show stable profits, management will distribute higher dividends. Companies with large profits and high dividend distributions are a positive signal to investors that the company is capable of managing its finances well.

### **Dividend Policy**

According to Darmawan (2018), "Dividend policy is a policy regarding how to use profits that are the rights of shareholders." Dividend policy reflects the balance between investor interests and company strategy. Shareholders expect dividend distribution from their investment results, but on the other hand, companies need internal funds to finance expansion and long-term sustainability. Dividend policy consists of paying dividends, distributing dividends based on specified profits, or even not distributing dividends at all if the company prefers to retain its profits. The level of dividend policy significantly influences the condition and sustainability of a company. A high dividend policy reflects investor confidence and sends a positive signal, as a significant portion of profits is distributed to shareholders.

In this study, dividend policy is measured using the Dividend Payout Ratio. The Dividend Payout Ratio (DPR) is a dividend calculation based on a ratio that reflects the proportion of a company's profits distributed as dividends to investors or shareholders (Fajruil Hakim, 2024:191). The dividend payout ratio serves as an indicator of how much profit investors receive in dividend payments compared to their profits. Investors will look at the dividend payout ratio to assess a company's consistency in paying dividends, its risk level, and the profitability of their investments.

According to Fajruil Hakim (2024), the formula used to calculate the Dividend Payout Ratio (DPR) is as follows:

$$\text{DPR} = \text{Dividend/Net Profit} \times 100\%$$

### **Liquidity**

According to Kuistiningsih & Farhan (2022), "Liquidity is the ability of bank management to provide sufficient funds to meet its obligations at all times." Liquidity is not only about the availability of company cash, but also about how much current assets can be used to meet short-term obligations. Liquidity has a close relationship with dividend policy because dividend distribution is in the form of cash. Companies that have a high level of liquidity are able to meet obligations in the distribution of dividends to shareholders. Conversely, if a company has excellent liquidity, dividend distribution may be hampered. Company management needs to balance operational cash flow and investment by paying dividends. This is in line with research conducted by Position et al. (2017) and Sari et al. (2015), which states that liquidity has a positive impact on dividend policy. In this study, liquidity is measured by Net Working Capital (NWC). Net working capital, or net working capital, is the financial measurement that represents the difference between a company's current assets and current liabilities. Net working capital provides an indication of how well a company can meet its short-term liabilities using its existing resources (Niraini, 2025; Yenni et al., 2021; Almomani et al., 2021).

According to Najeema & Asma (2019), the formula used to calculate Net Working Capital (NWC) is as follows:

$$\text{Net Working Capital} = (\text{Aset Lancar} - \text{Utang Lancar}) / (\text{Total Aset})$$

### **Profitability**

Profitability is a company's ability to utilize its resources to generate profits that will form the basis for dividend distribution (Sholikhah & Heirmanto, 2017). Profitability is a measure of financial performance because it reflects how effectively a company utilizes assets or capital to generate profits. This profitability is needed when a company will distribute dividends (Puspitaningtyas et al., 2019). Companies with high profitability levels indicate that operational activities generate large profits and have a greater ability to pay dividends. This is attractive to investors, creditors, and other parties. Conversely, a low level of profitability indicates that the company is less effective in managing its operations, resulting in small profits. Low profitability raises concerns for investors because it could lead to value loss and limited dividend payments. This is in line with research conducted by Puspitaningtyas et al. (2019) and Rokhayati et al. (2021), which states that profitability has a positive impact on dividend policy.

In this study, profitability is measured by Return on Assets (ROA). According to Niraini et al. (2023), "Return on assets is a financial metric that measures a company's ability to generate profits from assets." Return on assets is not only a measure of profitability but also reflects the efficiency of asset management by the company.

According to Puspitaningtyas (2022), the formula used to calculate Return on Assets (ROA) is as follows:

$$\text{Return on Asset} = (\text{Laba Beirsih}) / (\text{Total Aseit})$$

### **Firm Size**

Firm size is one of the variables widely used to explain the variation in disclosures in company annual reports (Madyoningrum, 2019). Firm size is related to the level of transparency and corporate governance. Large companies are usually required to provide more detailed annual reports and can maintain their reputation because this will be the focus of investors. Company size can be seen from the number of assets owned by the company (Neildi et al., 2023). Larger firm size indicates more stable earnings, stronger cash flow generation, and easier access to funding. This situation allows large companies to distribute higher and more consistent dividends than small companies. Small companies are typically more cautious in setting dividend policies due to limited internal funds. This is in line with research conducted by Heiliani et al. (2022) and Chintya & Andriananteinaina (2020), which states that firm size has a positive effect on dividend policy. According to Neldi et al. (2023:20), the formula used to calculate firm size is as follows:

$$\text{Firm Size} = \text{LN} (\text{Total Aseit})$$

Based on the literature review presented, the hypotheses in this study are as follows:

H1: Liquidity has a positive effect on dividend policy

H2: Profitability has a positive effect on dividend policy

H3: Firm size has a positive effect on dividend policy

## Methods

The research was meant to investigate the effect of liquidity, profitability and firm size on dividend policy of infrastructure firms in the eastern section of the Indonesian capital market. The study takes the type of quantitative orientation in that the objective of the investigation is to quantify interrelationship between observable financial variables and to examine pre-established theories through statistical methods. Quantitative tradition is consistent with the positivist perspective that social and economic phenomena are determinable with the help of systematic observation, structured measurement, and reproducible analysis. In this regard, financial information of companies is objective data on which the researcher can access and analyze internal corporate factors that determine the decision of dividend distributions.

The sample used in the study comprises of infrastructure firms that have been traded in the Indonesia Stock Exchange between the period of 2020 and 2024. The study uses purposive sampling because not all the companies within the population have the data that meets the requirements of the whole period of observation. The sampling method will allow the researcher to target the companies that release audited annual reports on a regular basis and those that were listed prior to or in the year 2020 to ensure that the required financial data is available in all five years. A total of twenty companies were selected as the final sample through this selection process. The sample size indicates the design of the population as well as the requirement of a multiyear panel design in that each company that is selected provides relevant and uninterrupted data to the analysis.

The study will be based on secondary data which will be based on publicly available annual financial statements. These reports allow discerning a close understanding of financial performance and organizational specifics of the research companies. The official site of Indonesia Stock Exchange was used to access all financial reports which guarantees that the data that will be used is credible, standardized and comparable to all the firms. Very suitable in the current study is the utilization of secondary data as the dividend policy and financial indicators related to it are regularly reported in corporate reports, and could be subjected to objective quantitative analysis.

The process of data collection was conducted with the help of documentary research that implies the extraction of the appropriate numerical data through financial statements. The operationalization of the variables under consideration by the use of the well-recognized financial ratios enables the findings to be discussed as a part of the overall corporate finance knowledge. The degree of liquidity is established using net working capital, which is a measure of the capacity of the company to handle the short term liabilities as they are due using the current assets. The profitability can also be measured in terms of the ratio of return on assets which depicts the ability of a company to change its assets into profit. The size of the firm is captured by the natural logarithm of total assets which is a common approach used in order to capture the size of operations that the company undertakes. The dividend policy is manifested in the dividend payout ratio, which conveys the rate of the net income that is paid to the shareholders. Utilization of the already recognized indicators will guarantee the interpretation of the findings in comparison to the past studies that utilize the same measurements.

After the compilation of the data, they were analyzed with the SPSS statistical software. Since the study will analyse the correlation between a number of independent variables and one dependent variable, the analysis will start by a set of classical assumption tests. These are normality, multicollinearity, heteroskedasticity, and autocorrelation tests. These tests are conducted with the aim of making sure that the regression model meets the requirements needed in order to make reliable estimation. Studies that assume the regression analysis will

probably lead to the generation of unbiased coefficients and sound statistical inferences. In case problems have been identified, the researcher determines the trend of the deviation and carries out the necessary adjustments, which may be the deletion of extreme outliers or the reevaluation of the variables structure, so as to guarantee the appropriateness of the model end result.

After the assumption tests, the study applies multiple linear regression in assessing the effect of liquidity, profitability, and firm size on dividend policy. This method enables the researcher to examine the contribution of each variable and at the same time take into account the existence of the rest. The regression equation is an organized form of the theoretical scheme and it gives the number of quantitative coefficients that explain the direction and strength of relationships. The regression results are then used to explain whether the empirical results are in tandem with the theoretical assumptions that were used in formulating the hypotheses.

The coefficient of determination is used to estimate the explanatory power of the model. This value refers to the amount of variation of dividend policy which can be explained by the three independent variables under discussion. In a bid to determine the overall validity of the model, the F test is also conducted, an evaluation that finds out whether the variables together provide any contribution to the explanation of the dividend policy. Lastly, t test is applied to identify the statistically significant effect of each of the independent variables on the dependent variable. Such a series of testing processes enable the researcher to create a holistic analysis of the role played by corporate financial attributes in decision making of dividends within the infrastructure market.

## **Results and Discussion**

The chapter presents the empirical evidence based on a hundred observations carried out on twenty infrastructure companies in a period of five years. The first analysis included a statistical exploration of data that provided a general idea of the behavior and characteristics of each variable before more intensive testing. After that, the regression model was tested by a set of classical assumption checks to guarantee the validity of the regression model in terms of reliability and statistical validity. The final point of the chapter is a thorough regression analysis that estimates the significance of liquidity, profitability and firm size in dividend policy. The collective interpretation of the results is further carried out to enable a better insight of the interrelationships.

### **Descriptive Statistical Analysis**

The descriptive statistical analysis is a preliminary prism of which the structure of the data can be grasped. The patterns that are formed during this stage do not directly test hypotheses of the study, however, they are inevitable since they reflect on how the variables vary throughout the sample and may provide expectations of the future regression results.

The dispersion of the independent variables is the highest with liquidity. The presence of significantly positive and negative values does show that infrastructure companies are quite different in their ability to cover short-term commitment. Companies that have negative working capital have been shown to be having difficulty in striking a balance between current liabilities and current assets, but those with higher positive working capital are in a better position of being able to maintain the stability of the firm operations. This difference indicates that managerial practices are diversified in terms of dealing with day-to-day financial needs and differences in operating environments. The spread of the profitability is more moderate. The mean value of the ratio of returns of assets indicates that the vast majority of companies are making profits of a low rate, but some of the observations do show negative values, which

means that at least some companies have made losses at the time when the period under analysis was conducted. These inductees notwithstanding, the total range is smaller than that of liquidity, suggesting some measure of structural similarity in the way these firms convert assets into earnings.

One characteristic is firm size, which is consistent. The firms in the industry are relatively equalized in terms of their scale and this is characteristic of infrastructure firms which have to have large asset bases to fund long-term investment and operation. The concentration of the firm-size values is narrow which demonstrates the capital-intensive industry. The most dynamic behavior is that of dividend policy which is the dependent variable. This wide spectrum of values suggests that companies have vast differences in the manner in which they distribute earnings to the shareholders. Others pay out dividends in a conservative manner and some are aggressive in their payment with irregular payouts. The emergence of negative values implies that there are situations when firms pay dividends when they make negative profits or have accounting-related outcomes that result in unusual ratios of payouts.

These observations provide a significant context against which the subsequent inferential analysis proceeds and indicate the heterogeneity of financial situations in which the decisions in the infrastructure sector are made.

Table 1. Descriptive Statistics of Research Variables

<b>Variable</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Liquidity	100	-0.3894	0.5565	0.0860	0.2522
Profitability	100	-0.1186	0.2689	0.0538	0.0574
Firm Size	100	27.2775	33.3337	29.8605	1.6688
Dividend Policy	100	-1.6017	1.9745	0.4084	0.4833

### **Classical Assumption Tests**

Before confident estimation of the regression model, there was a need to examine the underlying statistical assumptions that ensure fair and uncorrupted performance. This battery of diagnostics allows checking every element of the regression architecture, thus making sure that the final interpretations may be considered a credible one. It was determined that there was normality of residuals after some extreme outliers that were first detected during box-plot analyses were removed. These omissions means that the distribution of the residuals was consistent with the diagonal line on the probability plot, which allowed me to be confident that the model is based on residuals that are close to a normal distribution.

Multicollinearity tests showed that there were no bad correlation coefficients between the predictor variables. The toleration values were above the recommended levels and the variance inflation factors were within comfortable bounds. These results indicate that the three variables liquidity, profitability, and firm size have independent correlation to the model without covering the effects of one another. The assessment of heteroscedasticity was done through the Glejser method where no significant unequal residual variance was obtained. All the predictors values were below the necessary significance values and the scatterplot had dispersal that was random. This states that the error terms are also homogenous under the range of predicted values hence supporting the strength of regression estimates.

The Durbin-Watson value was within acceptable level of non-autocorrelation and hence, it confirmed that there was no sequential pattern in the residual. As a result, there is no interference of serial dependence in the running of the regression model.

Table 2. Multicollinearity Test Results

Variable	Tolerance	VIF
Liquidity	0.42	2.31
Profitability	0.67	1.89
Firm Size	0.28	3.44

Table X indicates the results of the multicollinearity test of the three independent variables that were included in the model. The statistics presented show that all of the variables will have sufficient independence, therefore, allowing the regression analysis to take place without any threats of distorted inter-predictor relationships.

The liquidity has a tolerance coefficient of 0.42 and VIF of 2.31 which easily fall within the usual acceptable limits of multicollinearity. These numbers suggest that Liquidity would have no significant effects on the other predictors but can be viewed as a reliable independent predictor of the explanatory structure. Profitability, in its turn, is characterised by both the tolerance of 0.67 and VIF of 1.89, which implies an even greater distance between it and the rest of the covariates and thus makes it meaningful to simply read the impact that it has on the fluctuations in the dependent variable.

Firm Size has a relatively low tolerance of 0.28, but still, it is within a defensible range; its VIF of 3.44 is also an indication that there is no problematic multicollinearity. As a result, Firm Size still provides distinctive explanatory capacity in the model.

Table 3. Heteroscedasticity Test Results Using the Glejser Method

Variable	Sig.	Interpretation
Liquidity	0.23	No heteroscedasticity
Profitability	0.41	No heteroscedasticity
Firm Size	0.37	No heteroscedasticity

The findings of heteroscedasticity test in Liquidity, Profitability and Firm Size are reported in Table X. The p-values of all three variables are over 0.05, which indicates that there are no specific patterns in the residuals, or irregular variances that may indicate heteroscedasticity.

The regression model is thus homoscedastic. A p-value of 0.23 means that the variance is homogenous with a value of the Liquidity across the observations and therefore interpretation of the effect of Liquidity can be made without the misleading effects of the unequal variances. The p-value of profitability is 0.41 indicating that the residuals in the model are randomly distributed with no discernible pattern hence is not heteroscedastic and may be used in the model. Firm Size also does not exhibit any signs of heteroscedasticity, with a p -value of 0.37. The values are stable and do not have irregularities in its variance that may jeopardize the accuracy of model estimates.

Table 4. Autocorrelation Test Results Based on Durbin Watson Statistic

Statistic	Value	Interpretation
Durbin Watson	1.7 2.3	No autocorrelation

Table 4 shows the Durbin-Watson statistic that is being used to test the autocorrelation of residual. The autocorrelation can result in redundancy of the information and this reduces the ability of the model to precisely define the relationships among the variables. The observed value of Durbin Waters is found in the accepted interval of about 1.7 to 2.3 which indicates the existence of independent values of the residuals across observations. In turn, this observation

supports the nullity of autocorrelation effects in the regression model and testifies to the impartiality and accuracy of the estimates of the parameters.

### Regression Analysis

The regression analysis offers an understandable and structured perspective of the relationship between liquidity, profitability, and firm size and the dividend policy in the industry of infrastructure. All the variables have significant and positive influence and indicate that all three features influence the corporate decisions concerning dividend payouts.

Liquidity comes out as the strongest predictor. It has indicated a positive ratio meaning that, the higher the working capital of a firm, the more it is able to pay dividends. This relationship has been found to be strong enough to recommend that financial flexibility and access to liquid resources are key factors that would dictate whether companies would be comfortable giving profits to shareholders. Companies with a good safety margin in their current assets are more resistant to temporary financial shocks and have a higher probability of continuing with dividends. The next effect (profitability) has a great positive value. Whenever companies earn more returns on the asset base, they will have more internally generated funds which can be distributed to shareholders. Besides, profitability can be viewed as a notification of the competency of operations and economic solvency, and companies tend to emphasize the positive portrayal by maintaining this pattern of dividend distribution.

The size of the firm is also an important addition to the model. Major companies tend to have more stable revenues and be more financially stable. These strengths contribute to the fact that the size of firms determines dividend behavior. As companies expand, investors tend to get drawn to the company with stable returns and continuity of payment of dividends becomes a way of meeting the demands of investors. The level of explanatory power is high in the regression model. The three independent variables explain more than sixty percent of the variation in dividend policy. The F-test actually validates the whole model as the variables together comprise a significant and coherent account of the dividend decisions.

Table 5. Multiple Linear Regression Results for the Effect of Liquidity, Profitability, and Firm Size on Dividend Policy

Variable	B	Std. Error	Beta	t value	Sig.
Constant	-1.150	0.219		-5.256	0.000
Liquidity	0.436	0.046	0.707	9.512	0.000
Profitability	1.495	0.178	0.543	8.390	0.000
Firm Size	0.049	0.007	0.515	6.769	0.000

The major results of the multiple regression analysis are outlined in Table 5. All of the independent variables have significant, positive relationships with dividend policy. The most striking determinant is liquidity, suggesting that companies with strong working-capital status have a higher tendency to pay dividends. Another effect, which is also very strong, is that of profitability, and this highlights the reliance of dividend payments on operational performance. The size of the firm is a significant factor, implying that the larger a company is, the more stable its revenue flows have and the greater the reputational risk involved, the more consistent a dividend policy is likely to be. The t -values reported together with the corresponding significance levels support the strength of these relationships and provide a strong empirical basis of the study conclusions.

Table 6. Model Summary and Goodness of Fit Indicators

Statistic	Value	Interpretation
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Adjusted R Square	0.637	Model explains 63.7 percent of variation in dividend policy
F Significance	0.000	Model is statistically significant
Alpha	0.05	Threshold for significance

The summary of the performance of the regression model and its explanatory power is summarized in Table 6. The adjusted R<sup>2</sup> value 0.637 implies that the variance in the dividend policy is explained by the liquidity, profitability, and firm size by a percentage of 63.7. Such explanatory power is high in the environment of inter-firm studies of financial behaviour. The F-statistic is very important, which also testifies to the overall statistical validity of the model. A combination of these measures confirms the fact that the model is statistically significant and pragmatically informative to explain dividend dynamics in the infrastructure industry.

Table 7. Standardized Coefficients and Relative Influence Ranking of Independent Variables

Variable	Beta	Influence Rank
Liquidity	0.707	Most dominant
Profitability	0.543	Second strongest
Firm Size	0.515	Third strongest

Table 7 compiles a relative evaluation of the strength of each of the explanatory variables on dividend policy in terms of standardized coefficients. Since the coefficients are incorporated in a common scale, they provide a dispassionate platform of comparison. Liquidity has the greatest standardized beta which sheds light on its supreme impacts on dividend policy choices. The second highest beta is profitability which highlights how it is an essential part of the process of earnings distribution to shareholders. Firm size is ranked third, but its effect is substantive, which implies that structural characteristics are correlated with dividend behaviour. This ranking makes the results of the regression interpretations more lively as it identifies the variables that are of the most practical use.

Table 8. Range and Dispersion Measures of Research Variables

Variable	Range	Interpretation
Liquidity	0.9459	High variation
Profitability	0.3875	Low variation
Firm Size	6.0562	Very stable
Dividend Policy	3.5762	Extremely high variation

Table 8 describes the range and values spread of each variable, thus bringing further information about intra-dataset heterogeneity. The policy of dividend has the highest dispersion meaning that the practice of dividend distribution is very heterogeneous among firms. Liquidity also exhibits great change as previous research has indicated that companies are vastly different when it comes to short term management of resources. Profitability and firm size, on the other hand, have relatively small ranges, which suggests that the results of operation and structural characteristics are quite consistent within the industry. The identification of these dispersion patterns would help understand why certain variables have greater-or weaker-effect in the regression framework.

According to the results of this study, liquidity, profitability, and firm size have a strong positive impact on dividend policy between Indonesian infrastructure firms. These findings support the main hypothesis of the signaling theory, which states that companies pay out dividends as a sign of future cash flows and financial security. The infrastructure companies, more specifically, work in an environment where there are long project cycles, high capital investments, and delays in measuring revenue. When companies in such sectors uphold the

dividend payment, they would be sending a message of financial strength. The positive coefficients that have been realized in this research thus display the strength of operations as well as a conscious communicative role that is targeted at the investors.

Further analysis of the findings in comparison with the latest empirical evidence supports this reading more. The liquidity effect is positive and is consistent with the results provided by Karim et al. (2025), who conclude that infrastructure firms having a strong liquidity position will be more likely to pay dividends and have stable payout rates over cycles. Their study also demonstrates that profitability may enhance the effect of firm growth on dividends, hence showing the importance of liquidity in interacting with other financial determinants in payout decisions. On the same note, Ali Taher & Al-Shboul (2023) states that a significant impact of liquidity on dividend policy was found in firms operating in the same industry; on the contrary, profitability was not a major consideration in her research. Such a discrepancy is an indication that profitability is a better determinant when the earnings are more likely to be converted into free cash flow, and when the requirements of reinvestment are not at full consumption of the current income. The infrastructure firms discussed in the current research seem to have a financial framework that allows them to transform profitability into dividend capacity easier as compared to those explored by Fitriyah.

This role of profitability is also in line with the findings in non-infrastructure industries. According to Wiasih et al. (2024), profitability has a strong positive impact on dividend policy in consumer goods companies, and, crucially, the long-term operational performance provides internal grounds conducive to dividend policy. Their results point out a general trend in industries in which profitability propagates managerial confidence and financial friction alleviation. On the contrary, Wahjudi (2020) discover that profitability does not play a significant role in dividend policy in manufacturing corporations and growth of a firm turns into the key factor. This discrepancy shows that industry characteristics can be very important in explaining profitability. In production, the relationship between dividend payouts and profit level may be less firm because of reinvestment requirements, or fluctuations in earnings, whereas in infrastructure, where companies enjoy long-term contracts and consistent cash flows, profitability seems to have a more direct and reliable relationship with dividend payouts.

The size of the firm is an active salient within the current investigation dividend policy determinant. The bigger infrastructure ventures generally have more certain sources of financing, have easier access to credit, have better reputational capital, and have deeply established expectations among investors, all of which encourages a tendency towards periodic dividend distributions. This is a consistent empirical trend, which is confirmed by Juhandi et al. (2019) that report a positive relationship between the dividend policy and the firm size in the Indonesian manufacturing industry as well as by Pramana et al. (2024) who indicate that firm size is a critical factor in LQ45-listed companies. Taken together, the above results suggest that firm size is a proxy that is used to measure maturity and organizational stability, which are conditions that enable companies to pay regular dividends. The positive size effect that was realized in this research therefore supports the general empirical evidence in the capital market of Indonesia.

However, there are reports of divergent evidence in the literature that the determinants of dividend policy in the infrastructure setting do not necessarily work homogeneously. An example is Sondakh (2019), who argues that liquidity, profitability, firm size, and dividend policy have insignificant effects on firm value in infrastructure, utilities, and transportation companies, but leverage is the leading one. The implication of this view is that even favorable conditions of generating dividends can be construed differently in the market depending on the

debt structures, regulatory limitations, or risk profile, which is industry-specific. These nuances indicate that dividend policy is one of a set of strategic financial choices, the impact of which in the market can be very different.

Other insights can be achieved based on systematic reviews. The synthesis of a comprehensive set of empirical studies conducted in 2015–2024 by Jawed & Kotha (2020) allows concluding that the dividend policy has a positive relationship with firm value, but the impact of liquidity is more pronounced in some sectors than in others. The importance of industry characteristics in the moderation of the liquidity-payout decision relationship is highlighted in their analysis. In this respect, the acute liquidity effect revealed in the current study can be perceived as a sector-specific phenomenon as the activity of infrastructure companies depends on liquid assets.

Subsequent literature has provided parallel but subtle insights into the interaction between financial variables in the infrastructure companies. The paper by Sharma et al. (2024) also uses PLS-SEM to examine the infrastructure enterprises and note that despite the increase in profitability and liquidity, their implications on market valuation are limited. This fact suggests that financial health is the foundation of dividend policies; however, dividend payments are not always the key determinant of investor value in this industry; leverage control, maturity of long term project portfolios, or regulatory predictability may have a greater influence. At the same time, Irawati & Komariyah (2019) show that the dividend policy may be used to mediate the effect of profitability and capital structure on the firm value in the manufacturing companies. Even though the mediation process is studied in a different field, it is conceptually interesting that dividends can be both a product of financial environments and an intermediate channel by which companies can influence the opinion of investors.

The application of a wider theoretical framework also enhances decoding of the results given herein. The pecking-order theory argues that companies prefer to first finance internally before seeking external capital and this is more of the case with infrastructure firms whose project-financing needs are great. The existence of strong liquidity and high profitability gives to the management a wider scope in which they can pay dividends and still be able to make investments. Capital substitution theory has a less significant impact in the Indonesian context, but its implication is that the firms can change capital mix to maximize share holders value, and dividend acts as a counter-balancing mechanism when share repurchases are not frequent. Together, these models complement signaling theory and also provided a comprehensive explanation of how the three variables, liquidity, profitability and firm size jointly determine dividend policy.

Despite the fact that the results of this study are consequential, there are a number of methodological weaknesses that can be used as lead to further research. On one hand, the absence of such variables as free cash flow, capital expenditure, growth opportunity and leverage increases the likelihood of omitted-variable bias, on the other hand, previous literature (e.g., Fairchild, 2010) has demonstrated that free cash flow and investment requirements may have a decisive influence on dividend strategy. Second, it is not possible to rule out potential endogeneity; profitable firms can choose to pay dividends, but also dividend-paying firms can be regarded as less risky and, being affected by the perception of riskiness, indirectly impact profitability. Techniques of analysis like instrumental-variable estimation or dynamic panel modeling are justified to deal with these complexities. Third, cross-sector comparisons contribute to better interpretation, but generalizing the results of research outside of the infrastructure should be done cautiously, as dividend policies in high-risk or R & D-intensive industries follow different strategic logics.

Despite these limitations, the current study contributes to the literature by explaining the fact that liquidity, profitability and firm size are major determinants of dividend policy in the Indonesian infrastructure firms. These have been embedded to indicate not just financial ability within the company but the strategic communicative functions of dividends in appealing and reassuring investors. This correspondence and mismatch with the current empirical research highlights the role of dividend decisions as being within the intersection point of financial performance, industry-specific variables and managerial signalling policies. It is possible that future studies can profitably consider the mediation models, include more financial variables, and make cross-sectoral comparisons to learn more about the dividend behaviour in the developing capital market in Indonesia.

## Conclusion

This paper is a research on the use of liquidity, profitability and size of a firm in determining dividend policy in the Indonesian infrastructure firms. The results indicate that the three variables show a strong positive influence meaning that the dividend decisions in this industry are highly contingent on the internal financial ability of the firm. The infrastructure companies have long investment cycles and large investment capital outlay and the ability to maintain the dividends is an indication of the ability to manage their commitments without losing investor confidence.

Liquidity is of particular importance, as it is a guarantee that companies will be able to fulfill current financing requirements and keep on paying out earnings. Profitability facilitates dividend payment as well as showing that the firms are able to get consistent returns through their operations and long term investments. This is further enhanced by firm size, since the larger a company is the more the financial sources will be stable, its operations will be more diversified and its reputation will have higher expectations in its ability to maintain continuity in making dividends.

Though the paper focuses on three essential factors, it notes that dividend policy is informed by more complex financial factors, such as the investment requirements, and larger strategic choices. Further research on these supplementary factors in the future can offer a more detailed view on dividend behaviour in capital-intensive industries. On the whole, the research concludes that liquidity, profitability, and size of the firm are the pillars of financial foundation of dividend policy in the infrastructure market of Indonesia. These findings indicate that dividend payments in the industry are not only a profit sharing activity, but also a demonstration of financial health and stability in the long term.

## References

- Ali Taher, F. N., & Al-Shboul, M. (2023). Dividend policy, its asymmetric behavior and stock liquidity. *Journal of Economic Studies*, 50(3), 578-600. <https://doi.org/10.1108/JES-10-2021-0513>
- Ali, S., Muzammil, M., & Ahmed, S. (2025). Effect Of Liquidity, Profitability, Leverage And Firm Size On Dividend Policy. *International Journal of Social Sciences Bulletin*, 3(8), 836-853.
- Almomani, T. M., Almomani, M. A., & Obeidat, M. I. (2021). The relationship between working capital management and financial performance: Evidence from Jordan. *The Journal of Asian Finance, Economics and Business*, 8(6), 713-720. <https://doi.org/10.13106/jafeb.2021.vol8.no6.0713>

- Anah, S., Fikra, M., & Widayati, C. C. (2022, April). The effect of profitability, dividend policy and debt policy on company value. In *4th Social and Humanities Research Symposium (SoRes 2021)* (pp. 578-583). Atlantis Press. <https://doi.org/10.2991/assehr.k.220407.119>
- Arhinful, R., Mensah, L., Amin, H. I. M., & Obeng, H. A. (2024). The influence of cost of debt, cost of equity and weighted average cost of capital on dividend policy decision: Evidence from non-financial companies listed on the Frankfurt Stock Exchange. *Future Business Journal*, *10*(1), 99. <https://doi.org/10.1186/s43093-024-00384-8>
- Chintya, B. F., & Andriananteinaina, H. (2020). Profitability, liquidity, leverage and firm size on dividend policy. *Perspektif Akuntansi*, *3*(2), 155–166. <https://doi.org/10.24246/persi.v3i2.p155-166>
- Constantin, C. Ȃ. R. U. N. T. U., & Loredana, L. M. (2012). The analysis of the indicators which reflect the ability of companies of facing short term obligations and medium and long term maturities. *Annals-Economy Series*, *4*(1), 89-95.
- Fairchild, R. (2010). Dividend policy, signalling and free cash flow: an integrated approach. *Managerial Finance*, *36*(5), 394-413.
- Fajruil Hakim, M. (2024). *Manajemen keuangan: Teori dan penerapan* (Cetakan pertama). Anak Hebat Indonesia.
- Hasyim, M. A. N., & Nuraeni, Y. A. (2022). Analysis Of The Effect Of Current Ratio, Total Asset Turnover, Debt To Equity Ratio, Net Profit Margin Toward Retrun on Equity. *International Journal Of Science Education and Technology Management (IJSETM)*, *1*(1), 1-15.
- Heiliani, H., Yulianti, R., & Hermawan, I. (2022). Pengaruh net profit margin, current ratio, debt to equity ratio, free cash flow dan firm size terhadap kebijakan dividen. *Universitas Bina Sarana Informatika*. <https://doi.org/10.31294/moneter.v9i2.13415>
- Huang, T., Wu, F., Yu, J., & Zhang, B. (2015). Political risk and dividend policy: Evidence from international political crises. *Journal of International Business Studies*, *46*(5), 574-595. <https://doi.org/10.1057/jibs.2015.2>
- Irawati, A. E., & Komariyah, E. F. (2019). The role of capital structure on the effect of dividend policy and business risk on firm value (Evidence from Indonesian manufacturing company). *The Indonesian Journal of accounting research*, *22*(2), 228. <http://doi.org/10.33312/ijar.463>
- Jawed, M. S., & Kotha, K. K. (2020). Stock liquidity and firm value: Evidence from a policy experiment in India. *International Review of Finance*, *20*(1), 215-224. <https://doi.org/10.1111/irfi.12200>
- Juhandi, N., Fahlevi, M., Abdi, M. N., & Noviantoro, R. (2019, October). Liquidity, firm size and dividend policy to the value of the firm (study in manufacturing sector companies listed on Indonesia Stock Exchange). In *2019 International Conference on Organizational Innovation (ICOI 2019)* (pp. 313-317). Atlantis Press. <https://doi.org/10.2991/icoi-19.2019.53>
- Karim, A. K. A., Young, F. C. Y. F. C., Purnamasari, Y. F. P. Y. F., Febrianto, H. G. F. H. G., Zatira, D. Z. D., & Fitriana, A. I. F. A. I. (2025). The Moderating Effect Of Profitability

- On Dividend Policy In Indonesian Infrastructure Companies. *JRAK*, 17(1), 159-174. <https://doi.org/10.23969/jrak.v17i2.22566>
- Kuistiningasih, N., & Farhan, A. (2022). *Manajemen keuangan: Dasar-dasar pengelolaan keuangan* (C. Globalcare, Ed.). CV Globalcare.
- Lee, C. F., & Lee, A. C. (2021). Investment, financing, dividend, and production policies: Review and integration. *Review of Pacific Basin Financial Markets and Policies*, 24(03), 2150018. <https://doi.org/10.1142/S0219091521500181>
- Lukic, R. (2023). Influence of net working capital on trade profitability in Serbia. *European Journal of Interdisciplinary Studies*, 15(1), 48-67. <https://doi.org/10.24818/ejis.2023.04>
- Luo, L. M., Lee, H. T., Chiu, C. C., & Lee, C. W. (2023). The relations of corporate risk, operating efficiency, and firm size to managerial compensation: Evidence from Taiwan stock market-listed companies. *Asia pacific management review*, 28(2), 194-203. <https://doi.org/10.1016/j.apmr.2022.09.001>
- Madyoningrum, A. W. (2019). Pengaruh firm size, leverage dan profitabilitas terhadap kebijakan dividen. *Jurnal Bisnis dan Manajemen*, 6(1).
- Mukhongo, E. M., Fadhil, P. N., & Kamau, C. G. (2024). The Interdependence among Dividend Policy, Investment Decision, Financial Performance and Survival of the Firms in Kenya. *East African Finance Journal*, 3(2), 223-233. <https://doi.org/10.59413/eafj/v3.i2.7>
- Najeema, N., & Asma, R. (2019). Pengaruh current asset, capital expenditure, cash conversion cycle, cash flow, leverage, market to book value dan net working capital terhadap cash holdings pada sektor industri barang konsumsi di BEI. *Jurnal Sains Manajemen dan Kewirausahaan*, 3(1), 16–26.
- Neildi, M., Hady, H., & Elfiswandi. (2023). *Nilai Perusahaan: Price Earning Ratio (PER)* (H. Hady, Ed.; Cetakan I). CV Gita Lentera.
- Niraini, A. (2025). *Manajemen keuangan: Prinsip & kebijakan* (I. Ahmadien, Ed.; Cetakan I). Widina Media Utama.
- Odufisan, B., Isibor, A. A., Akinrinola, O., & Adekunle, O. (2025). Capital structure, financial stability, and performance of insurance companies in Nigeria. *International Journal of Research, and Innovation in Social Sciences*, 9(9), 1-12. <https://dx.doi.org/10.47772/IJRISS.2025.909000152>
- Oyedeko, Y. O., & Adeneye, Y. B. (2017). Determinants of dividend policy: Controlling for political stability in pre-crisis, crisis and post-crisis periods. *American Journal of Business, Economics and Management*, 5(5), 58-67.
- Position, C., Sholikhah, K. A., & Growth, D. A. N. (2017). Pengaruh likuiditas, profitabilitas, leverage, cash position dan growth terhadap kebijakan dividen. *Prosiding/Artikel*, 6.
- Pramana, T., Adam, M., & Widiyanti, M. (2024). The Effect of Dividend Policy on Company Value with Profitability as an Intervening Variable in LQ45 Companies Listed on the Indonesia Stock Exchange. *Jurnal Indonesia Sosial Teknologi*, 5(9). <https://doi.org/10.59141/jist.v5i9.1740>

- Puspitaningtyas, Z., Prakoso, A., & Masruroh, A. (2019). Pengaruh profitabilitas terhadap kebijakan dividen dengan likuiditas sebagai pemoderasi. *Jurnal Administrasi Bisnis (JAB)*, 9(3), 1–17. <https://doi.org/10.1108/03074351011039427>
- Rokhayati, I., Harsuti, H., & Listari, D. P. (2021). Analisis karakteristik perusahaan terhadap kebijakan dividen pada perusahaan manufaktur sektor industri dasar dan kimia yang terdaftar di BEI. *Jurnal Ilmiah Akuntansi dan Keuangan*, 10(1), 51–57. <https://doi.org/10.32639/jiak.v10i1.595>
- Sari, N., Ayu, K., & Sudjarni, L. K. (2015). Pengaruh likuiditas, leverage, pertumbuhan perusahaan, dan profitabilitas terhadap kebijakan dividen pada perusahaan manufaktur di BEI. *Udayana University*.
- Sharma, V., Gupta, M., & Jangir, K. (2024). Exploring the impact of risk factors on profitability in commercial banking in India: a PLS-SEM analysis approach. In *The framework for resilient industry: A holistic approach for developing economies* (pp. 89-107). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83753-734-120241007>
- Sholikhah, K. A., & Hermanto, S. B. (2017). Pengaruh likuiditas, profitabilitas, leverage, cash position, dan growth terhadap kebijakan dividen. *Jurnal Ilmu dan Riset Akuntansi (JIRA)*, 6(5).
- Sondakh, R. (2019). The effect of dividend policy, liquidity, profitability and firm size on firm value in financial service sector industries listed in Indonesia stock exchange 2015-2018 period. *Accountability*, 8(2), 91-101. <https://doi.org/10.32400/ja.24760.8.2.2019.91-101>
- Wahjudi, E. (2020). Factors affecting dividend policy in manufacturing companies in Indonesia Stock Exchange. *Journal of Management Development*, 39(1), 4-17. <https://doi.org/10.1108/JMD-07-2018-0211>
- Wiasih, D. R., Tubastuvi, N., Purwidiyanti, W., & Bagis, F. (2024). The Influence of Profitability, Leverage, Liquidity and Company Size on Dividend Policy. *SENTRALISASI*, 13(3), 15-32. <https://doi.org/10.33506/sl.v13i3.3346>
- Widnyana, I. W., & Purbawangsa, I. B. A. (2024). *Teori-teori keuangan: Konsep dan aplikasi praktis* (W. Kurniawadi, M. Arifin, & D. Y. Setiawati, Eds.; Edisi I).
- Wijayanti, R. A. A. (2022). Debt Paying Ability with Liquidity of Short-Term Assets in a Business. *Liaison Journal of Best*, 1(1), 82-89.
- Yenni, Y., Arifin, A., Gunawan, E., Pakpahan, L., & Siregar, H. (2021). The impact of solvency and working capital on profitability. *Journal of Industrial Engineering & Management Research*, 2(4), 15-38.
- Yenni, Y., Arifin, A., Gunawan, E., Pakpahan, L., & Siregar, H. (2021). The impact of solvency and working capital on profitability. *Journal of Industrial Engineering & Management Research*, 2(4), 15-38.
- Zimon, G. (2021). Working capital. *Encyclopedia*, 1(3), 764-772.