The International Journal of Business Management and Technology, Volume 7 Issue 1 January-February 2023
ISSN: 2581-3889

Research Article Open Access

# The Effects of Leverage, Liquidity, and Investment Opportunities on Dividend Policy With Profability As A Moderated Variable

**[1*)]Dian Wahyu Rahmadani, [2*)] Rina Trisnawati**

[1)]*Faculty of Economics and Business, University of Muhammadiyah Surakarta, Indonesia*
[2)]*Faculty of Economics and Business, University of Muhammadiyah Surakarta, Indonesia*

**Abstract:** This study aims to determine the effect of leverage, liquidity, and investment opportunities on dividend policy with profitability as a moderating variable. This study utilizes secondary data from annual reports or company financial reports. This research uses a quantitative approach with Moderated Regression Analysis for this analysis. The total populations are 138 companies in the property and real estate & industrial sectors listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. Purposive sampling was used in this research and obtained 36 companies with 57 data samples. The result of this study shows that liquidity has a significant effect on dividend policy, while leverage and investment opportunities do not significantly affect dividend policy. Profitability is able to significantly moderate the effect of liquidity on dividend policy. Meanwhile, profitability is not able to significantly moderate the effect of leverage and investment opportunities on dividend policy.

**Keywords:** leverage, liquidity, investment opportunities, dividend policy, profitability

## I. INTRODUCTION

There is a relationship between the company and investors or owners of capital whose goal is to gain profits in the process of interaction carried out in the capital market. The company invests as a form of business to develop its business by using funds from internal funds which tend to be risky and weak funds. Therefore, there is a need for capital injections from investors. There is a phenomenon that has occurred related to dividend policy in Indonesia. As experienced by PT Dafam Property Indonesia Tbk (DFAM). The decision issued by DFAM not to pay dividends from 2018 profits, and decided to focus more on growing assets, expanding, and strengthening the business, company profits are allocated as retained earnings, this decision was stipulated at the Annual General Meeting of Shareholders (RUSPT). The impact of this decision was DFAM's profit increase of 26.67% or IDR 30.96 billion, up to IDR 147.07 billion. A larger amount compared to the previous year(Utami & Erawati, 2021). The same thing happened to PT Bank OCB NISP Tbk, which made the decision not to pay dividends in 2018. The profits obtained were fully used to develop the business and strengthen the capital structure. As the President Director of NISP, Purwati Surdaudaja, explained that in 2018, which would be the 15th year, it did not distribute dividends to investors or shareholders. So that the net profit recorded by the company was IDR 2.6 trillion, an increase of 21% compared to the previous year for the 2018 annual report(Triyana & Anhar, 2020).

Based on empirical evidence from research on the topic of dividend policy, there are factors that influence dividend policy. In previous studies, several factors have been studied, namely leverage(Nugroho, 2020), liquidity(Nadapdap & Kristianto, 2021), and investment opportunities(Isabella & Sudarwan, 2022). This study uses four independent variables, namely leverage, liquidity, and investment opportunities. This study also uses profitability as a moderating variable.

Leverage is a description of the company's ability to measure the amount of existing assets in the company that can be used to finance the company's debt(Sukarya & Baskara, 2019). Liquidity is a description of the company's ability to fulfill all components of the obligations borne by the company and especially the short-term debt it provides(Saraswati & Hendra, 2020). Investment opportunities are a picture of the company's ability to spend funds for investment activities taken for the company, funds that will be given to management as future financing.(Arieska & Harto, 2019). The survival of a company can also be measured by dividends through business valuation by investors regarding the value of the company. Investors who have many shares in the company, the higher the dividends that will be received by investors as shareholders for each period. Companies that can fulfill their obligations in paying dividends are reflected as good

companies or can provide an advantage for anyone.(Atmaja, 2008). Profitability on dividend policy as an illustration of the company's operations in generating good returns on sales, assets or profits for own capital. Increased profitability makes the company also feel an increase in its internal funds and increase dividends so that shareholders will experience an increase in the dividends paid(Horne & John, 2009). Companies must be careful when implementing dividend policies because the more dividends a company distributes, the greater the funds spent to pay them, the less cash for operations, the greater the chance of bankruptcy.(Sunarya, 2013). Based on the explanation above, the purpose of this research is to examine the effect of leverage, liquidity, and investment opportunities on dividend policy with profitability as a moderating variable.

## II. LITERATURE REVIEWS

### 2.1 Agency Theory

*agency theory*is the basis of this research. This theory is an agency relationship in a contract which includes the relationship between two parties, namely the principal and the agent (Jensen 7 Meckling, 1976). The agent in this theory is the management of the shareholders who are the owners of the company. Shareholders give orders to agents to act on their behalf in delegating authority to agents. In order to go according to plan, adequate incentives and supervision by management are needed. Actions taken by management such as auditing financial statements, binding institutions and management decisions are limited. In supervision, costs are required for its implementation, known as agency costs(Triyono, Kusumastuti, & Palupi, 2019).

### 2.2 Contingency Theory

Contingency theory as a situational theory is explained as leadership depending on the situation or interpreted that contingency is an uncertainty that can be applied universally. Postulates in contingency theory suggest effectiveness in organizations that seek to overcome environmental uncertainties in the form of elements originating from subsystems that are created to meet various environmental demands that are interrelated with one another.(Ariani & Bawono, 2018).

### 2.3 Dividend Policy

Dividend policy is a matter relating to the distribution of income between revenue users and shareholders in the form of dividends, while income for the company is referred to as retained earnings. The function of retained earnings for the company is to finance the company's survival, and for dividends is cash flow set aside for shareholders(Princess & Susetyo, 2020).dividends distributed to shareholders if it is too high will have an impact on the company's profits to be reduced so that investment and expansion are needed again. It's different if the dividends paid are low, which makes it difficult for the company to get the attention of investors(Victoria & Viriany, 2019).

### 2.4 Leverage

leverage as a benchmark in knowing the company's ability to carry out its obligations both short and long term. A solvable company is characterized by the ownership of assets or wealth in fulfilling short and long term obligations. While companies that do not have sufficient wealth to meet its obligations(Hadian, 2019).If this ratio is getting bigger, the debt used is also getting higher, and the company will face a big financial risk as well(Widyasti & Dwija Putri, 2021).

### 2.5 Liquidity

liquidity as a reflection of the company's ability to pay short-term debts paid using the company's current assets. If the company is in a liquid condition, which means that the company's operations are running in accordance and generating maximum profit(Utami & Erawati, 2021). But if the company's liquidity is low, it explains that the company has not been able or has problems paying off current liabilities when they are due and the company needs retained earnings or past profits to pay liquidity, so the company's profits are reduced.(Mufidah & Agus Sucipto, 2020).

### 2.6 Investment Opportunity

Investment opportunities as a determinant of a company's decision in determining to invest. The increasing number of investment opportunities regarding groups or company characteristics, thus reducing errors in selecting a classification based on the growth rate of each company, thus investment opportunities require proxies that can implement asset values such as in the book value of assets or equity and the opportunity value of the company in the future(Suharmanto, Widiyanti, & Taufik, 2019).if the value of the company is not only reflected in finances but also looks at the investment value issued by the company in the future. Companies that have high investment opportunities are considered to get more profits and get a large number of returns as well(Mufidah & Agus Sucipto, 2020).

### 2.7 Profitability

A company's performance that is described by profitability in relation to increasing company revenue or profits, as a measure of profit that can be obtained by a company from its ability to manage its own capital or funds sourced from investor capital in the company(Sukarya & Baskara, 2019).profit is something that affects the company's financial performance, the amount of profit will determine the level of investor confidence in the company's financial performance. The prospect of a company that is declared high is when the profitability is high which attracts investors so that the

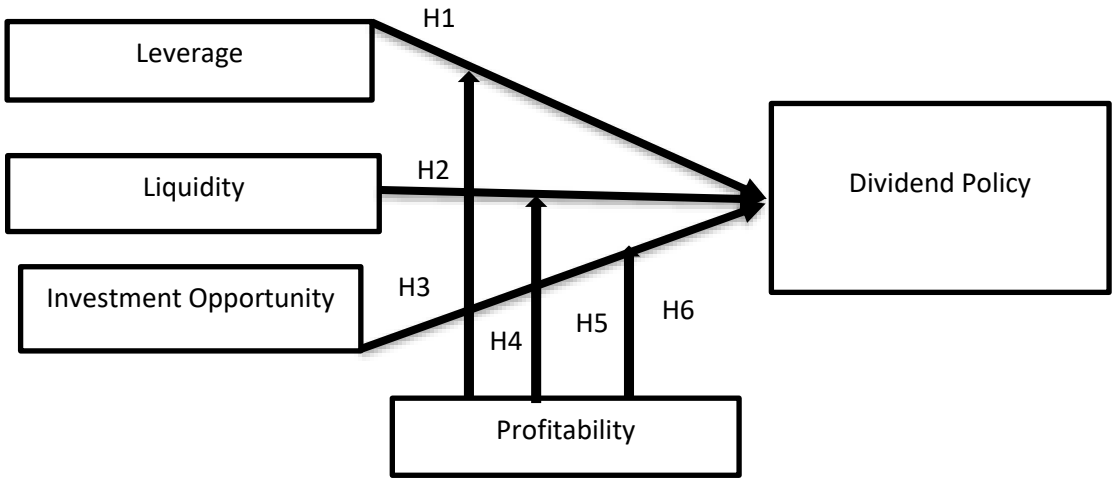
company's value increases as well(Rahayu & Yasa, 2018). And if profitability is the availability of large funds that can cause problems between shareholders and management who manage funds and overcome them by increasing debt for funding(Fitriyani & Khafid, 2019).

## III. Indentations and Equations

### 3.1 Research Design

This research uses many variables to answer a research problem. The dependent variable is dividend policy and the independent variables are liquidity, leverage and investment opportunity with profitability ad moderating variable. The analysis method used Moderated Regression Analysis.

### 3.2 Conceptual




### 3.3 Population and Sample

This study uses 36 companies in the property & real estate and industrial sectors that have been listed on the Indonesia Stock Exchange (IDX). With a total sample of 57 during 2019-2021. This study useda purposive sampling technique.

### 3.4 Data

This study uses secondary data in the form of annual reports of companies in the property & real estate and industry sectors listed on the Indonesia Stock Exchange (IDX) for 2019 to 2021. The data source for this research is the official website of the Stock Exchange (www.idx .co.id) and related company websites.

### 3.5 Data Analysis

To analysis profitability whether moderate the effect of leverage, liquidity, and investment opportunities on dividend policy, this study uses moderated regression analysis (MRA) equations. The equation test model used in this study is as follows:

Equation 1:

$Y = \alpha + \beta_1 DAR + \beta_2 CR + \beta_3 PI + e$

Equation 2:

$Y = \alpha + \beta_1 DAR + \beta_2 CR + \beta_3 PI + \beta_4 ROE + \beta_5 DAR*ROE + \beta_6 CR*ROE + \beta_7 PI*ROE + e$

Information :

Y : Dividend Policy
α : Constant
$\beta_1, -\beta_7$ : Regression coefficient
$\beta_1$DAR : Leverage
$\beta_2$CR : Liquidity
$\beta_3$PI : Investment Opportunity
$\beta_4$ROE : Profitability
$\beta_5$DAR*ROE : Effect of Leverage Profitability Variable on Dividend Policy

$\beta_6$CR*ROE : Effect of Profitability Variable with Liquidity on Dividend Policy
$\beta_7$PI*ROE : Effect of Profitability Variable With Investment Opportunities on Dividend Policy
e : ErrorValue

### 3.6 Measurement variable

**Dividend Policy**

The dividend policy uses the calculation of the Dividend Payout Ratio (DPR), which is a comparison between profits earned and dividends to be paid expressed in percentage form. Investors get excess profits if the dividend payout ratio increases but for the company's internal finances it will become weak and vice versa(Princess & Susetyo, 2020).The dividend calculation formula in this study refers to research(Laim & Nangoy, 2015) and(Princess & Susetyo, 2020), as follows:

$$\textbf{Deviden Payout Rasio } (\boldsymbol{DPR}) = \frac{\boldsymbol{Deviden\ per\ share}}{\boldsymbol{profit\ per\ share}}$$

**Leverage (DAR)**

Leverage uses the Debt to Assets Ratio (DAR) calculation, which is a percentage determinant to see the extent to which the company's loan funds are involved in asset financing.(Nurchaqiqi & Suryarini, 2018).The formula for calculating leverage in this study refers to research(Weygandt, Kimmel, & Kieso, 2015), as follows :

$$\textbf{Debt to Aset Rasio } (\boldsymbol{DAR}) = \frac{\textbf{Total Liabilities}}{\textbf{Total Asset}}$$

**Liquidity (CR)**

Liquidity uses the calculation of the Current Ratio (CR), which is the company's ability to pay off its short-term debt. If the resulting current ratio shows high, it is illustrated that the company has quite a lot of current assets as a form of fulfilling the company's obligations related to short-term debt payments. The formula for calculating liquidity in this study refers to(Saraswati & Hendra, 2020), as follows :

$$\textbf{Current Rasio } (\textbf{CR}) = \frac{\textbf{Current Asset}}{\textbf{Current Liabilities}} \times \textbf{100\%}$$

**Investment Opportunity**

According to research(Arieska & Harto, 2019)Investment opportunity is a description of the company's ability to spend funds for investment activities taken for the company, funds that will be given to management as future financing. The formula for calculating investment opportunities in this study refers to(Arieska & Harto, 2019), as follows :

$$\textbf{PI} = \frac{\textbf{Total Liability} + (\textbf{Share Outstanding} \times \textbf{Close Price End})}{\textbf{Total Asset}} \times \textbf{100\%}$$

**Profitability (ROE)**

According to research(Fitriyani & Khafid, 2019) Profitability is the funds that exist in a company that will be decided to invest or as dividend payments to shareholders. The ratio of this study using the proxy Return On Equity (ROE) is used as a measure of company profitability. This ratio is useful for describing the company's ability to gain profit or profit. The formula for calculating profitability in this study refers to research(Fitriyani & Khafid, 2019)as follows :

$$\boldsymbol{Return\ On\ Equity}\ (\textbf{ROE}) = \frac{\boldsymbol{Laba\ Setelah\ Pajak}}{\textbf{Total Ekuitas}}$$

## IV. DATA ANALYSIS AND DISCUSSION

### 4.1 Descriptive Statistical Analysis

**Table 1 Descriptive Statistical Analysis**

| | *Minimum* | *Maximum* | *Means* | *std. Deviation* |
|---|---|---|---|---|
| Dividend Policy | -,06 | 1.38 | ,3519 | ,28288 |
| leverage | ,06 | ,76 | ,3591 | ,14299 |
| Liquidity | 93.63 | 283789.46 | 5220,8053 | 37556,47393 |
| Investment Opportunity | 35,35 | 535,18 | 158.0554 | 123.16728 |

Source: Secondary Data, Processed, 2022

The table above contains information about the minimum, maximum, average (mean), and standard deviation of the values of each variable studied in this study based on descriptive statistical tests.

1. The dividend policy variable has the lowest value -0.06 for the Perdana Gapuraprima Tbk company in 2019 and Nusantara Almazia Tbk in 2020, while the highest value is 1.38 for the Supreme Cable Manufacturing & commerce company in 2019-2021, while the average debt policy value is 0 .3519 with a standard deviation of 0.28288.
2. The leverage variable has the lowest value of 0.06 for the Binakarya Jaya Abadi Tbk company in 2019-2021, while the highest value is 283789.46 1.76 for the Modern Internasional Tbk company in 2019-2021. with an average leverage value of 0.3591 and a standard deviation of 0.14299.
3. The liquidity variable has the lowest value of 93.63 in the company Dosni Roha Indonesia Tbk in 2019-2020, while the highest value is 283789.46 in the company Bekasi Asri Pemula Tbk in 2019-2020. with an average value of 52220.8053 with a standard deviation of 375556.47393.
4. The investment opportunity variable has the lowest value of 35.35 for the Suryamas Dutamakmur Tbk company in 2019-2021, the highest value is 535.18 for the Dyandra Media International Tbk company in 2019-2021. with an average value of 158.0554, and a standard deviation of 123.16728.

**Table 2 Descriptive Statistical Analysis**

| | *Minimum* | *Maximum* | *Means* | *std. Deviation* |
|---|---|---|---|---|
| Dividend Policy | -,06 | 1.38 | ,3519 | ,28288 |
| leverage | ,06 | ,76 | ,3591 | ,14299 |
| Liquidity | 93.63 | 283789.46 | 5220,8053 | 37556,47393 |
| Investment Opportunity | 35,35 | 535,18 | 158.0554 | 123.16728 |
| Profitability | -,10 | ,35 | .0954 | ,07813 |
| Leverage x Profitability | -,04 | ,15 | .0345 | ,03518 |
| Liquidity x Profitability | -51.59 | 8513.68 | 169.6951 | 1125,14487 |
| Investment Opportunity x Profitability | -18.44 | 170.31 | 18.6738 | 29.06200 |

Source: Secondary Data, Processed, 2022

1. The profitability variable has the lowest value of -0.10 for the Ceramica Indonesia Association Tbk company in 2019-2021, while the highest value is 0.35 for the Intraco Penta Tbk company in 2019-2021. with an average value of 0.0345 with a standard deviation of 0.03518.
2. The leverage variable moderated by profitability has the lowest score of -0.04 for the Lippo Karawaci Tbk company in 2019-2021, while the highest score is 0.15, while the average value is 0.0345 for the Pakuwon Jati Tbk company in 2019-2021. with an average value of 0.0345 with a standard deviation of 0.05040.
3. The liquidity variable moderated by profitability has the lowest value -51.59 in the Duta Anggada Realty Tbk company in 2019-2021, the highest value is 8513.68 in the Pakuwon Jati Tbk company in 2019-2021. with a mean value of 169.6951 with a standard deviation of 1125.14487 .
4. The investment opportunity variable moderated by profitability has the lowest velue of -18.44 44 for the Bakrieland Development Tbk company in 2019-2021, the highest velue is 170.31 for the Summarecon Agung Tbk company in 2019-2021, with an average value of 18.6738 and the standard deviation of 29.06200.
5.

**4.2 Classical Assumptions Test**

Based on the data that has been processed in this study, the classical assumption test results are obtained as follows. The first test is the normality test. The distribution of a feasible data regression model must be normal or close to normal. This test uses the Kolmogorov-Smirnov test to check the normality of the data, by looking at the level of significance used in this study which is >0.05. Equation 1 produces the Asymp value. Sig. 0.093 is greater than or equal to 0.05, indicating

that the data is normally distributed. And equation 2 produces the Asymp value. Sig of 0.200 is greater than 0.05, then it is stated that the data is normally distributed.

Next is the multicollinearity test. This study resulted that for the independent variable equation 1, multicollinearity did not appear because the value of each tolerance value for each independent variable was greater than 0.1 and the VIF value was less than 10. Meanwhile, for the independent variable equation 2, multicollinearity appeared.

Spearman's test is used in the follow-up test of this study, which examines heteroscedasticity. As can be seen from the significant value shown by all the independent variables in this study, none of the independent variables in this study showed symptoms of heteroscedasticity.

Then the last test is the autocorrelation test. This test uses the Durbin Watson Test (DW Test). Based on the test results, it is known that the results are between -2 and +2, which means that there is no autocorrelation problem.

**4.3 Hypothesis Test**

**Table 3 Multiple Regression Analysis**

**Equations 1**

| Variable | *coefficient* | t | *Sig.* |
|---|---|---|---|
| *(Constant)* | ,502 | 4,818 | ,000 |
| leverage | -.425 | -1,832 | ,073 |
| Liquidity | 3,609 | 4,116 | ,000 |
| Investment Opportunity | ,0001 | -,374 | ,710 |
| F count | | | 7,063 |
| R2 | | | 0.286 |
| *adjusted*R2 | | | 0.245 |
| Significance of F | | | 0.000 |

Source: Secondary Data, Processed, 2022

Based on this table, the regression equation can be arranged as follows:
Dividend Policy = 0.502 + (-0.425) Leverage + 3.609 Liquidity + 0.0001 Investment Opportunity + e

Based on equation 1 above, it can be interpreted as follows: the constant value in the table above shows 0.502, meaning that if the independent variables, namely leverage, liquidity, and investment opportunities are considered zero, then the company value is 0.502. The leverage coefficient proxied by the debt to asset ratio in the table above shows the regression coefficient value of -0.425 which indicates a negative regression result. this means that if the company's leverage increases by 1 unit, the company's dividend policy will decrease by -0.425. The liquidity coefficient proxied by the current ratio in the table above shows the regression coefficient value of 3.609 which indicates a positive result. This means that if the company's liquidity increases by 1 unit, the company's dividend policy will also increase by 3.609. The investment opportunity coefficient in the table above shows the regression coefficient value of 0.0001 which indicates a positive result. This means that if the company's liquidity increases by 1 unit, the company's dividend policy will also increase by 0.0001. Thus the relationship formed between the dependent and independent variables is unidirectional. If the company's growth increases, the amount of dividends earned tends to increase and vice versa.

**Table 4 Moderated Regression Analysis**

**Equations 2**

| Variable | *coefficient* | t | *Sig.* |
|---|---|---|---|
| *(Constant)* | ,475 | 2,589 | ,013 |
| leverage | -,128 | -,332 | ,741 |
| Liquidity | ,0001 | 2,199 | .033 |
| Investment Opportunity | ,0003 | -,822 | ,415 |
| Profitability | -,510 | -,287 | ,775 |
| Leverage x Profitability | -3,014 | -,889 | ,378 |
| Liquidity x Profitability | ,006 | 2,243 | ,029 |
| Investment Opportunity x Profitability | ,002 | ,635 | ,528 |
| F count | | | 4,022 |
| R2 | | | 0.365 |

| | | | |
|---|---|---|---|
| *adjusted*R2 | | | 0.274 |
| Significance of F | | | 0.001b |

Source: Secondary Data, Processed, 2022

Based on this table, the regression equation can be arranged as follows:
Dividend policy = 0.475 – 0.128 Leverage + 0.0001 Liquidity + 0.0003 Investment Opportunity – 3.014 Leverage*Profitability + 0.006 Liquidity*Profitability + 0.002 Investment Opportunity*Profitability + e

Based on the regression equation, it can be interpreted as follows: the constant value in the table above shows 0.475 so that if the independent variables are leverage, liquidity and investment opportunities, this shows that dividend policy has a value of 0.475 if the independent and moderating variables are considered zero. The leverage coefficient proxied by the debt to asset ratio in the table above shows the regression coefficient value of -0.128, this means that if leverage increases by 1 unit, the dividend policy will decrease by -0.128. The company's liquidity proxied by the current ratio in the table above shows a positive regression coefficient value of 0.0001, this means that if leverage has increased by 1 unit, then the dividend policy (Y) will experience a decrease of 0.0001. The investment opportunity coefficient proxied by investment opportunities in the table above shows a positive regression coefficient of 0.0003. This means that if leverage increases by 1 unit, the dividend policy (Y) will decrease by 0.0003. Thus the relationship formed between the dependent and independent variables is unidirectional. If the company's growth increases, the amount of dividends distributed tends to increase and vice versa. The profitability coefficient proxied by the return on equity in the table above shows a negative regression coefficient of -0.510. This means that if the return on equity in the company decreases, then the amount of dividends earned by the company decreases and vice versa. The leverage coefficient which is moderated by profitability proxied by the debt ro asset ratio x return on equity in the table above shows a negative regression coefficient of -3.014. This means that if the debt-to-asset ratio is moderated by the return on equity of the company, it decreases, the amount of dividends the company earns tends to be low and vice versa. The liquidity coefficient is moderated by profitability proxied by the current ratio x return on equity in the table above shows a positive regression coefficient of 0.006. This means that if the current ratio is moderated by the greater the return on equity, then the amount of dividends earned by the company tends to increase and vice versa. The coefficient of investment opportunities moderated by profitability proxied by investment opportunities x return on equity in the table above shows a positive regression coefficient of 0.002. This means that if investment opportunities moderated by return on equity decrease, the amount of debt obtained by the company tends to be low and vice versa.

Based on the results of the F test contained in the table above, it can be seen that simultaneously or together the influence of the variables leverage, liquidity, and investment opportunities on dividend policy. This is evidenced by the calculated F in equation 1 has a value of 7.063 and a significance level of 0.000 and in equation 2 has a value of 4.022 and a significance level of 0.001. So that with a significance level value of less than 0.05 or 5%, the regression model used is able to predict the independent variables that affect dividend policy simultaneously or together. Based on the results of testing the coefficient of determination of the independent variable on debt policy in equation 1 it is expressed by the value of the coefficient of determination (Adjusted R2) of 0.245 or 24.5%. Thus it can be interpreted that the independent variables can explain the dependent variable of 24.5% while the remaining 75.5% is explained by being influenced by other variables that are not included in this study. In equation 2 it is stated that the coefficient of determination (Adjusted R2) is 0.274 or 27.4%. Thus it can be interpreted that the independent variables can explain the dependent variable of 27.4% while the remaining 72.6% is explained by being influenced by other variables that are not included in this study.

Based on the table, a results of the statistical test (t-test) it can be explained as follows:

1. First Hypothesis Test Results (H1)

   Based on the results of the statistical t test in table 4 above, it can be seen that the significance of leverage is 0.073 and shows that it is greater than the specified level of significance (α), which is 0.05 or 5%. This shows that H1 is rejected. This shows that leverage has no effect on dividend policy.

2. Second Hypothesis Test Results (H2)

   Based on the results of the statistical t test in table 4 above, it can be seen that the significance of liquidity is 0.000 and is smaller than the specified level of significance (α), which is 0.05 or 5%. This indicates that H2 is accepted. This shows that liquidity has an effect on dividend policy.

3. Third Hypothesis Test Result (H3)

   Based on the results of the statistical t test in table 4 above, it can be seen that the significance of investment opportunities is 0.710 and shows greater than the specified level of significance (α), which is 0.05 or 5%. This shows that H3 is rejected. This shows that investment opportunities have no effect on dividend policy.

4. Sixth Hypothesis Test Results (H4)

Based on the results of the statistical t test in table 4 above, it can be seen that the significance of leverage moderated by profitability is 0.378 and shows that it is greater than the specified level of significance (α), which is 0.05 or 5%. This shows that H4 is rejected. This shows that profitability does not moderate the effect of leverage on dividend policy.

5. Seventh Hypothesis Test Results (H5)

Based on the results of the statistical t test in table 4 above, it can be seen that the significance of liquidity moderated by profitability is 0.029 and is smaller than the specified level of significance (α), which is 0.05 or 5%. This indicates that H5 is accepted. This shows that profitability moderates the effect of liquidity on dividend policy.

6. Eight Hypothesis Test Results (H8)

Based on the results of the statistical t test in table 4 above, it can be seen that the significance of investment opportunities moderated by profitability is 0.635 and shows greater than the specified level of significance (α), which is 0.05 or 5%. This indicates that H6 is rejected. This shows that profitability does not moderate the effect of investment opportunities on dividend policy.

**4.4 Discussion**

**1. Effect of leverage on dividend policy**

The findings of this study state that leverage has an effect on dividend policy. This proves that the level of leverage is not a reference for managers to determine the amount of dividend policy. Leverage that does not determine the amount of dividend payments due to the decision taken by managers to rely more on related internal fundingthe survival of the company in terms of funding the company's operations with its own capital from retained earnings and share capital rather than using external funds/debt options.

Leverage has no effect on dividend policy because debt borrowing is the manager's last resort when the company is in a crisis. Usually the dividend policy will come out if the company is able to issue safe securities when balancing the company's leverage. So that the company's leverage does not affect the amount of dividends paid.state that managers tend to choose policies that can minimize agency costs, so that the policies taken are acceptable to shareholders and management. One way that can be used to reduce agency costs is by increasing the dividend payout. For this reason, the level of debt has no effect on the size of the dividend distribution. The results of this study are consistent with the results of research conducted by(Princess & Susetyo, 2020) And (Benyadi & Andrianantenaina, 2020)provides evidence that leverage has no effect on dividend policy.

**2. Effect of liquidity on dividend policy**

The findings of this study state that liquidity has an effect on the dividend policy received. The results of the study show that liquidity affects dividend policy for property and real estate & industrial sector companies in 2019 - 2021, based on these conclusions it can be said that the lower the liquidity value will provide changes in the increased dividends that will be paid to investors. In general, the age of the company in this study can already be categorized as an established company and is in the maturity stage and produces high liquidity so that its activities are more focused on efforts to generate profits and distribute them to its shareholders.

Liquidity is a reference used to determine whether a company is healthy or not. And the company's liquidity is one of the most important in terms of dividend policy. Because dividends are a picture of cash outflows, which means that if the larger the cash position and the overall liquidity of the company is getting bigger, it shows that the company is increasingly capable of paying high dividends. The results of this study are consistent with the results of research conducted by(Nurchaqiqi & Suryarini, 2018),(Victoria & Viriany, 2019), And(Princess & Susetyo, 2020)where the research results show that liquidity has an effect on dividend policy.

**3. The influence of investment opportunities on dividend policy**

The findings of this study state that investment opportunities have an effect on dividend policy being rejected. The level of investment opportunities is not a factor that influences the interest of managers to undertake new projects or invest in them. This proves that the company has sufficient cash funds to meet the company's capital structure. But(Isabella & Sudarwan, 2022)managers prefer to do additional external funding because they are trying to maintain cash reserves, and not to use it in investing and expanding assets and are more wary of an economic crisis that could suddenly occur.

This is because companies that are still recovering from the pandemic use more sources of funding from their capital or equity and do not affect the amount of dividend payments that will be distributed. The level of investment opportunity has no effect on dividend policy, it is possible that there are other factors such as almost absolute authority at the GMS and suspected expropriation by controlling shareholders so that cash dividends are not distributed for several periods. The results of this study are consistent with(Suharmanto, Widiyanti, & Taufik, 2019), And(Isabella & Sudarwan, 2022)where investment opportunities have no effect on dividend policy.

**4. The effect of leverage is moderated by profitability on dividend policy**

The findings of this study state that profitability does not moderate the effect of leverage on dividend policy. because companies will issue the safest securities first, starting with issuing bonds, then bonds that can be converted into their own capital, then finally issuing new shares. So that profits or profits are high or low and the amount of company leverage is not related to the amount of dividends that will be paid by managers to shareholders.

There is no effect on leverage in this study because many company managers decide to run their operations with internal funding compared to using external funds which are too expensive for the company and high risk. And the application to always distribute dividends is not an obligation. Even though the company uses a large debt policy, the company's expenses and profits decrease or increase, which makes equity increase even if the company distributes dividends to investors or not, it does not make the company's value decrease because managers get investors with the opportunity to get capital gains. The high leverage illustrates the greater the composition of debt in the company's capital structure, therefore resulting in greater financial risk that will be faced by the company. The use of debt that is too high will affect the company's capital structure and affect interest costs (debt costs) which have an impact on the company's net profit. However, the company's net profit obtained is not necessarily followed by the company's ability to pay dividends, because the obligation to pay debts takes precedence over paying dividends. The results of this study are consistent with the results of research conducted by(Fistyarini & Kusmuriyanto, 2015),(Prihatini & Susanti, 2018)And(Angeline & Wijaya, 2022) proves that leverage is moderated by profitability has no effect on debt policy.

**5. The effect of liquidity moderated by profitability on dividend policy**.

The findings of this study state that profitability moderates the effect of liquidity on dividend policy. The results of this study support the contingency theory which provides fulfillment of environmental demands that have a relationship with companies such as companies with high liquidity ratios will provide social information to provide good news to readers to enhance image and attract investors, thus depicting companies capable of managing profits and certainty. will provide a high dividend policy. Companies that financially have a strong level of liquidity need to disclose more detailed information to explain their strong performance compared to companies that have a low liquidity ratio.

A positive relationship between CR and ROE means that an increase in liquidity will be followed by an increase in company profitability and indirectly high or low liquidity can have a significant effect on the dividend policy of the company. The position of cash or liquidity and profit in the company is an important factor that must be considered before making a decision to determine the amount of dividends to be paid to shareholders. Because dividends are cash outflows, the stronger the company's liquidity position, the greater the company's ability to pay dividends

The results of this study are consistent with the results of research conducted by(Cahyani & Badjra, 2017),(Nurchaqiqi & Suryarini, 2018); And(Bawamenewi & Afriyeni, 2019) proves that liquidity is moderated by profitability has an effect on debt policy.

**6. The influence of investment opportunities moderated by profitability on dividend policy**

The findings of this study state that profitability does not moderate the effect of investment opportunities on dividend policy. The results of this study mean that low or high investment opportunities followed by an increase in profits or not in a company do not guarantee the level of dividends that will be paid to shareholders. Company profits tend to be used as retained earnings and are not distributed as dividends but which will later be used as reserve funds in times of crisis, but managers continue to make efforts to continue to meet investment opportunities that come, so that the company continues to run, the funds used are not only sourced from high profits but can be through forming business partners or borrowing funds from creditors.

The number of investment opportunities taken by the company does not have an impact on dividend distribution even when the company's profits are high or low, the company will still invest, because one of the factors the company can carry out its liquidity well so that it is proven that the company has a good plan for recovery and company expansion, by investing in forming new projects using the company's profitability ratios will still choose to keep cash out for the company's expansion, as is the case with the position of the financial statements of many companies even though in good condition the company will prioritize investing in assets rather than paying high dividends (Rifai, Wiyono, & Sari, 2022)**.** The results of this study are consistent with the results of research conducted by(Princess & Susetyo, 2020)And(Rifai, Wiyono, & Sari, 2022)that profitability does not moderate the effect of investment opportunities on dividend policy.

## V. CONCLUSION

The purpose of this study is to analyze and collect empirical evidence about the impact of corporate dividend policy on property and real estate & industrial sector companies listed on the Indonesia Stock Exchange (IDX) in 2019–2021, as well as the effect of moderated leverage, liquidity and investment opportunities by profitability. Follow-up findings can be made based on tests conducted on the study sample using multiple linear regression analysis and moderated regression analysis (MRA).

1. Leverage has no effect on the dividend policy of companies in the property and real estate & industrial sectors

listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. H1 is rejected (p-value 0.741 > 0.05).

2. Liquidity affects the dividend policy of companies in the property and real estate & industrial sectors listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. H2 is accepted (p-value 0.033 <0.05).
3. Investment opportunities do not affect company dividend policies in the property and real estate & industrial sectors listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. H3 is rejected (p-value 0.415 <0.05).
4. Leverage moderated by profitability has no effect on company dividend policies in the property and real estate & industrial sectors listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. H4 is rejected (p-value 0.378> 0.05).
5. Liquidity moderated by profitability affects company dividend policies in the property and real estate & industrial sectors listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. H5 is accepted (p value 0.029> 0.05).
6. Investment opportunities moderated by profitability have no effect on company dividend policies in the property and real estate & industrial sectors listed on the Indonesia Stock Exchange (IDX) for the 2019-2021 period. H6 is rejected (p value 0.528> 0.05).

## REFERENCES


[1] Angeline, G., & Wijaya, H. (2022). Faktor-Faktor Yang Mempengaruhi Kebijakan Deviden Dengan Profitabilitas Sebagai Pemoderasi. *Jurnal Paradigma Akuntansi*, 229-232.

[2] Ariani, K. R., & Bawono, A. D. (2018). PENGARUH UMUR DAN UKURAN PERUSAHAAN TERHADAP AUDIT REPORT LAG DENGAN PROFITABILITAS DAN SOLVABILITAS SEBAGAI VARIABEL MODERATING. *Riset Akuntansi dan Keuangan Indonesia (REAKSI)*, 3(2).

[3] Arieska, F., & Harto, P. (2019). PENGARUH KEBIJAKAN DIVERSIFIKASI TERHADAP KINERJA PERUSAHAAN DENGAN INVESTMENT OPPORTUNITY SET SEBAGAI VARIABEL MODERATING (Studi Empiris pada Perusahaan Manufaktur Multinasional yang terdaftar di Bursa Efek Indonesia Tahun 2014 – 2017). *DIPONEGORO JOURNAL OF ACCOUNTING*, 2337-3806.

[4] Atmaja, L. S. (2008). *Teori dan Praktek Manajemen Keuangan*. Yogyakarta: Andi.

[5] Bawamenewi, K., & Afriyeni. (2019). Pengaruh Profitabilitas, Leverage, Dan Likuiditas Terhadap Kebijakan Dividen Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Pundi*, Vol. 03, No. 01, 2556-2278.

[6] Benyadi, F. C., & Andrianantenaina, H. (2020). Profitability, Liquidity, Leverage and Firm Size on Dividend Payment. *Perspektif Akuntansi*, Volume 3 Nomor 2, hal. 155-166.

[7] Cahyani, N. L., & Badjra, I. B. (2017). PENGARUH LEVERAGE DAN LIKUIDITAS TERHADAP KEBIJAKAN DIVIDEN DENGAN PROFITABILITAS SEBAGAI VARIABEL INTERVENING DI BEI. *E-Jurnal Manajemen Unud*, Vol. 6, No. 10, hal 5262-5286.

[8] Fistyarini, R., & Kusmuriyanto. (2015). PENGARUH PROFITABILITAS, IOS DAN LEVERAGE TERHADAP KEBIJAKAN DIVIDEN TUNAI DENGAN DIMODERASI LIKUIDITAS. *Accounting Analysis Journal* 4.

[9] Fitriyani, U. N., & Khafid, M. (2019). Profitability Moderates the Effects of Institutional Ownership, Dividend Policy and Free Cash Flow on Debt Policy. *Accounting Analysis Journal*, hal 45-51.

[10] Hadian, N. (2019). The Influence of Profitability and Leverage on Dividend Policy in the Banking Sector. *International Journal of Innovation, Creativity and Change*, Volume 6, Issue 7.

[11] Horne, J. C., & John, M. (2009). *Prinsip–Prinsip Manajemen Keuangan, alih bahasa Dewi Fitriasari dan Deny A.Kwary.* Jakarta: Salemba Empat.

[12] Isabella, & Sudarwan. (2022). Pengaruh Profitabilitas, Leverage, Likuiditas, dan Investment Opportunity Set Terhadap Kebijakan Dividen pada Perusahaan Property dan Real Estate yang Terdaftar di Bei Periode 2014 –

2019 dengan Life Cycle Stage sebagai Variabel Moderasi. *Spesial Issue Syntax Literate: Jurnal Ilmiah Indonesia / Original Articles*, Vol. 7, Special Issue No. 1.

[13] Laim, W., & Nangoy, S. C. (2015). ANALISIS FAKTOR-FAKTOR YANG MEMPENGARUHI DIVIDEND PAYOUT RATIO PADA PERUSAHAAN YANG TERDAFTAR DI INDEKS LQ-45 BURSA EFEK INDONESIA. *Jurnal EMBA*, HAL 1072- 1203.

[14] Mufidah, N., & Agus Sucipto. (2020). THE MODERATING ROLE OF DIVIDEND POLICY ON THE INFLUENCE OF LIQUIDITY, PROFITABILITY, LEVERAGE, AND INVESTMENT OPPORTUNITY SET AGAINST STOCK RETURN REGISTERED IN THE JAKARTA ISLAMIC INDEX. *Media Ekonomi dan Manajemen*, Volume 35 Issue 2, July 2020, 188-205.

[15] Nadapdap, J. P., & Kristianto, A. H. (2021). PENGARUH ASPEK INVESTASI DAN ASPEK LIKUIDITAS TERHADAP KEPUTUSAN KEBIJAKAN DEVIDEN. *jurnal.wicida.ac.id/index.php/sebatik*, hal 520-529.

[16] Nugroho, R. D. (2020). ANALISA PENGARUH LIKUIDITAS, PROFITABILITAS DAN LEVERAGE TERHADAP NILAI PERUSAHAAN DAN IMPLIKASINYA TERHADAP KEBIJAKAN DEVIDEN PADA CONSUMER SERVICE INDUSTRY, HOTELS, RESTAURANT AND LIESURE SECTOR DI BURSA EFEK SINGAPURA. *Jurnal Semarak*, 3(3), 66–81.

[17] Nurchaqiqi, & Suryarini. (2018). The Effect of Leverage and Liquidity on Cash Dividend Policy with. *Accounting Analysis Journal*, 10-16.

[18] Prihatini, P., & Susanti, D. (2018). PENGARUH PROFITABILITAS, INVESTMENT OPPORTUNITY SET, DAN KEPEMILIKAN MANAJERIAL TERHADAP KEBIJAKAN DIVIDEN (STUDI PADA PERUSAHAAN MANUFAKTUR YANG TERDAFTAR DI BURSA EFEK INDONESIA TAHUN 2013-2016). *Jurnal Ecogen*, Volume 1, Nomor 2. hal 298-307.

[19] Putri, N. R., & Irawati, W. (2019). Pengaruh Kepemilikan Manajerial dan Effective Tax Rate terhadap Kebijakan Dividen dengan Likuiditas sebagai Variabel Moderating. *JURNAL KAJIAN AKUNTANSI*, Vol 3, (1), 2019, 93-108.

[20] Putri, V. R., & Susetyo, A. (2020). Pengaruh Kesempatan Investasi, Leverage, dan Likuiditas Terhadap Kebijakan Dividen pada Perusahaan yang Terindex di JII Periode 2015-2018. *Jurnal Ilmiah Mahasiswa Manajemen, Bisnis dan Akuntansi*, 563-577.

[21] Rahayu, A. A., & Yasa, G. W. (2018). Investment Opportunity Set (IOS) Sebagai Pemoderasi Pengaruh Profitabilitas Dan Kepemilikan Manajerial Terhadap Kebijakan Utang. *E-Jurnal Akuntansi Universitas Udayana*, Vol.22.2. hal: 856-883.

[22] Rifai, M., Wiyono, G., & Sari, P. P. (2022). Pengaruh profitabilitas, leverage, dan investment opportunity set (ios) terhadap kebijakan dividen pada perusahaan sektor consumer good yang terdaftar di bursa efek Indonesia periode 2016-2019. *JURNAL MANAJEMEN*, Pages 171-180.

[23] Saraswati, N., & Hendra, L. (2020). EFFECT OF LEVERAGE, LIQUIDITY, AND COMPANY SIZE ON PROFITABILITY IN BANKING COMPANIES LISTED IN IDX 2017-2019. *Sekolah Tinggi IlmuEkonomi Indonesia*.

[24] Saraswati, N., & Hendra, L. (2020). PENGARUH LEVERAGE, LIKUIDITAS, DAN UKURAN PERUSAHAAN TERHADAP PROFITABILITAS PADA PERUSAHAAN PERBANKAN YANG TERDAFTAR DI BEI 2017-2019/EFFECT OF LEVERAGE, LIQUIDITY, AND COMPANY SIZE ON PROFITABILITY IN BANKING COMPANIES LISTED IN IDX 2017-2019. *Respository STIE INDONESIA (STEI) Jakarta*.

[25] Suharmanto, A., Widiyanti, H. M., & Taufik, H. (2019). Analysis of Financial Performance and Opportunity of Investment on Dividend Policy with Profitability As Moderating Variable in LQ45 Company Listed In Indoenesia Stock Exchange . *International Journal of Scientific Research and Engineering Development*, Volume 2 Issue 1.

[26] Suharmanto, A., Widiyanti, H. M., & Taufik, H. (2019). Analysis of Financial Performance and Opportunity of Investment on Dividend Policy with Profitability As Moderating Variable inLQ45 Company Listed In Indoenesia Stock Exchange. *International Journal of Scientific Research and Engineering Development*-, 183-197.

[27] Sukarya, I. P., & Baskara, I. G. (2019). PENGARUH PROFITABILITAS, LEVERAGE, DAN LIKUIDITAS TERHADAP KEBIJAKAN DEVIDEN PERUSAHAAN SUB SEKTOR FOOD AND BEVERAGES. *E-Jurnal Manajemen*, 8(1), 7399–7428.

[28] Sunarya, D. H. (2013). PENGARUH KEBIJAKAN UTANG, PROFITABILITAS DAN LIKUIDITAS TERHADAP KEBIJAKAN DIVIDEN DENGAN SIZE SEBAGAI VARIABEL MODERASI PADA SEKTOR MANUFAKTUR PERIODE 2008-2011 . *Jurnal Ilmiah Mahasiswa Universitas Surabaya* , Vol. 2 No.1 .

[29] Triyana, W. N., & Anhar, M. (2020). PENGARUH KEPEMILIKAN MANAJERIAL PROFITABILITAS, DAN UKURAN PERUSAHAAN TERHADAP KEBIJAKAN DIVIDEN PADA TERDAFTAR DI BURSA EFEK INDONESIA TAHUN 2015-2018. *Sekolah Tinggi Ilmu Ekonomi Indonesia*.

[30] Triyono, Kusumastuti, A., & Palupi, I. D. (2019). The Influence of Profitability, Assets Structure, Firm Size, Business Risk, Sales Growth, and Dividend Policy on Capital Structure. *Riset Akuntansi dan Keuangan Indonesia*, Vol.4 No.3.

[31] Utami, W., & Erawati, T. (2021). PENGARUH LIKUIDITAS DAN KEPEMILIKAN INSTITUSIONAL TERHADAP KEBIJAKAN DIVIDEN DENGAN PROFITABILITAS SEBAGAI VARIABEL MODERASI PADA PERUSAHAAN PROPERTI, REAL ESTATE DAN KONSTRUKSI BANGUNAN YANG TERDAFTARDI BURSA EFEK INDONESIAPERIODE 2016-2019. *Jambi Accounting Review*, JAR Volume 2, Nomor 3, 365-383.

[32] Victoria, W., & Viriany. (2019). Pengaruh Leverage, Profitability, Liquidity, Dan Firm Size Terhadap Kebijakan Dividen. *Jurnal Multiparadigma Akuntansi*, Volume I No. 4/2019 Hal: 1085-1093.

[33] Weygandt, J. J., Kimmel, P. D., & Kieso, D. E. (2015). *Financial & Managerial Accounting*. John.

[34] Widyasti, I. G., & Dwija Putri, I. A. (2021). The Effect of Profitability, Liquidity, Leverage, Free Cash Flow, and Good Corporate Governance on Dividend Policies (Empirical Study on Manufacturing Companies Listed in Indonesia Stock Exchange 2017-2019). *American Journal of Humanities and Social Sciences Research (AJHSSR)*, Volume-5, Issue-1, pp-269-278.