

## Analysis of Factors Affecting Investment Decision with Growth Opportunities as a Moderation Variable in Basic Industry and Chemicals Sector Companies Listed on Indonesia Stock Exchange in 2016 – 2020



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**ABSTRACT:** This study focuses on examining how the effect of profitability, debt policy, investment opportunity set and firm size with growth opportunity as a moderating variable on investment decisions. This study has a population of basic and chemical industrial sector companies listed on the Indonesia Stock Exchange for the period 2016 – 2020. The research data used is secondary data with an observation period of 5 years. Determination of this sample using purposive sampling with several criteria. Thus, obtained 37 samples of companies used in this study. This study also uses Moderation Regression Analysis (MRA) as the method of analysis. The results of this study are profitability and firm size have a significant and positive effect on investment decisions, while debt policy and investment opportunity sets have a significant negative effect on investment decisions. Growth opportunity can moderate the relationship between debt policy and investment decisions, but on the other hand growth opportunity is not able to moderate the relationship between profitability, investment opportunity set and company size on investment decisions.

**KEYWORDS:** Profitability, leverage, Investment Opportunity Set, Company Size, Growth opportunity, Investment Decision

### INTRODUCTION

There are many factors that support the improvement of a country's economy, one of which is through the capital market. The capital market plays an important role in a country including Indonesia. This is because the capital market is a measure of a country's economic development. Apart from acting as a leading indicator in improving a country's economy, the capital market is also a source of funding for development implementation. From an investment standpoint, the manufacturing industry is one of the industrial sectors most in demand by investors besides the financial industry. This is because the development of the manufacturing industry is still quite high, so that the manufacturing industry can provide a high return to investors. Companies in this industry are also one of the highest contributors to export value in the pillars of national economic development. According to data obtained through the website of the ministry of industry, this industry managed to contribute the highest export value of 126.57 billion US dollars or equivalent to 75.5% of the achievement of the national export value in 2019.

The manufacturing industry consists of various supporting sectors. Among them are the basic and chemical industry sector, the miscellaneous industrial sector, and the goods and consumption industry sector. The manufacturing sector has continued to experience growth since 2016. The highest growth occurred in 2016 where the basic industrial and chemical sectors recorded growth of 31.96% year to date (ytd), higher than the two industrial sectors in other manufacturing companies. In 2018 this sector continued to record the highest growth among other manufacturing sectors, reaching 24.01% ytd, while the Jakarta Composite Index (IHSG) slightly weakened by 3.02% ytd.

However, the biggest decline occurred in 2020, which this year was the start of the COVID-19 pandemic. This has caused many economic changes in the world, including in Indonesia. IHSG was corrected weakly by -31.25% while stocks in the manufacturing industry sector also corrected by -9.22%, so this will also affect the performance of the basic and chemical industry sector which will be corrected by -5.84%. Apart from the pandemic, this was due to the impact of the decline in world oil prices and fluctuations in export values that occurred throughout 2019.

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One of the main goals of every company is to provide increased prosperity for its shareholders (investors). This is because every investor hopes to gain profits in the future through investing in an issuer. In a company, financial managers are authorized by owners of capital or shareholders to be responsible for every decision making. The decision in question concerns the company's funding activities such as: investment decisions, funding decisions, and dividend policy decisions. One of the most important things in the decision above is regarding the investment decision. This is because the investment decision is used as an indicator of the company's existence, if there is no new investment, investors assess that there is no positive prospect for the company. Anjani (2012) says that investment decisions are policies or decisions taken to invest in one or more assets to gain profits in the future. Therefore, it is necessary to analyze the factors that can influence investment decisions in a company.

the value of investment decisions in companies in the basic industrial and chemical sectors also increased in line with the growth they experienced. the increase with the highest point occurred in 2018, while the decline continued to occur in 2019 and 2020. This was due to major global problems and fluctuations in exports as well as the co-19 pandemic which caused global economic paralysis.

In addition, there are many things that underlie investment decisions, including capital expenditures. Capital expenditures are funds issued by companies to obtain benefits for more than one year. Hidayat (2010) states that capital expenditure is generally made for the expansion, replacement, or renewal of fixed assets or for benefits that may be less tangible in the long term. Modligani and Miller (1958) in Hidayat (2010) state that investment decisions and funding decisions are not related to each other even in perfect market conditions. Thus, even though market conditions are perfect, investment decisions and funding decisions will still occur even though there will be modifications made by the financial manager by using the weighted average cost of capital as the discount rate. Even when capital structure becomes relevant, whether due to tax or other factors, there is still no direct link between investment and financing. What exists is that the investment program is decided first and then funding. For investment decisions to be truly aimed at maximizing firm value, investment decisions must be independent from funding decisions.

Investment decisions and funding decisions can also be related because they are influenced by profitability. Pure investment decisions are taken on the basis of consideration of the company's ability to obtain higher profits. This is because the profit will be used by the company to finance existing investments. Even though the company has the opportunity to grow after investing, the company does not have strong enough funding (profits), so the decision taken is not to invest in these assets (Endiana, 2016). Then Safitri (2016) also stated that Profitability has a positive effect on investment decisions, meaning that maximizing the use of company assets in generating profits can affect an increase in firm value. This is because, an increase in the value of the company which is marked by an increase in the company's stock price is a positive response from the market (investors) to the growth of the company.

In addition to the above profitability, investment decisions are also influenced by the company's debt policy. Then, this debt policy is proxied by ratio analysis in the form of Debt-to-Equity Ratio (DER). A healthy company generally has a lower DER value than the industry sector average. Companies that have a high debt ratio tend to have difficulty obtaining external funding sources and vice versa with a low debt ratio it will be easier for companies to obtain external funding activities (Hovakimian and Titman (2006) in Hidayat (2010)). Thus, companies need to maintain their debt ratios so that they do not increase beyond the industry average such as collecting debts that are past due and reducing the age of debts to customers.

Smith and Watts (1992) in Endiana (2016) explain that the basis for making investment decisions is also influenced by a set of investment opportunities owned by the company. The investment opportunity set is a component of the firm's value which is the result of several choices to make a larger investment in the future. The prospects or expectations of the company here can be estimated through a set of investment opportunities. Meanwhile, a set of investment opportunities cannot be seen directly but must be processed with certain proxies.

In addition to the things above, company size is also considered to influence investment decision making. Riyanto (2001) argues that larger companies tend to have more stable financial performance so that they will increase investment opportunities compared to smaller companies. In addition, investors also consider that it is easier for large companies to obtain external funding through bank loans and or investment from the government for funding activities so that it is easier to expand or choose expansion policies, so that it will be easier for companies to grow.

Opportunity to grow (Growth Opportunity) is an opportunity or possibility of company growth in the future. Growth opportunities show the growth in the market value of the company's assets compared to the book value of the company's assets. Companies that have good growth have asset market values that are greater than the book value of their assets, resulting in an increase in share prices on the stock market. Companies that grow high enough will tend to require funds that are

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high enough to finance this growth, in this case investment in the future. Thus, the company will tend to maintain its profits to invest back into the company.

Based on the description of the background above, the researcher is interested in conducting research on "Analysis of Factors Affecting Investment Decisions with Growth Opportunities as Moderating Variables in Basic Industry and Chemical Sector Companies Listed on Indonesia Stock Exchange in 2016 - 2020".

### **LITERATURE REVIEW**

#### **1. Signalling Theory**

Myers (1984), states that signal theory is the assumption that managers have better information about their investment opportunities than investors and that managers' actions are based on the best interests of existing shareholders (investors). There is certain information that only managers know, while investors know this information so that there is asymmetric information between company managers and investors as shareholders. Thus, this will result when there is a change in the company's capital structure will provide information to shareholders and result in changes in the value of the company. In this case it can be said that the behaviour of managers in managing capital structure can be considered as a signal by outsiders, especially investors.

This signal theory also discusses how signals of success or failure of management (agent) must be conveyed to the owner (principle), Anjani (2012). Companies that have high growth opportunities and profitability can be considered as a good signal, because this is a form of investment decision made with a positive NPV (Net Present Value). Fama and French (1987) in Anjani (2012) found that investments resulting from leverage have positive information about the company in the future which will have a positive impact on firm value.

#### **2. Pecking Order Theory**

Pecking order theory was first proposed by Corey and Myers (1984). This theory states that companies prefer internal funding compared to external funding, safe debt compared to risky debt and common stock. This theory is based on the fact that there is no target regarding a specific debt to equity ratio, only the company's most preferred source of funding. The essence of this theory is that there are two types of models of external financing and internal financing. The order of funding in this theory is retained earnings, debt and the last is the issuance of shares. In this case, companies that use external funding sources, loans are preferred over funding with additional capital from new shareholders.

#### **3. Agency Theory**

Agency theory is a relationship regarding agency relationships between one or more people (principals) who employ several other people (agents) to provide a service and then delegate authority to the agent to make decisions (Jensen and Meckling, 1976). The above can be analogous to the relationship between company owners and company management. Companies are valued as a set of contracts between company managers and shareholders. The principal or owner of the company oversees handing over the management of the company to the management. Meanwhile, the manager as the party who receives and is authorized to manage the company's activities and is obliged to make financial reports that tend to maximize its utility and sacrifice the interests of its investors.

#### **4. Investment Decision**

According to Sutrisno (2012), investment decisions are a matter of how financial managers allocate funds in the form of investment instruments to gain future profits. Meanwhile, according to Hartono (2015) investment decisions are the first step taken to calculate the total amount of assets needed by the company, so this investment decision is very important for the company.

#### **5. Profitability**

Profitability is the ability of a company to obtain profits related to sales, total assets and own capital (Sartono, 2010). Meanwhile, according to Hartono (2009) profitability describes the company's ability to earn profits through all the capabilities and resources of the company.

#### **6. Debt policy**

Debt policy is an action taken by management to finance the company's operations through the company's external funds, namely debt. This is of course closely related to the capital structure chosen by the business entity. The capital structure itself is a consideration of the form of funding carried out by the company through internal funds (own capital) or external funds (debt, loans, etc.). In this case, the company owner prefers to use debt at a certain level for company capital so that his goals can be

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achieved. In addition, the behaviour of managers and commissioners can also be controlled (Hasni, 2013). Debt policy itself is often measured using the Debt-to-Equity Ratio (DER), which is a comparison between total long-term debt and total equity. The smaller the DER ratio, the smaller the level of debt generated and the higher the company's ability to make debt payments.

## 7. Investment Opportunity Set

The investment opportunity set (IOS) was first put forward by Myers (1977) who considered that the value of a company is a combination of assets in place and investment options in the future. Meanwhile, according to Gaver and Gaver (1993), IOS is a projection of the company's value, the amount of which depends on the company's expenses that will be carried out by the business entity in the future that has been determined by previous management, where investment is currently the choice to be made to obtain a greater rate of return in the future.

## 8. Firm Size

Company size is the size of the company as seen through its market capitalization. However, in this study, researchers used total assets to see the size of the company. The size of the company itself is proxied through the natural logarithm of total assets. The logarithmic form was chosen because in general the value of the company is very large, so it equates the value with other variables with the natural logarithm of total assets (Sugiarto, 2011)

## 9. Growth Opportunity

Charitou and Vefas (1998) stated that growth shows the growth of assets where assets are assets used in the company's operational activities. Generally, a manager in a corporate business will pay attention to growth rates and be more interested in investing after-tax profits in the hope of getting a better performance in the company's overall growth. Growth Opportunity is also referred to as an opportunity for business entities to be able to develop in the future (Brigham and Houston, 2006).

## RESEARCH HYPOTHESIS

the hypothesis in this research as follows:

- H1: Profitability has a positive effect on investment decisions
- H2: Debt to Equity Ratio has a negative effect on investment decisions
- H3: Investment Opportunity Set has a positive effect on investment decisions
- H4: Firm size has a positive effect on investment decisions
- H5: Growth Opportunity can moderate the profitability of investment decisions
- H6: Growth Opportunity can moderate the Debt-to-Equity Ratio on investment decisions
- H7: Growth Opportunity can moderate the Investment Opportunity Set on investment decisions
- H8: Growth Opportunity can moderate Firm Size on investment decisions

## RESEARCH METHODOLOGY

This study uses a causality design with a quantitative approach. The population in this study are companies in the basic and chemical industry sectors that are listed on the Indonesia Stock Exchange in 2016 - 2020, namely 61 companies. Sampling in this study used purposive sampling with several criteria that had been determined by previous researchers, so that there were 38 companies that would be sampled in this study.

The variables in this study are investment decisions as the dependent variable with Return on Investment, Debt to equity ratio, investment opportunity set, and firm size and growth opportunity as moderating variables.

the hypothesis in this study was tested using multiple linear analysis methods with the Moderated Regression Analysis (MRA) approach. with the following equation results:

investment Decisionit=  $\alpha + \beta_1ROI + \beta_2DER + \beta_3IOS + \beta_4SIZE + \beta_5Growth + \beta_6ROI*Growth + \beta_7DER*Growth + \beta_8IOS*Growth + \beta_9SIZE*Growth + \text{eit}$ . This data is processed using Eviews version 10.

## RESULTS AND DISCUSSION

**Moderation Regression Analysis** results:

Moderation Regression Analysis is processed using Eviews 10 with the following results:

**Table 1. Moderated Regression Analysis Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.003261	1.994567	-3.511168	0.0006
ROI	1.624358	0.230016	7.061946	0.0000

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DER	-13.72995	4.764007	-2.882017	0.0046
IOS	-13.73259	4.763588	-2.882824	0.0046
SIZE	0.241326	0.068648	3.515433	0.0006
Growth	0.100163	0.130105	0.769863	0.4427
Growth*ROI	-0.028296	0.060430	-0.468241	0.6403
Growth*DER	13.73323	4.765230	2.881966	0.0046
Growth*IOS	-0.000536	0.000911	-0.588358	0.5572
Growth*SIZE	-0.002934	0.004383	-0.669306	0.5044
Cross-section fixed (dummy variables)				
R-squared	0.576876	Mean dependent var	0.100523	
Adjusted R-squared	0.439894	S.D. dependent var	0.237258	
S.E. of regression	0.184329	Sum squared resid	4.722807	
F-statistic	4.211314	Durbin-Watson stat	2.219347	
Prob(F-statistic)	0.000000			

Based on table above, moderated regression analysis shows the results of equation as follows:

$$Y = -7.003261 + 1.624358 \text{ ROI} - 13.72995 \text{ DER} - 13.73259 \text{ IOS} + 0.241326 \text{ SIZE} + 0.100163 \text{ Growth} - 0.028296 \text{ ROI} * \text{Growth} + 13.73323 \text{ DER} * \text{Growth} - 0.000536 \text{ IOS} * \text{Growth} + 0.002934 \text{ SIZE} * \text{Growth}$$

### DISCUSSION

The constant value is  $-7.003261$  with a significance of  $0.0006$ , a significance level  $<0.05$ . So, the constant value is significant (has a relationship). The constant value means that if the value of all independent variables is zero then the Investment Decision value is  $-7.003261$ . Return on Investment (ROI) has a t value of  $7.061946 > 1.9732$ . While the probability value of Return on Investment (ROI) is  $0.0000 < 0.05$  so that  $H_0$  is rejected which means Return on Investment (ROI) affects Investment Decisions, so it can be concluded that hypothesis  $H_1$  in this study is accepted. The regression coefficient value indicates that if the ROI increases by one unit, then the investment decision value in the Basic Industry and Chemical Sector will increase by  $1.624358$ , while the others remain the same. The Debt-to-Equity Ratio (DER) has a t value of  $-2.882017 > 1.9732$ . While the probability value of the Debt-to-Equity Ratio (DER) is  $0.0046 < 0.05$ , a negative value indicates that the independent variable DER moves in the opposite direction or negatively so that  $H_0$  is rejected which means the Debt-to-Equity Ratio (DER) has a negative effect on Investment Decisions, so that it can be concluded that the hypothesis  $H_2$  in this study was accepted. The regression coefficient value indicates that if the DER decreases by one unit, then the investment decision value in the Basic Industry and Chemical Sector will decrease by  $13.72995$ , while the others remain the same. The Investment Opportunity Set (IOS) has a t count of  $-2.882824 > 1.9732$ . While the probability value of the Investment Opportunity Set (IOS) is  $0.0046 < 0.05$  so that  $H_0$  is rejected, which means that the Investment Opportunity Set (IOS) influences Investment Decisions. the conclusion that the  $H_3$  hypothesis in this study is rejected. The regression coefficient value indicates that if IOS decreases by one unit, then the value of Investment Decisions in the Basic Industry and Chemical Sector will decrease by  $13.73295$ , while the others remain the same. Company Size (SIZE) has a t count of  $3.515433 > 1.9732$ . While the probability value of Firm Size (SIZE) is  $0.0006 < 0.05$ , then  $H_0$  is rejected, which means Firm Size (SIZE) influences investment decisions, so it can be concluded that hypothesis  $H_4$  in this study is accepted. The regression coefficient value indicates that if SIZE increases by one unit, then the value of Chemical and Basic Industry Investment Decisions will increase by  $0.241326$ , while the others remain the same.

The Moderation Regression Analysis test is also used to determine the effect of the moderating variable, namely Growth Opportunity (Growth). With an investment decision of  $0.0000$  which means a significant effect and the interaction probability between Return on Investment (ROI) and Growth Opportunity (Growth) of  $0.6403$  which means no significant effect. Thus, it can be concluded that the Growth Opportunity variable (Growth) is a moderating predictor or only an independent variable, so it is not feasible to be used as a moderating variable. Growth Opportunities (Growth) have no effect on the relationship Return on Investment (ROI) to Investment Decisions. Moderation of Growth Opportunity (GROWTH) with Debt-to-Equity Ratio (DER) to Investment Decisions based on the moderating variable test above is the probability between Debt-to-Equity Ratio (DER) and Investment Decisions is  $0.0046$  which means significant influence and probability of the interaction between Debt-to-Equity Ratio (DER) with a Growth Opportunity (Growth) of  $0.0046$ , which means it has a significant effect. Thus, it can be concluded that the Growth Opportunity (Growth) variable is pseudo moderating or suitable to be used as a moderating variable. Growth Opportunities (Growth) influence the Debt-to-Equity Ratio (DER) relationship to Investment Decisions. Growth Opportunity (GROWTH) Moderation with Investment Opportunity Set (IOS) on Investment Decision Based on the moderating variable test

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above, the probability between Investment Opportunity Set (IOS) and Investment Decision is 0.0046 which means significant influence and interaction probability between Investment Opportunity Set (IOS) with a Growth Opportunity (Growth) of 0.5572, which means it has no significant effect. Thus, it can be concluded that the Growth Opportunity variable (Growth) is a moderating predictor or only an independent variable, so it is not feasible to be used as a moderating variable. Growth Opportunity (Growth) does not affect the Investment Opportunity Set (IOS) relationship to Investment Decisions. Moderation of Growth Opportunities (GROWTH) with Firm Size (SIZE) on Investment Decisions based on the moderating variable test above is the Probability between Firm Size (SIZE) and Investment Decisions is 0.0006 which means significant influence and interaction probability between Company Size (SIZE) and Growth Opportunity (Growth) of 0.5044 which means no significant effect. Thus, it can be concluded that the Growth Opportunity variable (Growth) is a moderating predictor or only an independent variable, so it is not feasible to be used as a moderating variable. Growth Opportunities (Growth) have no effect on the relationship between Firm Size (SIZE) and Investment Decisions.

Based on table 1 above, the  $F_{count}$  value is 4.211314, while the  $F_{table}$  value obtained using the significance of  $\alpha$  is 0.05 with a  $df_1$  value of  $4 - 1 = 3$  ( $df_1$  = number of independent variables - 1) and a  $df_2$  value of  $185 - 4 - 1 = 180$  ( $df_2$  = number of samples - number of independent variables - 1), so that a  $F_{table}$  of 2.65479 is obtained. In table 1 above, the value of  $F_{count} > F_{table}$  is  $4.211314 > 2.65479$  and a significance value of  $0.0000 < 0.05$  so that  $H_0$  is rejected and  $H_1$  is accepted. This means that the variables Return on Investment, Debt to Equity Ratio, Investment Opportunity Set and Company Size together have a significant effect on Investment Decisions in Companies in the Basic Industry and Chemical Sector for the 2016 – 2020 period.

Based on table 1 above, the R-Squared value in this study is 0.576876 or 57.68%. This means that the ratio of Return on Investment (ROI), Debt to Equity Ratio (DER), Investment Opportunity Set (IOS), and Company Size (SIZE) to Investment Decisions is 57.68%. Thus, the investment decision variables can be explained or influenced by the variables Return on Investment (ROI), Debt to Equity Ratio (DER), Investment Opportunity Set (IOS), and Firm Size (SIZE) and Growth Opportunity (Growth) as moderators. variables of 57.68% while the remaining 42.32% are other variables not explained in this study.

The results showed that the profitability ratio proxied by Return on Investment (ROI) showed a probability value of  $0.000 <$  from a significance level of 0.05 so it could be concluded that profitability had a positive effect on investment decisions and the  $H_1$  hypothesis was accepted. High profitability also indicates that the company is in a good condition in financing its operating activities and increasing its profits. Of course, this will have a positive impact on increasing the value of traded shares. Investors tend to choose companies with high profitability, because apart from being considered capable of financing the company's activities, they are also able to meet the interests of their investors. This result is in line with the previously built hypothesis that profitability has a positive effect on investment decisions. The results of this study are also in line with I Dewa Made Endiana (2016) and Bella Bestharinda Anjani (2012) which state that profitability has a positive effect on investment decisions.

The results showed that the debt policy ratio proxied by the Debt-to-Equity Ratio (DER) showed a probability value of  $0.046 <$  a significance level of 0.05 and had a t-statistic value -2.2882017 so that it can be concluded that debt policy has a negative effect on investment decisions and the  $H_2$  hypothesis is accepted. Debt policy proxied by the Debt-to-Equity Ratio (DER) shows the ratio of external funding used by companies to finance their business. The purpose of this external funding is not only to fund the company's operational activities but also to invest in the future. This is in line with the pecking order theory which states that the use of debt is preferred because the cost of issuing bonds is cheaper than issuing new shares. In Modigliani and Miller's theory which states that the use of debt will be able to increase firm value because the cost of debt can reduce tax payments. Thus, this becomes the basis for issuers in the Basic Industry and Chemical sectors to use external funding. This result is in line with the previously established hypothesis that the debt-to-equity ratio has a negative effect on investment decisions. The results of this study are also in line with I Dewa Made Endiana (2016), Dewi et al (2017) and Putri Novia Ardiana (2021) in supporting the research hypothesis which states that debt policy has a significant negative effect on investment decisions. This is because the interest rate on debt is higher than the investment yield resulting in a decrease in the level of corporate investment decisions.

The results showed that the Investment Opportunity Set showed a probability value of  $0.046 <$  from a significance level of 0.05 and had a t-statistic value of -2.882824 so it could be concluded that the investment opportunity set had a negative effect on investment decisions and the  $H_3$  hypothesis was rejected. In general, a high level of investment decision is certainly supported by a high level of investment opportunity as well. This is due to the high investment/investment opportunities, the company will maximize these opportunities to increase the value of its investment. However, the company also thinks about equity market timing before making an investment, so this is what makes investment opportunities do not affect investment decisions. Financial constraints are one of the reasons companies do not carry out equity market timing, namely by issuing shares when stock valuations are high and buying back these shares when stock valuations are down (Saad and Siagian, 2011).

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This result is not in line with the previously established hypothesis that the investment opportunity set has a positive effect on investment decisions. This result is also in line with Dian Safitri (2016) and Ra'uf alvian Prasetya and Agung Yulianto (2019) which state that Investment Opportunity Sets have a negative effect on investment decisions.

The results showed that firm size showed a probability value of  $0.006 <$  from a significance level of 0.05 so it could be concluded that firm size influenced investment decisions and the  $H_4$  hypothesis was accepted. This shows that the larger the size of the company, the greater the level of investment decisions made. Large companies are better at managing finances so that they can continue to increase profitability which will have an impact on increasing investor interest. As is meant by signal theory where company information is a signal for investors to invest in the company. This result is in line with the hypothesis that was built previously that company size has a positive effect on investment decisions. These results are also in line with research conducted by Ullah Ehsan (2017), Porras, Andewi Rokhmawati (2019) which states that company size has a significant positive effect on investment decisions.

The result of testing the profitability variable on investment decisions with growth opportunity as a moderating variable is that the growth opportunity moderating variable has not been able to influence the relationship between profitability and investment decisions and is a predictor of moderation, so it can be concluded that hypothesis  $H_5$  is rejected. The growth of companies is characterized by increasing their profitability value and creating opportunities to make investment decisions. However, not all companies that grow and have good profitability will make investment decisions. Many factors make investment decisions not a good decision when developing, including the company's internal funding needs in managing its operational activities or the company is in a state of financial constraints. This result is not in line with the previously built hypothesis that Growth Opportunity is able to moderate the profitability of investment decisions. This is in line with research conducted by I Dewa Made Endiana (2016) where growth opportunities have not been able to affect the profitability of investment decisions.

The results of testing the debt policy variable on investment decisions with growth opportunity as a moderating variable is that the growth opportunity moderating variable can influence the relationship between profitability and investment decisions and is quasi-moderating, so it can be concluded that hypothesis  $H_6$  is accepted. External sources of funds obtained by the company through third parties are supported by the company's opportunities to grow, enabling the company to make investment decisions to increase the value of its investment. This is supported by the pecking order theory where companies prefer external funding to fund their investment activities compared to internal funding because the payment of bond issuance costs is cheaper than the cost of issuing new shares for internal funding activities.

This result is in line with the previously built hypothesis that Growth Opportunity can moderate the debt-to-equity ratio in investment decisions. The results of this study are also in line with research conducted by I Dewa Made Endiana (2016) which states that growth opportunities can influence debt policy on investment decisions.

The result of testing the investment opportunity set (IOS) variable on investment decisions with growth opportunity as a moderating variable is that the moderating growth opportunity variable has not been able to influence the relationship between investment opportunity set (IOS) and investment decisions and is a moderator predictor, so it can be concluded that hypothesis  $H_7$  is rejected. Investment opportunities followed by good company growth opportunities will increase the value of investment decisions that will be made by the company. But not all of them are like that, companies also need to pay attention to the financial conditions that occur. If this is not possible, then the opportunity not to invest is the right choice to maintain the stability of the company. This result is not in line with the previously built hypothesis that Growth Opportunity is able to moderate the investment opportunity set on investment decisions. The results of this study are also in line with research conducted by Bella Bestharinda Anjani (2012) which states that growth opportunities cannot influence Investment Opportunity Set (IOS) on investment decisions.

The result of testing the firm size variable on investment decisions with growth opportunity as a moderating variable is that the growth opportunity moderating variable has not been able to influence the relationship between firm size and investment decisions and is a moderating predictor, so it can be concluded that the  $H_8$  hypothesis is rejected. Companies with large capitalization that are supported by high growth opportunities tend to continue to expand by increasing the value of their investment. However, not all large companies will do this. Many companies with large capitalization do not have high investment decisions because the ability possessed by management or human resources cannot control things and meet the expectations of large companies, so they tend to have less investment value. This result is not in line with the previously built hypothesis that Growth Opportunity is able to moderate company size on investment decisions.

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### CONCLUSION

ROI, DER, IOS and Firm Size simultaneously have a significant and positive effect on investment decisions. ROI and Company Size partially have a positive and significant effect on investment decisions. while DER and IOS have a negative and significant effect on investment decisions. the growth opportunity moderating variable is only able to moderate the Debt to Equity Ratio, while Return on Investment, Investment Opportunity Set and Firm Size have not been able to be moderated by Growth opportunity.

### SUGGESTION

Suggestions for future researchers to be able to use other analytical methods and be able to carry out research development by increasing the number of variables, increasing the population and sample and extending the time period. Suggestions for investors to be able to pay attention to fundamental ratios and perform better technical analysis to increase profits and minimize investment risk. whereas for companies with management as the holder of control over investment decision making, it is also necessary to pay attention to aspects of profitability, debt policy, investment opportunity set and company size. So that the company can always maintain the continuity of its business even though it is increasing the value of its investment.

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