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The Effect of Investment Decisions on Financial Distress with Managerial Ownership as a Moderating Variable in Insurance Companies Listed on the IDX in 2017-2022

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Abstract

This study aims to determine the effect of Investment Decisions on Financial Distress with Managerial Ownership as a moderation variable. The population in this study is insurance companies listed on the Indonesia Stock Exchange in 2017 - 2022 with a sample of 17 companies. Data analysis in this study used a simple linear regression test and moderating regression analysis. Based on the results of a

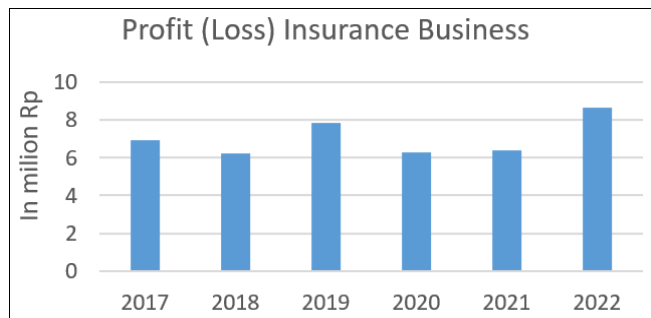
simple linear regression test in this study shows that investment decisions have a significant effect on financial distress. Then based on the results of the moderating regression analysis test shows that managerial ownership moderates (strengthens) the relationship between investment decisions and financial distress.

Keywords: Investment Decisions, Financial Distress, Managerial Ownership

1. Introduction

Insurance companies are companies that provide insurance services, manage risks, reinsure risks, promote and distribute insurance products, or sharia insurance products. The main source of income for insurance companies is premiums from customers. Insurance companies can be liquidated or dissolved when the company faces the risk of bankruptcy. Before experiencing bankruptcy or liquidation, most companies will experience financial problems or financial distress. Financial distress is a financial crisis that occurs within the company. Financial distress can be caused by internal and external factors. Internal factors such as wrong investment of resources, poor management and financial management can cause financial distress. Meanwhile, external factors of financial distress include interest rates, inflation, credit accessibility, GDP, salary levels, and tight monetary policy. Another cause of a company experiencing financial distress is a continuous decline in profits due to mismanagement or the lack of ability of the company's management to manage investments.

According to a study conducted by the Society of Actuaries and the Canadian Institute of Actuaries, insurance company bankruptcies in the United States peaked in the early 1990s, with 50 companies going bankrupt in 1992. Then, based on data from the National Organization of Life and Health Insurance Guaranty Associations (NOLHGA) from 2010 to 2023 there were several insurance companies in America that experienced a reduction in value and bankruptcy. The causes of bankruptcy that occur are, among others, due to underpricing issues, high operational costs, and investment depreciation and other operational problems. In Indonesia itself, in recent times, many insurance companies have experienced bankruptcy and are in the process of liquidation by the OJK. These cases include default cases by PT Asuransi Jiwa Adisarana Wanaartha, PT Asuransi Jiwa Kresna, Asuiransi Jiwa Bersama Bumputera and PT Asuransi Jiwasraya which are still unfinished and still under OJK supervision.



Source: Data from Otoritas Jasa Keuangan (OJK)

Fig 1: Profit (Loss) of General Insurance & Reinsurance Companies - Conventional

A decrease in profit is one indication that the company is experiencing financial distress. Data from OJK shows that from 2017 to 2022 the profits of insurance companies fluctuated, but in 2018 the lowest profit was recorded. The decline occurred because several insurance companies experienced defaults. The Jiwasraya insurance default case is one of the major default cases of insurance companies in Indonesia. The cause, among others, was poor management of customer investment funds by the company's investment managers. The Attorney General's Office mentioned the results of an investigation that 95% of Jiwasraya's customer investment funds were placed in fried stocks and 98% of investment funds in mutual funds, which amounted to Rp 14.9 trillion, were placed and managed in investment manager companies with poor performance. Meanwhile, Jiwasraya's own assets were only Rp 15.7 trillion with the majority of assets being illiquid and of poor quality.

Insurance companies obtain large amounts of cash from premiums paid by customers. However, the problem is that the timing of claims from these premiums is uncertain. Thus, the insurance company must use the cash funds for investment in order to increase its income. Investment decisions are a very important aspect for insurance companies, where investment decisions are related to the allocation of capital from inside and outside the company, as well as the use of capital aimed at the long and short term. Investment decisions refer to fund management policies to allocate funds to various assets to generate profits in the future (Piristina & Khairunnisa, 2019) [7].

Financial distress can be experienced by insurance companies because they do not manage their investments properly so that they do not generate profits from their investments. Declining investment income will have an impact on decreasing profits. If profits decrease continuously, it will cause financial distress. Poor corporate governance is also one of the factors that cause companies to experience financial distress. Corporate governance mechanisms can help companies plan their goals and objectives and how to determine supervision of the company, which can be in the form of managerial ownership. Managerial ownership is the proportion of shares owned by company management who actively participate in decision making. The existence of managerial ownership aims to align the objectives between management and the interests of shareholders. Decisions related to corporate finance, especially investment decisions, will be made more carefully by management when they have managerial ownership in the company. If investment decisions are made

properly, the company will earn profits so that the lower the possibility of financial distress.

Previous research shows that investment decisions affect the occurrence of financial distress (Widarno & Irawan, 2021) [12]. According to the results of research Junivar *et al.* (2022) [4] states that financial distress has a negative influence on investment decisions. In addition, research Al-Dhamari *et al.* (2023) [1] states that the existence of an investment committee will reduce the probability of financial distress.

Based on the description above, the authors are interested in empirically testing how investment decisions affect financial distress by using managerial ownership as a moderating variable in insurance companies listed on the Indonesia Stock Exchange.

2. Methodology

Population and Sample

The population of this study consists of insurance companies listed on the Indonesia Stock Exchange for the 2017-2022 period, namely 18 companies. The research sample was taken from the population by using the purposive sampling method. The criteria used in the study include:

1. Assurance companies that are listed on the Indonesia Stock Exchange.
2. Insurance companies that are listed on the Indonesia Stock Exchange and consecutively publish their financial statements during the 2017-2022 period.

Table 1: List of Sampling Criteria

S. No	Criteria	Total
1	Assurance companies that are listed on the Indonesian Efek Bursa	18
2	Insurance companies that are listed on the Indonesia Stock Exchange and consecutively publish their financial statements during the 2017-2022 period	(1)
Research Sample		17
Amount of Data		102

Source: Processed Data, 2023

Data Type and Source

This study uses secondary data in the form of financial reports and company annual reports obtained from the company's official website or the Indonesia Stock Exchange (IDX) website.

Operational Variables

1. Financial Distress

The financial distress measurement model in this study uses the modified Altman Z Score Model which is used to predict bankruptcy in non-manufacturing companies such as small businesses, mining and the service sector. The modified Altman Z Score formula is as follows:

$$Z = 6,56X1 + 3,26X2 + 6,72X3 + 1,05X4$$

Description:

- X1 = Working Capital / Total Asset
- X2 = Retained Earning / Total Asset
- X3 = Earning Before Interest and Tax (EBIT) / Total Asset
- X4 = Book Value of Equity / Total Debt

Based on the Z Score value obtained, companies are classified as safe, gray area, or distress with the following discriminant zones:

- a. If $Z > 2.60$ then the company is in the "safe" zone
- b. If $1.10 < Z < 2.60$ then the company is in the "gray" zone
- c. If $Z < 1.10$ then the company is in the "distress" zone.

2. Investment Decision

Investment decisions are management decisions to allocate funds in the form of investment in one or more assets in order to generate future profits (Piristina & Khairunnisa, 2019) [7]. Investment decisions in the company are considered to affect future financial conditions such as the risk of the company experiencing financial difficulties or financial distress. In this study, investment decisions are measured using the Investment Yield Ratio formula. This ratio assesses the return on investment made and provides a general indication of the quality of each type of investment (Safitri *et al.*, 2020) [9]. The Investment Yield Ratio formula is as follows:

$$IYR = \frac{\text{Investment Income}}{\text{Average Investment}}$$

Description:

$$\text{Average Investment} = \frac{\text{Year X investment income} + \text{Year X-1 investment income}}{2}$$

3. Managerial Ownership

Managerial ownership refers to the number of shares owned by directors, commissioners, and employees of a company under certain conditions (Mevania *et al.*, 2022) [6]. Managerial ownership is considered to strengthen the relationship between investment decisions and financial distress. In this study, managerial ownership is measured using the following formula:

$$\text{Managerial Ownership} = \frac{\text{Shares owned by management}}{\text{Number of outstanding shares}} \times 100\%$$

Data Analysis Technique

Descriptive Statistical Analysis

Descriptive statistics are used to present data in the form of mean, minimum, maximum, variance, standard deviation, range, total, kurtosis and skewness (difference in distribution) (Ghozali, 2018) [3]. The purpose of conducting descriptive statistical tests is to facilitate understanding of the research variables.

Classical Assumption Testing

Classical assumption testing is carried out to ensure that the resulting regression equation has a significant and representative relationship and accurate estimation.

Normality Test

The normality test is used to determine whether the confounding or residual variables in the regression model have a normal distribution (Ghozali, 2018) [3]. Normal or near-normal data distribution is a good regression characteristic. In this study, the Kolmogorov-Smirnov test was used as a statistical test to test data normality. The significance level used is 0.05. If the significance level of the K-S test is greater than 0.05 then H0 can be accepted,

and vice versa if the significance level value is less than 0.05 H0 is rejected.

Autocorrelation Test

The autocorrelation test is used to determine whether a linear regression model has a relationship between confounding errors in period t and confounding errors in the previous period or period t-1 (Ghozali, 2018) [3]. A regression model that is greater than autocorrelation is a good regression model. In the run test, if the significance level > 0.05 indicates the absence of autocorrelation, while if the significance level < 0.05 indicates autocorrelation.

Heteroscedasticity Test

The heteroscedasticity test is used to determine whether the observed residuals of the regression model are different or the same (Ghozali, 2018) [3]. In this study, the Glejser test was used as a heteroscedasticity test. The glejser test is used to determine whether there are signs of heteroscedasticity in a regression model by regressing the absolute value of the residual on the independent variable.

Simple Linear Regression Test

Simple linear regression analysis is used to determine how the interaction between the independent variable and the dependent variable. Ghozali (2018) [3] suggests that simple linear regression is based on testing the effect of an independent variable (independent) on one dependent variable (dependent). The simple linear regression model equation used in this study is formulated as follows:

$$FD = \alpha + \beta_1 \cdot IYR + \epsilon$$

Moderating Regression Analysis (MRA)

The moderation regression analysis test is used to control the influence of moderating variables using analytical methods that maintain the integrity of the research sample (Ghozali, 2018) [3]. This study uses MRA to test moderating variables that influence investment decisions on financial distress, namely managerial ownership. The MRA model used in this study is formulated as follows:

$$FD = \alpha + \beta_1 \cdot IYR + \beta_2 \cdot (IYR \cdot MO) + \epsilon$$

Description:

FD: Financial Distress

α : Constant

IYR: Investment Yield Ratio

MO: Managerial Ownership

ϵ : Error term

Hypotesis Testing

1. Determination Coefficient Test

The coefficient of determination shows how much contribution or combination of independent variables to the dependent variable. The coefficient of determination can be measured with values of 0 and 1. Ghozali (2018) [3] suggests that a value close to one indicates that the independent variable can predict the dependent variable as a whole. If R2 is low, the ability of the independent variable to explain the dependent variable is low and vice versa (Ghozali, 2018) [3].

2. Partial Significance Test of Regression Coefficient

The t test is used to determine whether the independent variable can affect the dependent variable (Ghozali, 2018) [3]. The significance level used is 0.05 or 5%. If the

significance value < 0.05, the independent variable has a significant effect on the dependent variable. However, if the significance result > 0.05 then the independent variable has no significant effect on the dependent variable.

3. Result and Discussion

3.1 Description of Research Objects

The research samples used in this study are insurance companies listed on the Indonesia Stock Exchange and publish consecutive financial reports from 2017 to 2022. Based on the sampling criteria above, there are 17 insurance companies listed on the Indonesia Stock Exchange, with 6 years of observation and a total of 102 data used as research samples.

Descriptive Statistics

Descriptive statistics are used to provide an overview or describe data related to research variables. The dependent variables and independent variables in this study are financial distress (FD) and investment decisions (IYR), as well as managerial ownership (MO) as a moderating variable. The results of descriptive statistics in this study are presented in the following table:

Table 2: Descriptive Statistical Results

<i>Descriptive Statistics</i>					
	N	Minimum	Maximum	Mean	Std. Deviation
Investment Decision	102	.18	8.60	1.1100	.84591
Managerial Ownership	102	.00	.51	.0376	.11545
Financial Distress	102	-1.61	5.55	2.8985	1.18133
<i>Valid N (listwise)</i>	102				

Source: Processed by Researchers with SPSS 27, 2023

Based on the results of the descriptive statistical test above, it shows that the value of investment decisions as an independent variable in this study proxied by the investment yield ratio (IYR) in 17 companies listed on the IDX has a minimum value of 0.18, while the maximum value is 8.60. This shows that, the value of investment yield ratio (IYR) in companies that become research samples ranges from 0.18 to 8.60 with a mean value of 1.1100 and a standard deviation of 0.84591. The company that has the lowest investment decision level is PT Maximus Graha Persada Tbk in 2019 with a value of 0.18, while the highest investment decision value also occurs at PT Maximus Graha Persada in 2022 which has an IYR value of 8.60.

Managerial ownership as a moderating variable has a minimum value of 0.00 and a maximum value of 0.51. This shows that the value of managerial ownership (MO) in the research sample ranges from 0.00 to 0.51 with a mean of 0.0376 and a standard deviation of 0.11545. The company that has the lowest managerial ownership is found in the majority of insurance companies in the sample, which is 0.00, while the largest managerial ownership level is PT Asuransi Ramayana Tbk in 2021 and 2022 with a MO value of 0.51.

Financial distress as the dependent variable has a minimum value of -1.61 and a maximum value of 5.55. Based on this data, the value of financial distress (FD) in the research sample ranges from -1.61 to 5.55 with a mean value of 2.8985 and a standard deviation of 1.18133. The company

with the lowest financial distress was PT Asuransi Bina Dana Arta Tbk in 2021 with an FD value of 5.55, while the highest level of financial distress was PT Asuransi Harta Aman Pratama Tbk in 2019 with an FD value of -1.61.

Classical Assumption Test Results

Normality Test

The normality test is carried out to determine whether the confounding or residual variables in the regression model are normally distributed or not. This study uses the One-Sample Kolmogorov-Smirnov statistical test to test normality. If the Sig value. > 0.05, then the data is normally distributed. The normality test was carried out twice, namely testing the simple linear regression equation model and the moderating regression analysis equation model. The results of the normality test can be seen in Table 3 as follows:

Table 3: One-Sample Kolmogorov-Smirnov Results

One-Sample Kolmogorov-Smirnov Test	
Model 1	
Asymp. Sig. (2-tailed)	.200
Model 2	
Asymp. Sig. (2-tailed)	.096

Source: Processed by Researchers with SPSS 27, 2023

Based on the test results in Table 3 which shows that the value of the distribution of research data is 0.200 or more than 0.05 in the simple linear regression model. Thus, it can be concluded that each research variable included in this regression model has a normal distribution. Likewise, the second regression model shows that the value of the distribution of research data is 0.096 or more than 0.05. Thus, it can be concluded that each research variable entered into this regression model has a normal distribution.

Autocorrelation Test

The autocorrelation test is conducted to determine whether in the regression model there is a relationship between confounding errors in period t and the previous period (t-1). The Durbin Watson test (DW Test) was used to test for autocorrelation at a significance level of 5% or 0.05 in this study. The test was carried out twice, namely in the simple linear regression model and in the moderating regression analysis equation model. The results of the autocorrelation test can be seen in Table 4 as follows:

Table 4: Autocorrelation Test Results

Model 1		
Model	R	Durbin-Watson
1	.205	.655
Model 2		
Model	R	Durbin-Watson
1	.389	.736

Source: Processed by Researchers with SPSS 27, 2023

Based on the test results in Table 4, the autocorrelation test results are obtained with a DW value of 0.655. So it can be written that the Durbin-Watson value is $-2 < 0.655 < 2$. So the Durbin-Watson test results in the regression model in this study indicate that there is no autocorrelation problem. The second test was conducted to determine whether there was autocorrelation in the moderating regression analysis equation model, the results of the autocorrelation test in this study had a DW value of 0.736. Based on this, it can be

written that the Durbin-Watson value is $-2 < 0.736 < 2$. Thus, the Durbin-Watson test results in the regression model of this study indicate that there is no autocorrelation problem.

Heteroscedasticity Test

The heteroscedasticity test is carried out to determine whether or not there is a similarity in the regression model in terms of differences in residual variance in observations. The Glejser test was used to identify symptoms of heteroscedasticity in this study. The test was carried out twice, namely in the simple linear regression equation model and the moderating regression analysis equation model. The results of the heteroscedasticity test are shown in Table 5 below:

Table 5: Heteroscedasticity Test Results

Coefficients						
Model 1						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.990	.117		8.453	.000
	IYR	-.077	.084	-.091	-.911	.365
Model 2						
1	(Constant)	.926	.118		7.848	.000
	IYR	-.064	.084	-.077	-.772	.442
	XM	-.764	.610	-.125	-1.253	.213

Source: Processed by Researchers with SPSS 27, 2023

Based on the results of the heteroscedasticity test on a simple linear regression model, the IYR variable shows a significance value of 0.365, which means that the value is greater than 0.05, and it can be concluded that there are no symptoms of heteroscedasticity. The second test was conducted on the moderating regression analysis equation model. The significance value of the IYR variable shows a value of 0.442, which means that the value is greater than 0.05, so it can be concluded that there are no symptoms of heteroscedasticity. Similarly, there are no symptoms of heteroscedasticity in the XM variable or moderating variable with a significance value of 0.213 which means greater than 0.05.

Simple Linear Regression Test Results

Simple linear regression test is conducted to determine the effect of the value of the independent variable on the dependent variable. In this study, the analysis was carried out to determine the effect of the independent variable, namely Investment Decision (IYR) on Financial Distress (FD) as the dependent variable.

Table 6: Simple Linear Regression Test Results

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	3.216	.190		16.891	.000
	IYR	-.286	.137	-.205	-2.094	.039

Source: Processed by Researchers with SPSS 27, 2023

The Table 6 shows the result of a simple linear regression test which produces the following regression equation model:

$$FD = 3,216 - 0,286 IYR + \epsilon$$

Based on the test results above, it shows the results of the simple linear regression test calculation, where the beta coefficient has a coefficient value (negative direction) of -0.286. This shows that if there is an increase in the Investment Decision, it will affect the decrease in the value of Financial Distress by -0.286. Thus, when the Investment Decision value increases, the Financial Distress value will decrease with other variables considered constant.

Moderating Regression Analysis Test Results

The Moderating Regression Analysis (MRA) test is conducted to determine whether the moderating variable, namely managerial ownership, strengthens or weakens the relationship between the independent variable, namely investment decisions on the dependent variable, namely financial distress. The results of the Moderating Regression Analysis (MRA) test are shown in Table 7 below:

Table 7: Moderating Regression Analysis Test Results

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	3.361	.185		18.205	.000
	IYR	-.302	.129	.216	-2.337	.021
	XM	-3.410	.955	.331	-3.572	.001

Source: Processed by Researchers with SPSS 27, 2023

The table above is the result of the regression test which produces the following regression equation model:

$$FD = 3,361 - 0,302 IYR - 3,410 (IYR*MO) + \epsilon$$

Based on the table of moderating regression analysis test results above and the resulting regression equation model, it can be concluded that:

1. A constant of 3.361 means that if the Investment Decision variable (IYR) and the moderating variable Managerial Ownership (MO) are considered constant (worth zero), then the Financial Distress of insurance companies will increase by 3.361.
2. The value of Investment Decision proxied by Investment Yield Ratio (IYR) of -0.302 indicates that if there is an increase in Investment Decision, it will affect the decrease in Financial Distress value by -0.302. So that when the value of Investment Decision increases, the value of Financial Distress will decrease with other variables considered to have a constant value.
3. The value of XM as a moderating variable of -3.410 indicates that if there is an increase in Managerial Ownership as a moderating variable for the Investment Decision, it will affect the decrease in the value of Financial Distress by -3.410. So that when the value of Managerial Ownership moderates the Investment

Decision increases, the value of Financial Distress will decrease with other variables considered to have a constant value.

Hypothesis Test Results

Test Results of the Coefficient of Determination R (Square)

The coefficient of determination test is carried out to determine how much contribution or combination of independent variables to the dependent variable. The coefficient of determination or R Square value is in the range of 0 to 1. If the R Square value approaches 0, it indicates that the dependent variable is limited to explain the independent variable and vice versa if the value approaches 1, then the ability of the independent variable to explain the dependent variable is getting bigger. The test was carried out 2 times, namely in the simple linear regression equation model and the moderating regression analysis equation model. The results of the coefficient of determination test are as follows:

Table 7: Test Results of the Coefficient of Determination R (Square)

Model Summary				
Model 1				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.205	.042	.032	1.16202
Model 2				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.389	.151	.134	1.09917

Source: Processed by Researchers with SPSS 27, 2023

Based on the results of the coefficient of determination test above, the Adjusted R2 value is 0.032 in the simple linear regression model. This means that the independent variable in this study, namely investment decisions, only has an ability of 3.2% in explaining the dependent variable, namely financial distress, and the remaining 96.8% is explained by other variables not examined in this study. The second test was conducted to test the coefficient of determination in the moderating regression analysis equation model, which showed the coefficient of determination with an Adjusted R2 value of 0.134. This means that the independent variable in this study, namely investment decisions moderated by managerial ownership, only has an ability of 13.4% in explaining the dependent variable, namely financial distress, while the remaining 86.6% is explained by other variables not examined in this study.

Partial Regression Coefficient Significance Test Results

The t test is used to determine how much influence the independent variable has on the independent variable. If the significance value is <0.05, the independent variable has a significant effect on the dependent variable and vice versa. The test was conducted twice, namely in the simple linear regression equation model and the moderating regression analysis equation model. The results of the partial regression coefficient significance test are as follows:

Table 8: Partial Test Results Model 1 equation

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	3.216	.190		16.891	.000
	IYR	-.286	.137	-.205	-2.094	.039

Source: Processed by Researchers with SPSS 27, 2023

Based on the table of partial test results on the simple linear regression equation model, the t value of the independent variable Investment Decision (IYR) is obtained with a significance value of 0.039 (0.039 <0.05) and a coefficient value of -0.286 (negative direction). The significance value is less than or <0.05. With a value of less than 5% or <0.05, it can be concluded that the Investment Decision variable proxied by the Investment Yield Ratio has a significant negative effect on Financial Distress. So it can be concluded that H1 is supported.

Table 9: Partial Test Results Model 2 equation

Coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	3.361	.185		18.205	.000
	IYR	-.302	.129	.216	-2.337	.021
	XM	-3.410	.955	.331	-3.572	.001

Source: Processed by Researchers with SPSS 27, 2023

Based on the table of partial test results on the moderating regression analysis equation model, the significance value of the independent variable Investment Decision (IYR) is 0.021 (0.021 <0.05) and the coefficient value is -.302 (negative direction). The significance value is less than 0.05. Thus, it can be concluded that the Investment Decision variable proxied by the Investment Yield Ratio has a significant negative effect on Financial Distress. Furthermore, the significance value of the moderation variable (XM) is 0.001 (0.001 <0.05) and the coefficient value is -3.410 (negative direction). The significance value is less than 0.05. So it can be concluded that the moderating variable Managerial Ownership (XM) has a significant negative effect on Financial Distress. Based on the t test results of the Investment Decision variable and the moderation variable, it can be concluded that the Managerial Ownership variable moderates the relationship between Investment Decision and Financial Distress. In other words, it can be said that Managerial Ownership is a moderating variable. So it can be concluded that H2 is supported.

3.2 Discussion

3.2.1 The Effect of Investment Decisions on Financial Distress

The results of testing the first hypothesis based on statistical analysis show that the coefficient value is -0.286 (negative direction), and the t statistical test shows a value of -2.094 and a significance value of 0.039 is smaller than the

specified error tolerance ($0.039 < 0.05$). Thus, it is concluded that hypothesis 1 is supported, namely investment decisions have a significant negative effect on financial distress.

The amount of premium value that is very low compared to the insurance policy coverage value makes the insurance company must obtain investment returns greater than the net premium obtained. So that insurance companies that receive premium funds from customers must manage these funds and allocate them in the form of investments that are able to generate profits. The profit obtained from the investment results made in addition to being income and profit for the company and improving the company's financial performance, the profit will be used to pay the insurance company's obligations to its customers. The problem of uncertain customer claims requires insurance companies to place their funds in short-term and liquid investments. If the company experiences problems when investing, the company will find it difficult to pay the insured. Vice versa, the company will be able to fulfil its obligations, namely paying corporate debt, operational costs, and customer claims that can be submitted at any time.

The higher the investment return, the higher the profit earned by the company so that the insurance company has the ability to pay its obligations and the possibility of financial distress will be low. Conversely, if the company's investment returns are low, the lower the profit earned by the company so that the insurance company will have difficulty paying its obligations, increasing the possibility of the company experiencing financial distress. Therefore, company management needs to make the right investment decisions and be careful in placing funds to be invested so that the funds spent can get optimal results. For example, PT Asuransi Bintang in 2020 has an investment yield ratio value of 1.45 and a financial distress value of 3.10 or the company is in a safe zone, but in the following years, namely 2021 and 2022, the company's financial distress value is 1.99 and 1.91, which is in the grey zone with an investment yield ratio value of 0.92 and 0.69.

The results of this study are in line with the research of Junivar *et al.* (2022) ^[4], which found that investment decisions have a negative relationship with financial distress. Al-Slehat (2020) ^[2] research also states that investment decisions affect the rate of return on assets, stock prices, and profits. In addition, based on the results of research by Al-Dhamari *et al.* (2023) ^[1], that the existence of an investment committee that has a large number, often holds regular meetings, and independent members of the board of directors will reduce the probability of financial distress. This means that investment decisions made by company management will have an impact on the occurrence of financial distress. Meanwhile, the results of this study are inconsistent with the results of research by Suranta *et al.* (2023) ^[11] and Pristiana & Istiono (2020) ^[8] whose research shows that investment decisions have no effect on the occurrence of financial distress.

3.2.2 Managerial Ownership Moderates the Effect of Investment Decisions on Financial Distress

The results of testing the second hypothesis based on statistical analysis show that the coefficient value is -3.410 (negative direction), and the t statistical test shows a value of -3.572 and a significance value of 0.001 is smaller than the specified error tolerance ($0.001 < 0.05$). Thus, it is concluded that hypothesis 2 is supported, namely managerial ownership moderates the effect of investment

decisions on financial distress.

The existence of managerial ownership will make management more responsible for managing the company. This is because they not only act as managers but also as owners who have the same risks as shareholders. In addition, the existence of a bonus plan or compensation that will be received by management when the company's profits are high will encourage management to make careful investment decisions and place these investments in short-term and liquid investments in order to get high and optimal investment returns so that the company's profits are also high. The profit will be used to pay claims from customer premiums that are uncertain in time and pay other company obligations. The higher the managerial ownership owned by the company's management, the higher the investment returns from the investment decisions made. Then, the greater the investment returns obtained, the greater the profit earned by the company which can later be used to pay the obligations of the insurance company in the future. Thus, the insurance company will avoid financial distress.

The data obtained from this study prove this, one of which is at PT Asuransi Jiwa Syariah Jasa Mitra Abadi (JMAS), where in 2021 the company has a managerial ownership level of 0.04 and an investment yield ratio value of 1.45, namely the investment return obtained is IDR 323 million with a financial distress value of 2.88, which means that the company is in a safe zone or not experiencing financial distress. However, in 2022 the level of managerial ownership of the company decreased to 0.01 followed by an investment yield ratio value that decreased to 0.72, namely the investment return obtained was only Rp 183 million with a financial distress value of 2.56, which means that the company is in the grey zone or the company's financial condition is vulnerable to financial distress.

The results of this study are in line with the research of idhiadnyana & Dwi Ratnadi (2019) ^[13], Maryam & Yuyetta (2019) ^[5], and Sarker & Hossain (2023) ^[10] that managerial ownership has a negative effect on financial distress. Pristiana & Istiono (2020) ^[8] research also states that good corporate governance has a significant effect in moderating investment decisions on financial distress. This means that managerial ownership can reduce the likelihood of financial distress when the level of investment decisions is high and managerial ownership can increase the likelihood of financial distress when the level of investment decisions is low.

4. Conclusion

This study examines the effect of investment decisions as an independent variable and managerial ownership as a moderating variable on financial distress in insurance companies listed on the Indonesia Stock Exchange for the period 2017-2022. The conclusions obtained based on the results of the analysis include that investment decisions have a significant negative effect on financial distress. The possibility of the company experiencing financial distress will be low if the investment returns are high. When the investment made is profitable, the profit can become the company's income and can be used to pay customer claims, pay corporate debt, company operating costs, and so on so that the company will not experience financial distress. Then, managerial ownership is able to moderate the relationship between investment decisions on financial distress. The higher the managerial ownership, the

investment decisions made by company management will also be high in the sense that management will be more careful in placing investments in profitable and liquid investments. So that the level of possibility of financial distress is low.

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