The Influence of Investment Decisions, Dividend Policy and Capital Structure on Firm Value

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|  | **A B S T R A C T**  This study examines the effect of investment decisions, dividend policy, and capital structure on firm value. This study uses a sample of companies listed on the Indonesian Sharia Stock Index on the Indonesia Stock Exchange during the 2017-2019 period. The number of companies that became the population in this study was 421 companies. The sample of this study was 30 companies for three years; the total sample of the study was 90 financial statements and annual reports. The method used is the purposive sampling method. Hypothesis testing was used in this study using multiple linear regression analysis. This study indicates that dividend policy has a positive effect on firm value; meanwhile, investment decisions and capital structure do not affect firm value. Investment decisions proxied using Capital Expenditure to Book Value Assets (CPABVA) have an insignificant negative effect on firm value. Dividend policy which is proxied using the Dividend Payout Ratio (DPR), has a significant positive effect on firm value. Capital structure proxied by using the Debt to Equity Ratio (DER) has an insignificant negative effect on firm value. In this study, there are suggestions that companies should pay attention to the company's dividend policy ratio to increase company value, especially those listed on the Indonesian Sharia Stock Index; For investors when they want to invest, need to pay attention to the company's dividend policy ratio because the value of the company is significantly affected by this ratio; Further researchers can add research variables such as investment decisions and capital structure with different research objects because the results in this study do not affect the value of companies listed on the Sharia Stock Index. |

# INTRODUCTION

The development of the global economic world makes companies as economic actors compete with other companies (Ahmad et al., 2018). The company's primary goal is to increase the prosperity of the company's owners (shareholders), which is indicated by the increase in the company's value and is reflected in the company's stock price (Horrison & Wickt, 2013; Arsyad et al., 2021). The company's goal is to maximize shareholder wealth (Nwanji & Howell, 2007) and to provide benefits to the broader community (Copeland et al., 2005). Ownership structure has become a significant focus of modern enterprise theory. The reason for using the ownership structure is because, in modern companies, it is related to financing decisions that do not only talk about how to determine the proportion of long-term debt with equity or the proportion of total debt with equity (financial structure); but also how the separation of the own capital held by the company's management (inside) with outside management (outside) (Hasanuddin et al., 2021). The existence of ownership by institutional investors, such as insurance companies, banks, or investment companies, will encourage a more optimal increase in the supervision of management performance by increasing manager accountability through various monitoring tools (Cornett et al., 2017). These institutional investors will seek to exercise their rights to create fundamental changes in management behavior, for example, by establishing a shareholder advisory committee whose function is to review operating results and financial management.

The establishment of a company must have a clear goal. The company's goals include obtaining maximum profits, wanting to prosper the company owners, and optimizing its value, which can be seen from its share price (Ahmad et al., 2018). Firm value reflects the current value of desired future income and is an indicator for the market in assessing the company (Kusumadilaga, 2010). Various factors that can affect firm value are capital structure, dividend policy, and investment decisions. Carrying out the function of financial management is something that can be done to achieve company goals. The optimal combination of management decisions can optimize the company's value, which will affect the prosperity of shareholders. High company value will be followed by high shareholder prosperity. The higher the stock price, the higher the company's value (Arsyad et al., 2021). A high company value is the desire of the company owners because a high value shows the prosperity of shareholders is also high (Prasetyorini, 2013).

The investment decision is one of the functions of financial management that involves allocating funds to a company in various forms of investment decisions to obtain greater profits than the cost of funds in the future for a company (Achmad & Amanah, 2014). Investment decisions are among the major decisions in financial management, funding decisions, and dividend decisions in increasing company value. Investment decisions are related to decisions on how managers should allocate funds into forms of investment that will bring profits in the future. The form, type, and composition of the investment will affect and support future profits. The future profits expected from these investments cannot be estimated with certainty, so investment proposals to be made are always risky. The consequence is that it is necessary to assess the expected level of income and its risks because both can affect the company's overall assessment in the market (Sutrisno, 2003). Planning for investment decisions is essential due to several factors such as:

1. Funds issued for investment purposes are substantial, and large amounts of funds are not recovered in the short term or obtained all at once
2. The funds issued will be tied up in the long term, so the company must wait for an extended period to get the funds back
3. Investment decisions involve expectations of future profits, so that forecasting will result in over or under investment which ultimately harms the company.
4. Long-term investment decisions, so mistakes in decision making will have a long and heavy consequences.

A dividend policy is a policy adopted by the company to determine how much profit must be paid (dividends) to shareholders and how much must be reinvested (retained earnings). Riyanto (2011) is a "policy concerned with determining the distribution of income (earnings) between users of income to be paid to shareholders as dividends or to be used in the company, which means the income must be invested in the company. Dividends can also be linked to the Signaling Theory, where the announcement of dividend distributions can be a good signal for investors to get profits. However, it can also be a wrong signal when the dividends announced decrease from the previous period. Because the reduced dividend payout ratio can reflect the company's profits are decreasing. As a result, a wrong signal will appear because it indicates that the company lacks funds. This condition will cause investors' preference for stock to decrease because investors have an extreme preference for dividends.

The term ownership structure is used to indicate that the essential variables in the capital structure are determined by the amount of debt and equity and by the percentage of ownership by managers and institutions. Managerial ownership and institutional investors can influence seeking funds, whether through debt or rights issues. If funding is obtained through debt, it means that the debt-to-equity ratio will increase, which in turn will increase risk. The pecking order theory is a concept that has existed for quite a long time and was first introduced by Gordon Donaldson in 1961. The initial concept stated that companies tend to prioritize internal funding to pay dividends and fund investments; if the need for funds is lacking, external funds are used as an addition. Internal funding is obtained from retained earnings and cash flows from depreciation. External funding is done primarily by issuing bonds rather than by issuing new shares. By the results of his research, Donaldson expressed the opinion that the company did this to avoid the floating costs attached to external funding. They prioritize the choice of bond issuance over the issuance of new shares due to the floatation cost for issuing bonds that is smaller than issuing new shares. The pecking order theory directs the decision to choose alternative company funding according to the funding level. This concept also provides directions to minimize the need for funds originating from external funding. Efforts are made to minimize the need for external funding by optimizing the company's profitability by making appropriate adjustments between investment opportunities and the company's target dividend payout ratio. The capital structure theory contains the pecking order theory, which directs funding decision-making according to the funding order or hierarchy, which is contrary to the concept of static trade-off theory. These two concepts contradict each other, tested in research conducted by Shyam Lakshmi Sunder and Stewart C. Myers (1994). In the concept of static trade-off theory, capital structure policy leads to a target debt to equity ratio. In contrast, the concept of pecking order theory leads to making decisions on the selection of financial alternatives based on funding needs alone. Internal funding sources meet funding. If it is not sufficient, it will be met with external funding sources, not meeting certain ratio levels as in the static trade-off theory concept.

Financial management strategic decisions that cannot be ignored are decisions regarding dividend, investment, and financing policies that are closely related to the company's objectives, namely optimizing the value and growth of the company. However, in practice, this goal is often not realized due to agency problems that occur due to the separation of the ownership and management functions of the company. This separation makes managers act freely and is not in line with company goals, resulting in a conflict of interest between managers and shareholders. An agency relationship is a contract in which one or more people, as investors (principals), involve other people (agents) to act on behalf of the giver of authority and provide power in decision-making. The separation of ownership is often recommended in the business world, thus creating efficiency in production and increasing the company's value, which is reflected in the high share price.

According to the agency theory, Jensen & Meckling (1976) that the causes of conflict between managers and shareholders include making decisions related to financing decisions and making decisions related to how the funds obtained are invested. Another cause of conflict between managers and shareholders is that shareholders only care about the systematic risk of the company's shares, and they invest in well-diversified portfolios. Meanwhile, managers are more concerned with the overall risk of the company. The difference in interest is a conflict called the agency problem and can limit the agency problem by providing adequate incentives and monitoring their decisions. Incentives can be in direct rewards (salaries) and can also be in the form of facilities from the supporting staff. While monitoring costs (Keown et al., 1996) are costs incurred for (1) Binding the loyalty and dedication of managers, (2) Carrying out audits or examinations through exceptional accountants or various financial reports, (3) Restructuring the company's organization in such a way so that managers do not act beyond the limits and

(4) Assessment of all costs and benefits of providing facilities to company management. These costs are agency costs and can be divided into two types (Jensen & Meckling, 1976) agency costs for external equity and agency costs for debt.

The company's management tends to obtain as much profit as possible at the expense of other parties. This behavior is commonly referred to as limited rationality (bounded rationality), and managers dislike risk (risk-averse). Jensen & Meckling (1976) stated that agency problems would occur if the proportion of manager ownership of company shares is less than 100%. Managers tend to pursue their interests and are not based on maximizing value in making funding decisions. Jensen and Meckling stated that the above condition is a consequence of the separation of the management function from the ownership function or often referred to as the separation of the firm's decision-making and risk beating functions. Management does not bear the risk of mistakes in making decisions; the shareholders entirely bear the risk. Therefore, management tends to make consumptive and unproductive expenditures for their interests, such as increasing salaries and status.

Investment decisions are among the major decisions in financial management, funding decisions, and dividend decisions in increasing company value. Investment decisions are related to decisions on how managers should allocate funds into forms of investment that will bring profits in the future. The form, type, and composition of the investment will affect and support future profits. The future profits expected from these investments cannot be estimated with certainty, so investment proposals to be made are always risky. Consequently, it is necessary to evaluate the expected level of income and risk because both can affect the company's overall assessment in the market (Sutrisno, 2003).

**H1:** Investment decisions have a significant positive effect on firm value

According to Safitri, (2018), a Dividend policy is a policy carried out by deciding whether the profits earned by the company will be distributed to shareholders as dividends or will be retained in the form of retained earnings. The policy on dividend payments is a crucial decision for a company. This policy involves two parties, namely the first party, the shareholders, and the second party from the company itself. A dividend policy is a policy adopted by the company to determine how much profit must be paid (dividends) to shareholders and how much must be reinvested (retained earnings). Riyanto (2011) is a policy concerned with determining the distribution of income (earnings) between users of income to be paid to shareholders as dividends or for use in the company, which means that the income must be invested in the company (Allen & Michaely, 1995). Dividends are also related to Signaling Theory which explains that dividend distributions can be a good signal to investors to get profits. However, it can also be a wrong signal when the dividends announced decrease from the previous period. Because the reduced dividend payout ratio can reflect the company's profits are decreasing. As a result, a wrong signal will appear because it indicates that the company lacks funds. This condition will cause investors' preference for stock to decrease because investors have a very strong preference for dividends.

**H2:** Dividend policy has a significant positive effect on firm value

Understanding the ownership structure is very important because it relates to corporate control, as Weston (1993) expressed. This control has a vital motive, namely ensuring that the policy program that has been set by management achieves high performance. The measurement of ownership structure has been developed by many experts, which essentially relates ownership structure to the level of corporate control and the cost of capital. Cole & Mihran (1998) suggest that to evaluate the ownership structure, it can be measured by considering the most significant percentage of ownership by a director, the most significant percentage of ownership by a particular institution or company, the most significant percentage of ownership by a non-specific institution or company, and the percentage of ownership by company employees. Furthermore, Ponto, S. (2013) revealed that the percentage of ownership does not only measure the ownership structure by the Chief Executive Officer (CEO) of the principal director; it is also added to the shares owned by the family of the company's directors. Potential investors can use the capital structure as a basis for investing in the company because these two variables describe their capital, total debt, and total assets where they use all three to see the level of risk, rate of return, and income that the company will receive (Mudjijah et al. al., 2019). The level of risk, rate of return, and company income can affect the level of demand for shares where it will also affect the company's value. Signal theory is very influential on the optimal capital structure so that a perspective arises for managers, namely the company's prospects will be profitable and unprofitable. The capital structure associated with the use of debt signals investors that the company's performance and the company's prospects in the future will be profitable. Likewise, with the dividend policy of a company. The increase in dividends is expected to signal investors that the company's management predicts good profits in the future (Moniaga, 2013).

**H3:** Dividend policy has a significant positive effect on firm value

# RESEARCH METHOD

The type of data used in this study is quantitative data. The method that will be carried out in this research in data collection is the documentation method. The data collection in this study is located on the Indonesia Stock Exchange (IDX) and can be accessed through the website <https://www.idx.co.id/>. The data to be taken at the location of this research are companies listed on the Sharia Stock Index (ISSI). The analysis used in this research is descriptive statistical analysis, classical assumption test consisting of Normality Test, Multicollinearity Test, Heteroscedasticity Test, Autocorrelation Test, Multiple Linear Regression Analysis, Hypothesis Test consisting of Determination Test, F Statistics Test, t Statistical Test. This test will help identify each independent variable, namely (investment decisions, dividend policy, and capital structure) under study. It appears which of the independent variables greatly influences the Dependent variable (Company Value) either partially or simultaneously.

# RESULTS AND DISCUSSION

### Table 1. Normal Test Results

|  |  |  |
| --- | --- | --- |
| **One-Sample Kolmogorov-Smirnov Test** | | |
| **N** | **Unstandardized Residual** |  |
| Normal Parameters |  | 90 |
|  | Mean | ,0000000 |
|  | Std. Deviation | 1,38318260 |
| Most Extreme Differences | Absolute | ,068 |
|  | Positive | ,068 |
|  | Negative | -,051 |
| Test Statistic |  | ,068 |
| Asymp. Sig. (2-tailed) |  | ,200c,d |
| a. Test distribution is Normal. |  |  |
| b. Calculated from data. |  |  |
| c. Lilliefors Significance Correction. | | |
| d. This is a lower bound of the true significance. | | |

The statistical test results in table 1 show that the value of the company with a sample of (N) 90 has a minimum value of 0.11 obtained from PT. Shipping Nelly Dwi Putri Tbk. in 2017, the maximum score of 60.89 was obtained from PT. Unilever Indonesia Tbk. in 2017. The average (mean) value of the company is 16.5317, and the standard deviation is 13.58568. The investment opportunity set with a sample size of (N) 90 has a minimum value of -0.04 obtained from PT. AKR Corporindo Tbk. in 2017, while the maximum value of 0.55 was obtained from PT. Kabelindo Murni Tbk. in 2017. The average value (mean) of Capital Expenditure to Book Value Assets is 0.0692, and the standard deviation is 0.08825. Dividend Payout Ratio with the number of samples (N) 90 has a minimum value of 0.00 obtained from PT. Shipping Nelly Dwi Putri Tbk. in 2017, while the maximum value of 1.33 was obtained from PT. AKR Corporindo Tbk. in 2019. The average value (mean) of the Dividend Payout Ratio is 0.3380, and the standard deviation is 0.25440. Debt to Equity Ratio with the number of samples (N) 90 has a minimum value of 0.08 obtained from PT. AKR Corporindo Tbk. in 2017, while the maximum value of 4.34 was obtained from Adhi Karya

(Persero) Tbk. in 2017. The average value (mean) of the Dividend Payout Ratio is 0.9691, and the standard deviation is 0.80380.

From Figure 1, the data spread around the diagonal line, indicating that the data on the research variables are normally distributed.

A graph of a normal p-p plot

Description automatically generated

## Figure 1. Normal P-Plot

The results of the multicollinearity test, as shown in table 2, show that the tolerance value > 0.10 and VIF < 10. So, it can be concluded that the independent variables in this study are not mutually correlated, or it can be said that there are no symptoms of multicollinearity between variables.

## Table 2. Multicollinearity Test Results

|  |  |  |  |
| --- | --- | --- | --- |
| **Model** | **Tolerance** | **VIF** |  |
| 1 | CPABVA | ,999 | 1,001 |
|  | DPR | ,955 | 1,048 |
|  | DER | ,955 | 1,047 |
| a. Dependent Variable: PBV | |  |  |

Based on Figure 2, the results of the heteroscedasticity test with a scatterplot graph can be seen that there is no clear pattern in the image, besides that the points spread above and below the number 0 on the Y-axis. It can be concluded that in this regression model, there is no heteroscedasticity.

A graph of scatter plot

Description automatically generated

### Figure 2. Heteroscedasticity Test Results

Based on table 3, the DW value is 1.755. The value is greater than du and smaller than 4-du, where the value of du is 1.7264 and the value of 4-du is 2.2736 (4 - 1.7264) or it can be interpreted that 1.7264

< 1.755 < 2.2736 . If the DW value lies between the upper bound (du) and (4-du), then the autocorrelation coefficient is equal to zero, meaning that there is no autocorrelation. So, it can be concluded that the data does not contain symptoms of autocorrelation.

### Table 3. Autocorrelation Test Results

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model Summary** | | | | | |
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** | **Durbin-Watson** |
| 1 | ,480a | ,230 | ,203 | 1,40710 | 1,755 |
| a. Predictors: (Constant), DER, CPABVA, DPR | | | |  |  |
| b. Dependent Variable: PBV | | | |  |  |

**Table 4. Multiple Linear Regression Analysis**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Coefficients** | | | | | | |
|  | **Unstandardized Coefficients** | | **Standardized Coefficients** | |  |  |
| **Model** |  | **B** | **Std. Error** | **Beta** | **t** | **Sig.** |
| 1 | (Constant) | ,124 | 1,239 |  | ,100 | ,920 |
|  | CPABVA | 1,747 | 1,603 | ,103 | 1,090 | ,279 |
|  | DPR | 3,418 | ,781 | ,424 | 4,375 | ,000 |
|  | DER | ,597 | ,429 | ,135 | 1,393 | ,167 |
| a. Dependent Variable: PBV | |  |  |  |  |  |

From the model obtained as shown in table 4, the constant value is 0.124, which means that with the investment decision through the addition of the company's share capital to increase productive assets, with the Dividend Payout Ratio, and with the Debt to Equity Ratio, the firm value listed on the Indonesian Sharia Stock Index will increase by 0.124 in 2017-2019. The CPABVA coefficient value is 1.747 indicating a positive result, which means that every investment decision through an increase in additional capital to increase the company's productive assets by 1% will increase the value of the company listed on the Indonesian Sharia Stock Index by 1747 times in the 2017-2019 period. The DPR coefficient value is 3,418, indicating a positive result. Every 1% increase in the Dividend Payout Ratio will increase the value of companies listed on the Indonesian Sharia Stock Index by 3,418 times in the 2017-2019 period. The DER coefficient value is 0.597, indicating a positive result. Every 1% increase in the Debt to Equity Ratio will increase the value of companies listed on the Indonesian Sharia Stock Index by 0.597 times in 2017-2019.

**Table 5. Determination Test Results**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Model Summary** | | | | |
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| 1 | ,480a | ,230 | ,203 | 1,40710 |
| a. Predictors: (Constant), DER, CPABVA, DPR | | |  |  |
| b. Dependent Variable: PBV | | |  |  |

## Table 6. F-Statistical Test Results

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Anova** | | | | | | |
| **Model** | | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| 1 | Regression | 50,946 | 3 | 16,982 | 8,577 | ,000b |
|  | Residual | 170,274 | 86 | 1,980 |  |  |
|  | Total | 221,220 | 89 |  |  |  |
| a. Dependent Variable: PBV | | |  |  |  |  |
| b. Predictors: (Constant), DER, CPABVA, DPR | | |  |  |  |  |

Based on table 5, the Adjusted value obtained is 0.203. This means that the value of companies listed on the Indonesian Sharia Stock Index on the IDX can be explained by the independent variables, namely investment decisions, dividend policy, and the expected capital structure of 20.3%. The remaining 79.7% is determined by other variables not examined in this study. From table 6, the calculated F value is 8,577 with a sig value. Of 0.000. This shows that the significance value < alpha (α = 0.05). So, it can be concluded that there is a significant simultaneous effect between investment decisions, dividend policy, and capital structure on firm value.

## Table 7. Statistical Test Results

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Coefficients** | | | | | | |
|  |  | **Unstandardized Coefficients** | | **Standardized Coefficients** |  |  |
|  | **Model** | **B** | **Std. Error** | **Beta** | **t** | **Sig.** |
| 1 | (Constant) | ,124 | 1,239 |  | ,100 | ,920 |
|  | CPABVA | 1,747 | 1,603 | ,103 | 1,090 | ,279 |
|  | DPR | 3,418 | ,781 | ,424 | 4,375 | ,000 |
|  | DER | ,597 | ,429 | ,135 | 1,393 | ,167 |
| a. Dependent Variable: PBV | | |  |  |  |  |

The results of the t-test in table 7, the investment decision variable has an account value of 1.090 and a significance value of 0.279> 0.05. This result means that the proposed H1 is rejected because the investment decision has no significant negative effect on firm value. Furthermore, the dividend policy variable has a t-count value of 4.375, and its significance value is 0.00 <0.05. This means that the proposed H2 is accepted because the dividend policy has a significant positive effect on the firm value of the company. The Capital Structure variable has the at-count value of 1393 and a significant value of 0.167

> 0.05. This means that the proposed H3 is rejected because the capital structure has no significant adverse effect on firm value.

### Discussion

The Effect of Investment Decisions on Firm Value

The results of testing the first hypothesis (H1) indicate that investment decisions have an insignificant negative effect on firm value. This result means that (H1) is rejected. This illustrates that the additional flow of funds for productive assets will affect the amount of retained earnings and dividend payments to owners of capital, which in turn will affect the value of the company because this study also examines the effect of dividend policy on firm value, the results of which have a significant positive effect. The results of this study support the research of Maimunah & Hilal (2018), which states that investment decisions (capital expenditure to book value assets) have a negative effect on firm value (price book value). If capital expenditure on book value assets increases, the price of book value will decrease.

The Effect of Dividend Policy on Firm Value

The results of testing the second hypothesis (H2) show that dividend policy has a significant positive effect on firm value. The results of this study support the theory put forward by Dogan & Topal, 2014), which states that the market share price will be higher if the dividends distributed by the company are more significant or vice versa because the stock market price also includes a reflection of the company's value. This happens because the distribution of dividends can reduce uncertainty for investors. Dividends are also related to signal theory. When the company distributes dividends to shareholders, this is a positive signal for investors that can be used to make investment decisions in the company. The results of this study support the research of Putra & Lestari (2016), which states that dividend policy has a positive and significant effect on firm value. If the dividend policy increases, the value of the company also increases. This proves that companies that distribute dividends to shareholders will attract investors to invest.

Effect of Capital Structure on Firm Value

The results of testing the third hypothesis (H3) show that capital structure has no significant adverse effect on firm value. The results of this study are supported by the Trade-off Theory, which explains that the use of corporate debt will only increase the company's value to a certain point. The addition of debt can reduce the company's value because the use of debt is not worth the cost of financial difficulties (Dwita & Kurniawan, 2019). The costs of financial distress are bankruptcy (bankruptcy costs) or reorganization and agency costs (agency costs). Investors can analyze the company's condition, in this case, the return and investment risk that will be borne so that investors can make decisions to invest or based on the preferences they get from the company. The results of this study illustrate that the size of the Capital Structure as measured by the DER ratio in companies whose securities are listed on the Sharia Securities List does not affect the size of the company's value as measured by the PBV ratio.

# CONCLUSIONS

It can be concluded that the investment decision proxied by using Capital Expenditure to Book Value Assets (CPABVA) has an insignificant negative effect on firm value. Dividend policy which is proxied using the Dividend Payout Ratio (DPR), has a significant positive effect on firm value. Capital structure proxied by using the Debt to Equity Ratio (DER) has an insignificant negative effect on firm value. In this study, there are suggestions that companies should pay attention to the company's dividend policy ratio to increase company value, especially those listed on the Indonesian Sharia Stock Index; For investors when they want to invest, need to pay attention to the company's dividend policy ratio because the value of the company is significantly affected by this ratio; Further researchers can add research variables such as investment decisions and capital structure with different research objects because the results in this study do not affect the value of companies listed on the Shari Stock Index.