# The Effect of Capital Structure and Profitability on Firm Value with Dividend Policy as a Moderating Variable in Property and Real Estate Companies Listed on the IDX

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| ABSTRACT | Published Online: July 13, 2024 |
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| The purpose of this study was to determine the effect of capital structure and profitability on firm value with dividend policy in property and real estate companies listed on the IDX. The sample of this research is 6 companies. The results obtained from this study are Capital Structure as measured by debt to equity ratio (DER) has no significant effect on firm value in property and real estate companies listed on the IDX for the period 2017 - 2022. Profitability as measured by return on equity (ROE) has a significant effect on firm value in property and real estate companies listed on the IDX for the period 2017-2022. Dividend policy (devidend payout ratio / DPR) is able to moderate the effect of debt to equity ratio (DER) on firm value in property and real estate companies listed on the IDX for the period 2017 - 2022. Dividend policy (devidend payout ratio / DPR) is able to moderate the effect of return on equity (ROE) on firm value in property and real estate companies listed on the IDX for the period 2017 - 2022. | **KEYWORDS:** Capital Structure, Profitability, Firm Value, Dividend Policy |

## 1. INTRODUCTION

Maximizing investor welfare can be done by maximizing company value which is one of many company goals. Increasing company value is very meaningful for a company, because increasing company value can increase investors can realize one of their goals, as well as property and real estate companies which are one of the supporters of infrastructure development and have an important contribution to the country's economy. Investors who invest in property and real estate companies usually have a long period of time and can develop along with economic development and are considered as one of the promising investments.

Firm value is the investors' assessment of a company and is often related to the stock price. Firm value can also be interpreted as an assessment of investors on the level of success of the company's performance as seen from the stock price. Firm value has a positive relationship with the price of

a share, where when the price of a share increases, the value of the company will also increase.

Firm value can be interpreted as the price that investors are willing to pay if the company is to be sold. The better the company value will increase the prosperity of the company owner. Increasing company value is an achievement that is in line with the wishes of shareholders so that the welfare of shareholders also increases (Hery, 2017). Firm value in this study can be measured by Price to Book Value (PBV), which describes how much the market values the book value of shares in a company.

Signalling Theory explains that a company has an urge to provide financial statement information to external parties. The company's encouragement to provide report information is because there is information asymmetry between the company and outsiders because the company knows more about the company and its future prospects than outsiders such as investors or creditors, if a company has a good signal, it is likely that external parties can invest large amounts of capital in the company because it has the potential for a good signal of a company that is quite clear.

In a company to achieve good company value, it is necessary to make good strategic efforts so that the company value in a company can be high, when the company value is good enough for a company, it can indirectly be known that

the company's operations are quite effective. According to Sartono (2014: 282) dividend policy is a decision that the company will distribute to shareholders as dividends or will be retained in the form of retained earnings to finance future investments. One of the reasons dividend policy is very important is because dividend policy will have an impact on the value of the company as seen from the share price in a company.

Dividend policy in this study can be measured by the Devidend Payout Ratio (DPR), which is the division of profits between payments to shareholders and reinvestment in the company. Dividend policy in this study is used as a moderating variable because it is used to determine whether it can be an influence that strengthens or weakens the relationship between firm value variables with capital structure and profitability, because dividend policy is one of the most important things for the sustainability of the company.

**Table 1. Property and Real Estate Company Value 2017-2022**

| Code | | The value of the company | | | | | |
|---|---|---|---|---|---|---|---|
| Company | | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| CTRA | | 1,41 | 1,13 | 1,09 | 1,05 | 0,93 | 0,83 |
| DMAS | | 1,18 | 1,07 | 2,20 | 2,14 | 1,72 | 1,34 |
| JRPT | | 2,07 | 1,52 | 1,11 | 1,04 | 0,88 | 0,80 |
| MKPI | | 7,60 | 4,08 | 2,79 | 4,73 | 4,05 | 5,75 |
| MTLA | | 1,02 | 1,00 | 1,15 | 0,81 | 0,80 | 0,62 |
| RDTX | | 0,78 | 0,64 | 0,59 | 0,52 | 0,62 | 0,84 |
| Rata – Rata | | 2,34 | 1,57 | 1,49 | 1,71 | 1,50 | 1,70 |

**Sumber: Data Sekunder diolah**

From Table 1. above, it can be seen that the company's value in property and real estate companies in 2017 - 2022 fluctuates and tends to decrease, this can be explained that the increase or decrease in company value from 2017 to 2022 can cause a problem in property and real estate companies so that with the decline it must be found out the cause of the decline in the company's value so that the company value in a company can increase and can attract investors in investing in property and real estate companies. In a year that has an increase in company value, it must also be analyzed for an increase so that the company can find out the part of the company's operations that can increase company value so that it can focus more on this but without ignoring other operations.

Research conducted by Anggraini and Siska (2019) and Putri et al., (2021) states that capital structure has a significant effect on firm value, while research conducted by Shabrina (2015) states that capital structure has no significant effect on firm value. From these differences in opinion, it can be concluded that capital structure has a significant effect on firm value.

Research conducted by Ramadhani and Maryam (2018) and Nurhayati and Kartika (2020) states that profitability has a significant effect on firm value, while research conducted by Maysita and Wahyuni (2021) states that profitability has no significant effect on firm value. From these differences in opinion, it can be concluded that profitability has a significant effect on firm value.

Research conducted by Nurhayati and Kartika (2020) and Asri (2021) states that dividend policy can moderate the effect of capital structure on firm value, while research conducted by Qodir et al., (2016) states that dividend policy cannot moderate the effect of capital structure on firm value. From these differences in opinion, it can be concluded that dividend policy can moderate the effect of capital structure on firm value.

Research conducted by Indrawaty (2018) and Fitria and Wuryani (2021) states that dividend policy can moderate the effect of profitability on firm value, while research conducted by Maysita and Wahyuni (2021) states that dividend policy cannot moderate the effect of profitability on firm value. From these differences in opinion, it can be concluded that dividend policy can moderate the effect of profitability on firm value.

## II. LITERATURE REVIEW
### Financial Management

According to Harahap (2018: 105) financial statements are reports that describe the financial condition and results of operations of a company within a certain period of time. Meanwhile, according to Munawir (2014: 5) states that a financial report is a report consisting of a balance sheet and profit and loss calculation and a statement of changes in capital on the balance sheet showing the amount of assets, debt and capital in a company with a certain period. From the above definitions, it can be concluded that a financial report is a report used to record company activities which contains a balance sheet and income statement to see the company's financial condition that has been determined for a certain period. Financial reports are very important reports to assess the achievements and economic conditions of a company, because with financial reports the company owner will always have a track record regarding the development of the company in the future and will make it easier for investors to find out the share price of the company.

### Capital Structure

According to Munawir (2014: 11) capital is a right owned by each company whose position is on the right side of the company's balance sheet, namely in the post of share capital and retained earnings. Capital consists of two types,

namely foreign capital and own capital. The balance between foreign capital and equity is called the financial structure, while the balance between long-term foreign capital and equity will form the capital structure. According to Sudana (2011: 189) the capital structure has to do with the long-term spending of a company which is described by the ratio between long-term debt and equity. According to and Harjitno, A. (2013: 256) states that the capital structure is a comparison or balance of a company's long-term funding indicated by the ratio between long-term debt and equity. Meanwhile, according to Prihadi (2013: 308) companies are always in the choice to determine the composition between debt and capital, the composition between debt and capital is called the capital structure.

### Profitability

Profitability can be defined as the company's ability to earn profits from its operational activities around sales, own capital or total assets. This ratio is used to determine the efficiency of the company in making a profit. Sujono and Soebiantoro (2007) stated that high profitability will increase the value of the company. This shows that high or good profitability will attract investors to invest. According to Sartono (2014: 122) states that profitability is the company's ability to earn profits in relation to sales, total assets, and own capital. According to Kamaludin (2011: 45) profitability is a description of the level of effectiveness of company management in generating profits.

Profitability is an important factor used to measure the amount of profit in order to determine whether the company has run its business effectively and efficiently or not, because from effective and efficient it can be known by comparing the profit earned with assets or capital in generating profit.

### Company Value

A company is an organization that combines and also organizes various existing resources of course to produce goods or services for sale (Hermuningsih, 2013: 131). One of the objectives of establishing a company is to make a profit, besides that, it is also to maximize the value of the company itself. According to Husnan (2014: 77) defines company value as the price that investors are willing to pay if the company is to be sold. The better the company value will increase the prosperity of the company owner.

Company value can be reflected in the share price owned by the company. Increasing company value is an achievement that is in line with the wishes of shareholders so that the welfare of shareholders also increases (Hery, 2017). According to Prastowo and Julianti (2010) if the market price is below its book value, potential investors will view that the company is not potential enough. If investors doubt the prospects of a stock, then many shares are sold at prices below their book value, and vice versa if investors are confident, the shares are sold at prices above their book value. The greater the PBV ratio, the higher the company value, so that the

return received by investors will be higher than the funds that have been invested in the company.

### Dividend Policy

Dividends are a form of payment made by the company either in the form of cash or shares to shareholders of a company as a proportion of the number of shares owned by the owner. According to Sugeng (2019) dividends are a distribution of profits given by the company issuing the shares for the profits earned by the company in a certain period to the owner or shareholder. If the company decides to distribute profits in dividends, all ordinary shareholders get the same rights. Dividend distribution for ordinary shares can be done if the company has paid dividends to preferred shareholders. Rahayu (2014) also states that dividends are shares in cash for each share (dividend per share). Meanwhile, stock dividends are dividends that are paid or distributed in the form of shares, which are calculated for each share. Dividends distributed by the company to shareholders can be divided into several types of dividends.

### Capital Structure and the Firm Value

According to Sudana (2011: 189) capital structure has to do with the long-term spending of a company which is described by the ratio between long-term debt and equity. Own capital is capital that comes from within a company such as share capital, retained earnings and reserves. Meanwhile, foreign capital is capital that comes from external companies that is temporary, for the company concerned, this capital is a debt that when the time comes must be paid back, for example short-term debt, medium-term debt and long-term debt.

The capital structure aims to measure the consideration between the liabilities owned by the company and the amount of its own capital. This ratio can also be interpreted as the company's ability to fulfill its debt payment obligations with the guarantee of its own capital. With a good capital structure, the company will get more value in the competitive market and the company has good value.

H1 : It is suspected that Capital Structure has a positive and significant effect on Firm Value.

### Profitability and Firm Value

Sujono and Soebiantoro (2007) state that high profitability will increase firm value. This shows that high or good profitability will attract investors to invest. An increase in a company's net profit can also be used as an invitation for the company's value to also increase. The increase in profit will also be related to the high share price which can have an influence on the value of the company. profitability in order to maintain the survival of a company in the long term. The reason is because the greater the level of profitability generated by the company, the survival of the company will be more secure because it has good prospects for the future.

Profitability is an important factor used to measure the amount of profit in order to determine whether the company has run its business effectively and efficiently or not, because from effective and efficient it can be known by comparing the profit earned with assets or capital in generating profits.

H2: It is suspected that Profitability has a positive and significant effect on Firm Value.

## Capital Structure and Firm Value with Dividend Policy as Moderating Variable

According to Asri (2021), managing the balance between the benefits of using liabilities, bankruptcy costs, and agency costs can create an optimal capital structure. Using pecking order theory can explain that companies that have a high level of profit have a lower level of debt. Companies that have a high level of profit generally use the company's internal funds to meet investment needs, so the company does not need external funds and the debt level becomes lower.

H3 : It is suspected that Dividend Policy Moderates capital structure has a positive and significant effect on Firm Value

## Profitability and Firm Value with Dividend Policy as a Moderating Variable

If a company determines to distribute dividends in cash, it will automatically reduce retained earnings and certainly also reduce the total profit of internal sources of funds or Internal Financing. Profitability will be able to generate additional funds for the company which will be included in retained earnings. The high dividend payment by the company is good news for investors, because it can identify conditions and provide a foresight that the company's finances are in good condition (Asri, 2021).

H4: It is suspected that Dividend Policy Moderates Profitability has a positive and significant effect on Firm Value.
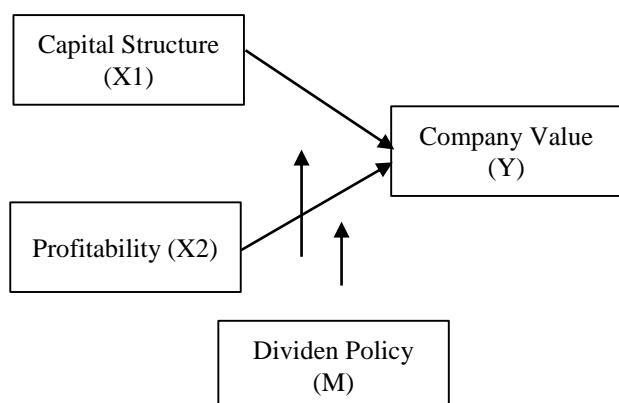


**Fig 1. Conceptual Framework**

## III. RESEARCH METHODS

The dependent variable in this study is firm value, the moderating variable in this study is dividend policy and the independent variables in this study are capital structure and profitability. The population in this study are property and real estate companies listed on the Indonesia Stock Exchange (IDX). The total population in this study was 49 companies. The samples in this study were 6 companies. the type of data used in this study is documentary data. The data analysis technique in this study used SPSS 23 software.

## IV. RESULTS AND DISCUSSION

Based on the criteria that have been determined and determined by researchers in sampling, the property and real estate companies used as samples of this study are 6 companies, namely: (1) PT Ciputra Development TBK, (2) PT Puradelia Lestari Tbk, (3) PT Jaya Real Property, (4) PT Metropolitan Kentjana, (5) PT Metropolitan Land Tbk, (6) PT Roda Vivatex Tbk.

**Description of Research Results**

**Company Value (PBV) Property And Real Estate Comany**

**Table 2. The results of the calculation of the company's value (PBV) in property and real estate companies listed on the IDX for the 2017-2022 period.**

**(In units of times)**

| Code Company | Company | Year | | | | |
|---|---|---|---|---|---|---|
| | | 2017 | 2018 | 2019 | 2020 | 2021 |
| CTRA | PT Ciputra Development | 1,41 | 1,52 | 1,15 | 1,72 | 0,80 |
| DMAS | PT Puradelta Lestari | 1,18 | 1,00 | 0,59 | 0,88 | 0,62 |
| JRPT | PT Jaya Real Property | 1,02 | 0,64 | 1,04 | 0,80 | 0,84 |
| MKPI | PT Metropolitan Kentjana | 0,78 | 1,09 | 0,81 | 0,62 | 1,18 |
| MTLA | PT Metropolitan Land | 1,13 | 2,20 | 0,52 | 0,83 | 1,13 |
| RDTX | PT Roda Vivatex | 1,07 | 1,11 | 0,93 | 1,34 | 1,07 |
| Total | | 14,07 | 9,43 | 8,93 | 10,29 | 8,99 |
| Average | | 2,34 | 1,57 | 1,49 | 1,71 | 1,50 |

**Source: www.idx.co.id (data processed)**

Based on the results of calculations carried out regarding the company value of 6 property and real estate companies listed on the IDX during the 2017-2022 period presented in Table 4.1 in 2017 the average PBV was 2.34, then in 2018 the average PBV was 1.57, then in 2019 the average PBV was 1.49, while in 2020 the average PBV was 1.71, then in 2021 the average PBV was 1.50, and in 2022 the average PBV was 1.70.

Overall the value of PBV (company value) in property and real estate companies in 2017 - 2022 is fluctuating (experiencing increases and decreases) this can be caused by the rate of economic growth from year to year which also experiences instability so that it can affect all companies including property and real estate companies.

**Capital Structure (DER) of Property And Real Estate Company**

**Table 3. The results of the calculation of Capital Structure (DER) in property and real estate companies listed on the IDX for the 2017-2022 Period**
**(In units of times)**

| Code Company | Company | Years | | | | |
|---|---|---|---|---|---|---|
| | | 2017 | 2018 | 2019 | 2020 | 2021 |
| CTRA | PT Ciputra Development | 1,05 | 0,57 | 0,59 | 0,14 | 0,42 |
| DMAS | PT Puradelta Lestari | 0,07 | 0,51 | 0,11 | 0,44 | 0,42 |
| JRPT | PT Jaya Real Property | 0,62 | 0,09 | 0,46 | 0,45 | 0,14 |
| MKPI | PT Metropolitan Kentjana | 0,11 | 1,04 | 0,46 | 0,09 | 0,07 |
| MTLA | PT Metropolitan Land | 1,06 | 0,17 | 0,09 | 1,00 | 1,06 |
| RDTX | PT Roda Vivatex | 0,04 | 0,51 | 1,10 | 0,16 | 0,04 |
| Total | | 2.95 | 2.90 | 2.79 | 2.29 | 1.89 |
| Average | | 0.49 | 0.48 | 0.46 | 0.38 | 0.31 |

**Source: www.idx.co.id (data processed)**

Based on the results of calculations carried out regarding the capital structure of 6 property and real estate companies listed on the IDX during the 2017-2022 period presented in Table 4.2 in 2017 the average DER was 0.40, then in 2018 the average DER was 0.44, then in 2019 the average DER was 0.46, while in 2020 the average DER was 0.47, then in 2021 the average DER was 0.43, and in 2022 the average DER was 0.40.

Overall the value of DER (capital structure) in property and real estate companies in 2017 - 2022 is fluctuating (experiencing an increase and decrease) this can be due to the company's need for capital from year to year which is different so that in a certain year the DER level in a company has increased which may be due to the company making debt or loans so that it can increase the DER level.

**Profitability (ROE) of Property and Real Estate Companies**

**Table 4. Results of the calculation of Profitability (ROE) in property and real estate companies listed on the IDX 2017-2022 Period (In units of %**

| Code Company | Company | Years | | | | |
|---|---|---|---|---|---|---|
| | | 2017 | 2018 | 2019 | 2020 | 2021 |
| CTRA | PT Ciputra Development | 6,55 | 15,68 | 12,67 | 13,36 | 10,19 |
| DMAS | PT Puradelta Lestari | 9,38 | 14,75 | 9,22 | 9,65 | 8,79 |
| JRPT | PT Jaya Real Property | 18,37 | 11,56 | 12,87 | 8,64 | 9,11 |
| MKPI | PT Metropolitan Kentjana | 12,02 | 7,23 | 7,02 | 6,74 | 9,38 |
| MTLA | PT Metropolitan Land | 7,83 | 20,56 | 8,63 | 9,58 | 7,83 |
| RDTX | PT Roda Vivatex | 6,90 | 14,01 | 10,76 | 21,29 | 6,90 |
| Total | | 72.56 | 76.19 | 74.85 | 64.89 | 54.72 |
| Average | | 12.09 | 12.70 | 12.47 | 10.81 | 9.12 |

**Source: www.idx.co.id (data processed)**

Based on the results of calculations carried out regarding the company value of 6 property and real estate companies listed on the IDX during the 2017-2022 period presented in Table 4.3 in 2017 the average ROE was 12.09, then in 2018 the average ROE was 12.70, then in 2019 the average ROE was 12.47, while in 2020 the average ROE was 10.81, then in 2021 the average ROE was 9.12, and in 2022 the average ROE was 11.64.

Overall the value of ROE (profitability) in property and real estate companies in 2017 - 2022 is fluctuating (experiencing increases and decreases) this can be caused by the net profit earned by the company from year to year which varies depending on the sales made by a company and the expenses borne by the company.

**Dividend Policy (DPR) of Property and Real Estate Company**

**Table 5. Profitability Data (Return on Assets) on Automotive and Component Sub-Sector Companies Listed on the Indonesia Stock Exchange during the period 2018-2022**

| Code Company | Company | Years | | | | |
|---|---|---|---|---|---|---|
| | | 2017 | 2018 | 2019 | 2020 | 2021 |
| CTRA | PT Ciputra Development | 0,10 | 0,32 | 0,15 | 1,25 | 0,30 |
| DMAS | PT Puradelta Lestari | 1,10 | 0,14 | 0,10 | 0,31 | 0,16 |
| JRPT | PT Jaya Real Property | 0,09 | 0,06 | 0,32 | 0,15 | 0,46 |
| MKPI | PT Metropolitan Kentjana | 0,10 | 0,16 | 0,18 | 0,19 | 1,10 |
| MTLA | PT Metropolitan Land | 0,15 | 0,76 | 0,10 | 0,14 | 0,15 |
| RDTX | PT Roda Vivatex | 1,26 | 0,32 | 0,09 | 0,69 | 1,26 |
| Total | | 1.90 | 2.26 | 2.06 | 2.87 | 2.29 |
| Average | | 0.32 | 0.38 | 0.34 | 0.48 | 0.38 |

**Source: www.idx.co.id (data processed)**

Based on the results of calculations carried out regarding the dividend policy of 6 property and real estate companies listed on the IDX during the 2017-2022 period presented in Table 4.4 in 2017 the average DER was 0.32, then in 2018 the average DER was 0.38, then in 2019 the average DER was 0.34, while in 2020 the average DER was 0.48, then in 2021 the average DER was 0.38, and in 2022 the average DER was 0.32.

Overall the value of DPR (dividend policy) in property and real estate companies in 2017 - 2022 is fluctuating (experiencing increases and decreases) this can be caused because the company takes into account the final result of profits that can be distributed in that year or used by the company as retained earnings to develop the company. The results of the calculation of dividend policy in this study can be seen in Table 4.4 as follows:

**Descriptive Statistical Analysis**

Descriptive statistics can be used to describe research variables. In this study the variables used are corporate social responsibility, firm value and profitability which are seen from the minimum, maximum, average and standard deviation values. The following are the results of descriptive statistics in this study:

**Table 6. Descriptive Statistical Analysis**

| Descriptive Statistics | | | | | |
|---|---|---|---|---|---|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| DER | 36 | ,04 | 1,10 | ,4314 | ,35929 |
| ROE | 36 | 6,55 | 21,29 | 11,1306 | 4,19214 |
| PBV | 36 | ,52 | 2,20 | 1,0983 | ,40278 |
| DPR | 36 | ,06 | 1,26 | ,4286 | ,41823 |
| Valid N (listwise) | 36 | | | | |

**Source: Data Processed**

Capital Structure (DER) has a minimum value of 0.04 and a maximum value of 1.10. The mean value obtained from the capital structure is 0.4314 with a standard deviation value of 0.35929. Profitability (ROE) has a minimum value of 6.55 and a maximum value of 21.29. The mean value obtained from profitability is 11.1306 with a standard deviation value of 4.19214. Company Value (PBV) has a minimum value of 0.52 and a maximum value of 2.20. The mean value obtained from the company value is 1.0983 with a standard deviation value of 0.40278. Dividend Policy (DPR) has a minimum value of 0.06 and a maximum value of 1.26. The mean value obtained from the dividend policy is 0.4286 with a standard deviation value of 0.41823.

**Normality Test**

The normality test aims to determine whether the dependent, independent, or both variables are normally distributed, close to normal or abnormal. A good regression model is to have a normal or near normal data distribution. The basis for decision making is done using 2 methods

**Pic 2. Normality Test Results**
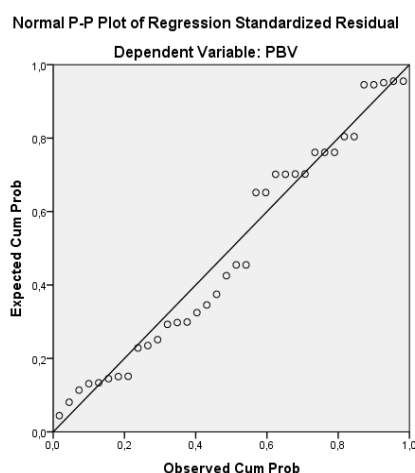


**Source : Data Processed 2023**

It can be seen that the data has caused and followed the direction of the diagonal line, so it can be concluded that using the normal probability plot method the research data is normally distributed.

**Tabel 7. Normality Results**

| One-Sample Kolmogorov-Smirnov Test | | | |
|---|---|---|---|
| | | Unstandardized Residual | Standardized Residual |
| N | | 36 | 36 |
| Normal Parameters[a,b] | Mean | 0E-7 | 0E-7 |
| | Std. Deviation | ,31166247 | ,97100831 |
| Most Extreme Differences | Absolute | ,103 | ,103 |
| | Positive | ,103 | ,103 |
| | Negative | -,100 | -,100 |
| Kolmogorov-Smirnov Z | | ,619 | ,619 |
| Asymp. Sig. (2-tailed) | | ,838 | ,838 |
| a. Test distribution is Normal. | | | |
| b. Calculated from data. | | | |

**Source: Data Processed**

Based on Table 7 above, it can show that the value of Asymp sig (2-Tailed) is 0.838. This means that this study has a normal distribution because the Asymp sig (2-Tailed) value is greater than 0.05. So it can be concluded that both using the normal probability plot and Kolmogorov Smirnov methods, the research data can be declared normal.

**Multicollinearity Test**

Multicollinearity test is a test used to determine the relationship between independent variables in a study. To conclude the multicollinearity test results is to see the tolerance value and the Variance Inflation Factor (VIF) value. If the tolerance value> 0.10 and the VIF value is less than 10, it means that the equation model does not occur multicollinearity.

**Table 8. Multicollinearity Test Results**

| Model | | Collinearity Statistics | |
|---|---|---|---|
| | | Tolerance | VIF |
| 1 | (Constant) | | |
| | DER | ,962 | 1,040 |
| | ROE | ,962 | 1,040 |

**Source: Data Processed**

It can be seen that the multicollinearity test results used in this study do not show multicollinearity since the data had tolerance values more than 0.1 and VIF values less than 10.

**Autocorrelation Test**
**Table 9. Autocorrelation Test Results**

| Durbin-Watson |
|---|
| 1,367 |

**Source: Data Processed**

The results of the autocorrelation test above show that the durbin watson value has a value of 1.367, this value is between the values of -2 to +2, it can be concluded that the data used in this study does not occur autocorrelation.

## Heteroscedasticity Test

The heteroscedasticity test is a test used to determine the residual value from year to year has the same value or not. If the scatterplot forms a certain pattern, a heteroscedasticity problem occurs, while if the scatterplot spreads randomly above and below the number 0 on the Y axis, it indicates that there is no heteroscedasticity problem..

**Pic 3. Heteroscedasticity Test Results**
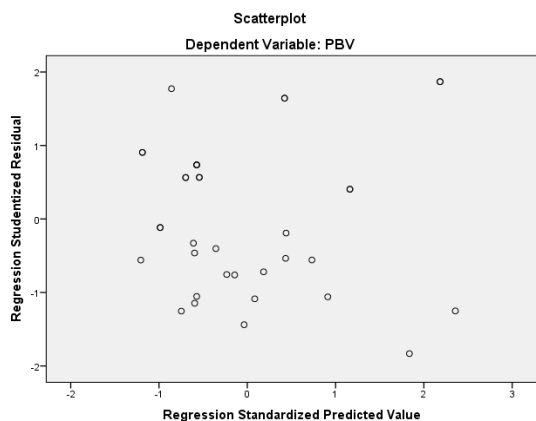


**Source: Data Processed**

Based on the results of testing heteroscedasticity in this study using the scatterplot graph above, it can be seen that the data from the scatterplot graph the points generated in this study have spread randomly above and below the number 0 on the Y axis, so the regression model in this study that was formed can be identified that there is no heteroscedasticity.

## Goodness of fit

The F test or simultaneous test is used to test whether the independent variables used can explain changes in the value of the dependent variable or not. Simultaneous hypothesis testing aims to measure the effect of capital structure and profitability as independent variables on firm value as the dependent variable. To conclude the F test results, use the probability value or sig value. If the probability value has a significance value $<\square = 0.05$ then the model has a significant effect simultaneously.

**Tabel 10. Hasil Uji F**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 2,278 | 2 | 1,139 | 11,058 | ,000b |
| | Residual | 3,400 | 33 | ,103 | | |
| | Total | 5,678 | 35 | | | |

a. Dependent Variable: PBV

b. Predictors: (Constant), ROE, DER

**Source: Data Processed**

In Table 10, it can be seen that the F test has a significance value of 0.000 <0.05, it can be concluded that the capital structure and profitability variables simultaneously have a significant effect on company value.

## Coefficient of Determination ($R^2$)

The Coefficient of Determination ($R^2$) is used to determine the contribution of the independent variables, namely capital structure and profitability to the dependent variable, namely firm value.

**Table 11. Test Results of the Coefficient of Determination ($R^2$)**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | ,633a | ,401 | ,365 | ,32097 |

**Souce: Data Processed**

It can be seen that the R-Square value is 0.401 or 40.1% which shows that the contribution of all variables, namely capital structure and profitability to firm value. While the remaining 59.9% is explained by other factors which are factors outside of the capital structure and profitability variables..

## Partial Test (Uji t)

The t test is used to show how far the influence of one independent variable individually in explaining the variation in the dependent variable or the t test can be used to test the effect partially (per variable) on the dependent variable.

**Tabel 12. F Test Results**

| Model | | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|
| 1 | (Constant) | | 2,009 | ,053 |
| | DER | ,093 | ,680 | ,501 |
| | ROE | ,645 | 4,696 | ,000 |

**Source: Data Processed**

From the data it can be seen that:

H1: Capital Structure has a significant effect on Firm Value. By using the significance level $\square = 0.05$, the significance value of the capital structure variable is 0.501 greater than 0.05, this indicates that the capital structure has no significant effect on firm value. Thus the proposed hypothesis is not proven.

H2 : Profitability has a significant effect on Firm Value. By using the significance level $\square = 0.05$, the significance value of the profitability variable is 0.000 smaller than 0.05, this indicates that profitability has a significant effect on firm value. Thus the proposed hypothesis is proven.

## Analisis Moderates Regression Analysis

Moderated Regression Analysis (MRA) or interaction test which is an equation in regression that contains an element of interaction (multiplication of two or more independent variables).

**Tabel 13. Moderated Regression Analysis**

| Model | | Unstandardized Coefficients | |
|---|---|---|---|
| | | B | Std. Error |
| 1 | (Constant) | ,363 | ,181 |
| | DER | ,105 | ,154 |
| | ROE | ,062 | ,013 |
| 2 | (Constant) | ,558 | ,123 |
| | DER | -,176 | ,229 |
| | DPR | ,342 | ,170 |
| | DER_DPR | 4,671 | 1,232 |
| 3 | (Constant) | ,788 | ,193 |
| | ROE | ,007 | ,018 |
| | DPR | -,488 | ,308 |
| | ROE_DPR | ,089 | ,028 |

**Source: Data Processed**

The moderation regression analysis equation in this study can be seen as follows:

Model 1   PBV = 0,363 + 0,105DER + 0,062ROE + e

Model 2:PBV = 0,558 - 0,176DER + 0,342DPR + 4,671DER.DPR + e

Model 3  PBV = 0,788 + 0,007ROE - 0,488DPR + 0,089ROE.DPR + e

From the equation above, it can be interpreted as follows:

**Model Equation 1**

The constant value is 0.363 and is positive. This means that if the Capital Structure and Profitability variables are 0, then the company value will increase by 0.363. This means that without looking at the Capital Structure and Profitability, it is estimated that the company value will increase by 0.363 units.

The regression coefficient of Capital Structure is 0.105 and positive. This shows that there is a unidirectional change. This means that if the Capital Structure increases by 1 unit, the firm value will increase by 0.105 units.

The regression coefficient value of Profitability is 0.062 and is positive. This shows that there is a unidirectional change. This means that if Profitability increases by 1 unit, the company value will increase by 0.062 units.

**Model 2 Equation**

The constant value is 0.558 and is positive. This means that if the Capital Structure, Dividend Policy, and Capital Structure_Dividend Policy variables are 0, then the company value will increase by 0.558. This means that without looking at Capital Structure, Dividend Policy, and Capital Structure_Dividend Policy, it is estimated that the company value will increase by 0.558 units.

The regression coefficient value of Capital Structure is 0.176 and negative. This shows that the change is not unidirectional. This means that if the Capital Structure increases by 1 unit, the company value will decrease by 0.176 units.

The regression coefficient value of Dividend Policy is 0.342 and has a positive value. This shows that there is a unidirectional change. This means that if the Dividend Policy increases by 1 unit, the company value will increase by 0.342 units.

The regression coefficient value of Capital Structure_Dividend Policy is 4.671 and is positive. This shows that there is a unidirectional change. This means that if the Capital Structure_Dividend Policy increases by 1 unit, the company value will increase by 4.671 units.

**Model Equation 3**

The constant value is 0.788 and is positive. This means that if the Profitability, Dividend Policy, and Profitability_Dividend Policy variables are 0, the company value will increase by 0.788. The constant value is 0.788 and is positive. This means that without looking at Profitability, Dividend Policy, and Profitability_Dividend_Policy, it is estimated that the company value will increase by 0.788 units.

The regression coefficient value of Profitability is 0.007 and is positive. This shows that there is a unidirectional change. This means that if profitability increases by 1 unit, the company value will increase by 0.007 units.

The regression coefficient value of Dividend Policy is 0.488 and has a negative value. This shows that there is a change that is not unidirectional. This means that if the Dividend Policy increases by 1 unit, the company value will decrease by 0.488 units.

The regression coefficient value of Profitability_Dividend Policy is 0.089 and has a positive value. This shows that there is a unidirectional change. This means that if the Profitability Dividend Policy increases by 1 unit, the company value will increase by 0.089 units.

## IV.  DISCUSSION
**Effect of Capital Structure (DER) on Company Value (PBV)**

In this study, capital structure has an insignificant effect on firm value. This shows that property and real estate companies use debt greater than their own capital. The use of high debt will cause bankruptcy costs, agency costs, greater interest expense and so on. If the cost of bankruptcy is greater, the level of profit required by shareholders is also higher. The cost of debt capital will also be higher because lenders will charge high interest as compensation for the increased risk of bankruptcy. Therefore, the company will continue to use debt if the benefits of debt (tax savings from debt) are still greater than the cost of bankruptcy.

The results of this study are in line with research conducted by Shabrina (2015) which states that capital structure has an insignificant effect on firm value. While not in line with research conducted by Anggraini and Siska

(2019) which states that capital structure has a significant effect on firm value.

### Effect of Profitability (ROE) on Company Value (PBV)

In this study, profitability has a positive and significant effect on firm value, this shows that the higher the return on equity value will further increase the company's value. If the company's ability to generate profits increases, the share price will also increase. Thus, the higher this ratio, the better the company's position, which means the greater the company's ability to cover the investment used. This can allow the company to finance investment from funds originating from internal sources available in retained earnings, so that information on the level of profitability will be a positive value for investors and can increase company value. High profitability reflects the company's good position so that the value given by the market reflected in the stock price of the company will also be good.

The results of this study are in line with research conducted by Ramadhani and Maryam (2018) and Nurhayati and Kartika (2020) which state that profitability has a significant effect on firm value.

### Dividend Policy Moderates the Effect of Capital Structure (DER) on Firm Value (PBV)

In the results of this study, dividend policy is able to moderate the effect of capital structure on firm value, this happens if the high debt of a company if balanced with increased dividend payments will result in increased firm value. Investors will have the perception that well-managed debt will increase company profits which will not only be used to pay debts, but also used to increase dividend payments. Based on signaling theory, the amount of debt accompanied by a high dividend policy will also attract investors to invest, so that demand and share prices will increase, which means that the company's value will also increase.

The results of this study are in line with research conducted by Asri (2021) which states that dividend policy is able to moderate the effect of capital structure on firm value. Meanwhile, it is not in line with research conducted by Qadir et al., (2016) which states that dividend policy is unable to moderate the effect of capital structure on firm value.

### Kebijakan Deviden Memoderasi Pengaruh Profitability (ROE) to Company Value (PBV)

In the results of this study, dividend policy is able to moderate the effect of profitability on firm value, this is because profitability on firm value can be strengthened because the company is at a high level of dividend policy. These results can support the bird in the hand theory that the distribution of profit in the form of dividends is favored by shareholders, and according to signaling theory that dividend distribution can be a positive signal that the company has good performance in earning profits so that it can pay dividends.

The results of this study are in line with research conducted by Fitria and Wuryani (2021) which states that dividend policy is able to moderate the effect of profitability on firm value. Meanwhile, it is not in line with research conducted by Maysita and Wahyuni (2021) which states that dividend policy is unable to moderate the effect of profitability on firm value.

## V. CONCLUSION

Based on the results of data analysis and discussion that has been carried out above, the authors can conclude from this research as follows:

1. Capital Structure as measured by debt to equity ratio (DER) has an insignificant effect on firm value in property and real estate companies listed on the IDX for the period 2017 - 2022.
2. Profitability as measured by return on equity (ROE) has a significant effect on firm value in property and real estate companies listed on the IDX for the period 2017-2022.
3. Dividend policy (devidend payout ratio / DPR) is able to moderate the effect of debt to equity ratio (DER) on firm value in property and real estate companies listed on the IDX for the period 2017 - 2022.
4. Dividend policy (devidend payout ratio / DPR) is able to moderate the effect of return on equity (ROE) on firm value in property and real estate companies listed on the IDX for the period 2017 - 2022.

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