THE EFFECT OF FOREIGN LIABILITY, INTEREST COVERAGE RATIO,GROWTH OPPORTUNITY AND FIRM SIZE, ON HEDGING DECISIONSIN BANKING COMPANIES WITH CAPITAL STRUCTUREAS A MODERATING VARIABLE

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Abstract. This study aims to determine the effect of foreign liability, interest coverage ratio, growth opportunity and firm size on firm value in Banking Companies listed on the Indonesia Stock Exchange. In addition, this study also aims to see whether capital structure can be used as a moderating variable in this study.This study uses a type of causal associative research that aims to test the hypothesis. Based on the purposive sampling technique, it can be seen that the number of samples in this study were 38 companies with a total of 190 observation data. This research was conducted on the Indonesia Stock Exchange using secondary data. While the data analysis technique used in this research is Logistic Regression Analysis and Interaction Test which is carried out with the help of SPSS software.The results obtained in this study concluded that the interest coverage ratio has a negative and significant effect on hedging decisions. Firm size is proven to have a positive and significant effect on hedging decisions, while foreign liability and growth opportunity are proven to have no effect on hedging decisions in Banking Companies listed on the Indonesia Stock Exchange in 2018-2022. In addition, other results in this study also concluded that capital structure is able to moderate the effect of interest coverage ratio and firm size on hedging decisions. Meanwhile, on foreign liability and growth opportunity on hedging decisions, capital structure is unable to provide a moderating effect.

Keywords: foreign liability, interest coverage ratio, growth opportunity, firm size, firm value, capital structure.

Introduction

Companies are faced with increasingly fierce competition due to the development of international trade. The occurrence of international trade is driven by many factors, including to meet the need for goods or services, to gain profits and increase income within countries, as well as differences in knowledge or capabilities in technology to process existing resources (Sun et al., 2023). So to remain competitive, companies need to strengthen partnerships with foreign companies. However, this activity carries risks such as the risk of exchange rate fluctuations, commodity prices and international assets which can cause losses (Sianggaran, 2022). Therefore, companies need to implement appropriate risk management to overcome these risks.

In an effort to minimize risks that can occur in a company, risk management becomes very important (Tessema and Rubbianiy, 2023). There are various types of risk management that can be carried out by a company, one of which is hedging (Geyer-Klingeberg, et al., 2018). In terms of financial risk, companies can hedge to protect the company from systematic fluctuations such as interest rates, exchange rates and commodity prices which can cause losses, as well as reducing the possibility of bankruptcy or reducing bankruptcy costs by using hedging claims. This is very important, especially for companies involved in international trade transactions (Maksum et al, 2021,

Rahman,et al., 2022, Nyegaard, 2023; Yang, et al., 2023; Ma and Ji, 2023), so that implementing appropriate hedging policies can help companies to minimize the risks associated with fluctuations. very unstable exchange rates and commodity prices on the global market.
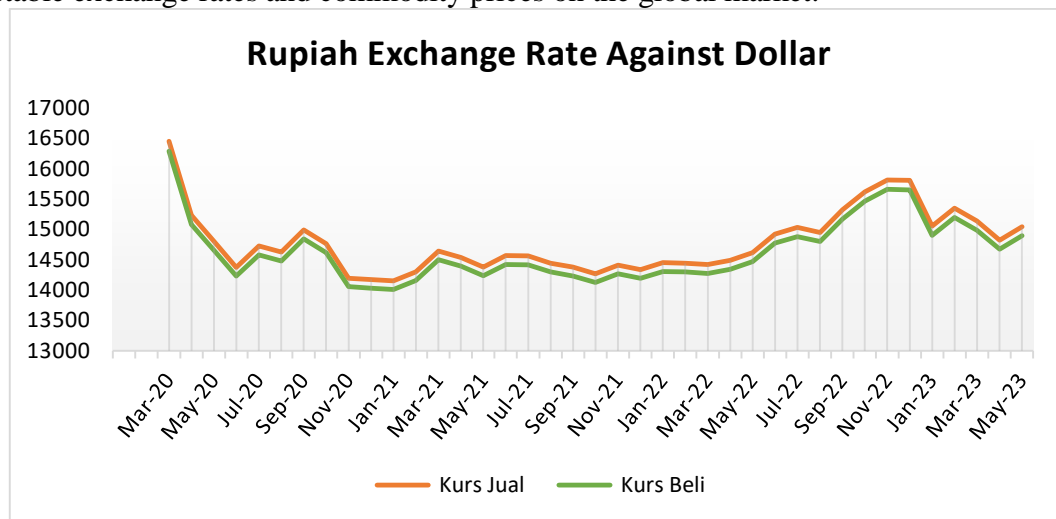
Source: Bank Indonesia
Figure 1. Rupiah Exchange Rate Fluctuation Phenomenon

International trade carried out by companies contains risks due to fluctuations in currency exchange rates (Ji and Wei, 2023). So companies need to implement hedging to protect the company from the risk of loss due to the continuously fluctuating rupiah exchange rate (Satria, et al., 2022). Especially banking sector companies which are always involved in foreign exchange transactions. By hedging, banking companies can minimize losses due to unwanted fluctuations in exchange rates or interest rates. For this reason, this research needs to be carried out to find out what factors can influence hedging decisions in banking companies listed on the Indonesia Stock Exchange.

One of the variables that is thought to influence hedging decisions is foreign liability. Foreign liabilities can be defined as a company's financial obligations in foreign currency, such as foreign debt or purchase contracts in foreign currency. So the company will face the risk of changes in currency exchange rates which can affect the amount of debt that must be paid or the predetermined cost of purchasing goods. Meanwhile, hedging decisions can be interpreted as actions taken by companies to protect themselves from currency exchange rate risk by carrying out transactions on the financial market, such as buying forward contracts or options.

High foreign liability indicates that the company has the potential to be exposed to foreign exchange exposure due to fluctuations in the exchange rate of the domestic currency against foreign currencies. So the higher the foreign liability ratio, the greater the company will be affected by foreign exchange exposure and will cause increased cash flow volatility in the company due to movements in foreign exchange rates, so that the higher the company will hedge derivatives in the foreign exchange market. Companies tend to consider hedging more to protect themselves from this risk. Because if the company does not hedge, the company will face unprotected exchange rate risks, which can have a negative impact on the company's financial performance.

The results of research conducted by Nabiilah (2021) succeeded in finding empirical evidence regarding the significant relationship between foreign liability and hedging decisions. Likewise, research conducted by Kussulisty and Mahfudz (2016) found that foreign liability was proven to have a positive and significant influence on hedging decisions.

The next variable that is thought to be able to influence hedging decisions is the Interest Coverage Ratio (ICR). Interest Coverage Ratio is a financial ratio that measures a company's ability to pay interest on its debt using operating income. This ratio is usually used by investors and creditors to evaluate a company's financial performance and its credit risk.

A low interest coverage ratio value can increase the company's financial risk. Because the value of a company's low interest coverage ratio reflects that the company is having difficulty paying interest on its debt. So hedging decisions can help companies protect themselves from currency exchange rate risks and minimize the negative impacts that can occur on company finances. On the other hand, companies that have a high interest coverage ratio will feel safer without hedging because the company has a good ability to pay interest on its debt. So the company will feel safer without hedging, because the company's financial risk tends to be smaller.

The results of research conducted by Meridelima and Isbanah (2021) succeeded in finding empirical evidence that the interest coverage ratio has a negative and significant effect on hedging decisions. Likewise, research conducted by Moningka (2022) found that the interest coverage ratio was proven to have a negative and significant influence on hedging decisions.

The third variable that is thought to be able to influence hedging decisions is growth opportunity. Growth opportunity is defined as a measure of a company's opportunities to develop its business in the future. In general, companies that grow quickly obtain positive results in the sense of strengthening their position in an era of competition, enjoying significantly increased sales and accompanied by an increase in market share. So that if the company's growth increases, there will also be an increase in the income earned.

Companies that have rapid growth often have to increase their fixed assets (Ratnaningsih, et al., 2021). A high growth opportunity indicates an advanced company with a tendency to need funds in large enough amounts to finance this growth in the future. The higher the growth rate of a company, the more necessary it is to carry out hedging activities within the company to protect risks that could cause losses to the company.

The results of previous research conducted by Yusbardini (2022) found that growth opportunity has a positive and significant influence on company hedging decisions. Likewise, the results of research conducted by Diana and Suriyono (2021) also found that growth opportunity had a positive and significant effect on hedging decisions.

The last variable that is thought to influence hedging decisions is firm size. Firm size is the size of a company which can be seen from the sales value, equity value and total value of assets owned. Total assets were chosen because they better describe the size of the company than revenue (Estyari, et al., 2021). Company size is used as an indicator to measure how big a company has grown. Firm size can influence decision making within the company, and also influence the ease of obtaining funding sources from internal or external sources.

The larger the size of a company, the more likely the company will use hedging activities to protect existing assets. This is because the larger the size of a company, the greater the risks faced by the company. So companies with a large size will definitely carry out better risk management actions within their company compared to small companies.

The results of previous research conducted by Estyari, et al., (2021) explain that firm size has a positive and significant influence on hedging decisions. Likewise, the results of research conducted by Afrida (2021) also found that firm size has a positive and significant effect on hedging decisions made by companies.

The phenomenon regarding Bank Woori Saudara Indonesia 1906 Tbk (Stock Code: SDRA) also shows that the company in the 2021 and 2022 fiscal years has carried out many transactions in foreign currency. However, the company did not implement a hedging policy at all for that period.

For novelty in this research, the researcher used additional moderating variables. A moderating variable is a variable that influences or modifies the relationship between two other variables in a causal relationship. The moderating variable used in this research is capital structure. Capital structure is related to the funding sources used by a company to carry out its operational activities (Ginglinger and Moreau, 2023), whether from external sources such as debt or shares from investors, or internal sources such as retained earnings obtained from the company's operational profits. Or in other words, capital structure refers to the proportion of capital obtained by a company through various sources, such as debt and equity.

Companies with a capital structure consisting of higher debt have more access to derivative markets or other hedging instruments (Vuong, et al., 2023), so they tend to be more active in making hedging decisions. On the other hand, a capital structure dominated by equity can weaken the relationship between independent variables (foreign liability, interest coverage ratio, growth opportunity, and firm size) and hedging decisions. Because companies with a lower capital structure have limitations in accessing certain resources and hedging tools, so they tend to be less active in making hedging decisions.

Based on the background explanation explained above, the phenomena and results of a review of previous research, the research is entitled "The Influence of Foreign Liability, Interest Coverage Ratio, Growth Opportunity and Firm Size on Hedging Decisions in Banking Companies with Capital Structure as a Moderating Variable " becomes interesting to do.

Literature Review
2.1 *Shareholders Value Maximization Theory*

The theory of shareholder value maximization is the basis for the rationality of hedging policies (Bae, et al., 2022). This theoretical concept explains that a rational hedging policy will be useful for maximizing company shareholder value by overcoming the problems of financial distress, underinvestment and asset substitution (Satria, et al., 2022). Based on the view of shareholder value maximization theory, several factors that encourage companies to implement hedging policies are:

1. The first reason that encourages companies to implement a hedging policy is to overcome the problem of financial distress which can cause legal costs, bankruptcy administration costs, supervision costs and contract costs which can harm the company's market value. By reducing cash flow fluctuations, hedging policies can reduce the possibility of financial distress, which in this study is measured by the financial distress and leverage ratio. Companies with high levels of financial distress and leverage are more likely to implement hedging policies.

2. The second reason that encourages companies to implement hedging policies is to reduce the underinvestment problem which occurs when companies do not utilize investment opportunities optimally because external financing costs are expensive. Underinvestment costs reflect the positive net present value of a project when internal financing is available. Companies that implement a hedging policy can be protected from cash flow fluctuations, so they can be confident that internal cash flow will be sufficient to fund the investment. Companies with growth opportunities and larger sizes will face greater underinvestment costs, so they will be more motivated to implement hedging policies.

3. The third reason companies have motivation to hedge is because of the assets substitution problem factor which is related to agency problems, which occur because of differences in interests between creditors and shareholders. This problem arises when the company's debt reaches a significant amount compared to the shares owned, so that shareholders will be tempted to substitute assets. This causes shareholders to tend to choose riskier projects to increase profits, while creditors consider shareholders to be acting opportunistically and charge them high interest rates. Therefore, companies that hedge can reduce this risk by ensuring that the cash flow generated is sufficient to pay debts and prevent shareholders from making asset substitutions that are detrimental to creditors.

The shareholder value maximization theory explains that hedging policies are considered as risk management tools that can help companies minimize business risks that can harm shareholder value. By reducing uncertainty and risk in company operations, hedging policies can help companies to generate greater profits for shareholders.

2.2 *Portofolio Theory*

Portfolio Theory is a concept introduced by Harry Markowitz in 1952 and is also known as Markowitz Theory. This theory explains how to avoid the risk of potential losses by creating an investment portfolio (Mittal, et al., 2022). The aim is to protect investment value and reduce risk to a minimum level (Lai, et al., 2022). To minimize risk, companies must diversify investments and invest funds not only in one aspect, but in many aspects so that when one aspect experiences a

decrease in value, there is a possibility that other aspects experience an increase in value so that they can reduce or even avoid losses.

The essence of portfolio theory is to choose the right diversification to provide expectations that match the company's desires and reduce risk to a minimum. This can be related to the way the company hedges to minimize risk, because the company must be able to carry out risk management by hedging investment decisions not only on other aspects such as operations and other investments, but also by implementing a hedging policy to reduce risks that have the potential to harm the company. By diversifying their investment portfolio and implementing appropriate hedging strategies, companies can increase their chances of getting better returns from investments and minimize the risk of losses (Shakatreh, et al., 2023). Therefore, companies that frequently carry out international transactions and have debts in foreign currencies and floating interest rates are expected to be able to understand and apply these two concepts effectively in managing investment risk.

2.3 *Foreign Liability*

Foreign liability is company debt where the debt is in the form of debt in foreign currency (Kim, et al., 2020). Or in other words, foreign liability can be interpreted as the amount of foreign currency debt a company has to fund its business, or foreign debt arising from international trade transactions. Foreign currency debt will be very vulnerable to exchange rate depreciation resulting in the debt that must be paid being larger than it should be (Atkin and Harris, 2023). This encourages companies to hedge to anticipate future risks.

Foreign liabilities are one source of foreign exchange exposure. The higher the foreign exchange exposure, the greater the company's need for hedging. This is because the company's debt is in another country's currency, so changes in the other country's currency will have an impact on changes in the nominal value of the company's debt if converted into rupiah. For this reason, a hedging policy is needed to prevent foreign debt from increasing due to an increase in the value of the foreign currency exchange rate (Larasari and Wijaya, 2022). Because the higher the foreign liability value a company has, the higher the need to carry out hedging activities. The measuring instrument used in this research to measure foreign liability is by dividing the amount of debt in foreign currency by the company's total debt.

METHODS

The research carried out is a type of causal associative research, namely a type of research that aims to identify cause-and-effect relationships between various variables. This research uses a quantitative approach based on a deductive-inductive approach. The quantitative approach begins with a theoretical framework, expert ideas, or the author's understanding based on experience, then used to formulate problems and solutions which are tested in the form of empirical data in the field. The aim of this research is to obtain empirical data support as justification (verification) or assessment of the problems raised.

In this research there are independent variables (variables that influence the dependent variable), dependent variables (variables that are influenced by the independent variable) and moderating variables. This research uses independent variables, namely foreign liability (X1), interest coverage ratio (X2), growth opportunity (X3), and firm size (X4). Hedging decisions are used as the dependent variable (Y) and capital structure (Z) is used as a moderating variable.

Population is a generalization area consisting of: objects/subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions drawn. Meanwhile, the sample is part of the number and characteristics of the population (Sugiyono, 2018). The population in this study consists of Banking Sector Companies listed on the Indonesia Stock Exchange, totaling 47 companies (Appendix 2).

Sample selection in this research was carried out using the purposive sampling method. Purposive sampling is a sample determination technique using certain considerations (Sugiyono, 2018). Samples were selected using the following criteria:

1. Is a Banking Sector Company whose shares are listed on the IDX in 2018-2022.

2. Publish audited financial reports during the 2018-2022 research period.

3. The company's published audited financial reports have complete data regarding the variables used in this research.

Based on these criteria, it can be seen that the number of samples in this research is 38 companies.

The analytical tool used in this research is logistic regression analysis with the help of SPSS Ver. 27. The reason for using a logistic regression analysis tool (logistic regression) is because the dependent variable is dummy (i.e. using hedging decisions or not using hedging decisions). The normal distribution assumption cannot be met because the independent variable is a mixture of continuous (metric) and categorical (non-metric) variables. In this case, it can be analyzed using logistic regression because there is no need to assume normality of data on the independent variables.

This analysis wants to test whether the occurrence of the dependent variable can be predicted by the independent variable. Logistic regression is a special form where the dependent variable is divided into two parts or groups (binary) although the formula can have more than two groups. Logistic regression is a regression that is used to find the regression equation if the dependent variable is a variable in the form of a scale.

Based on the problem formulation and research model described previously, the research model formed is as follows:

$$Ln\frac{Y}{1-Y} = a + b1X1 + b2X2 + b3X3 + b4X4 + e$$

Notes:

Y   = *Hedging Decision*
X_1 = *Foreign Liability*
X_2 = *Interest Coverage Ratio*
X_3 = *Growth Opportunity*
X_4 =*Firm Size*
a   = Constanta
b_1- b_4 = Regression Coefecient
e   = *Error*

4.5.1 *Overall Model Fit*

The first step taken in logistic regression is to assess the overall model fit to the data. Several statistical tests are provided to assess this. The hypothesis used to assess model fit is as follows:

H0 = The hypothesized model fits the data

Ha = The hypothesized model does not fit the data

Based on the hypothesis above, it is clear that we will not reject the null hypothesis so that the model fits the data. The statistics used are based on the likelihood function. The likelihood L of a model is the probability that the hypothesized model describes the input data. To test the null and alternative hypotheses, L was transformed to -2LogL. A decrease in likelihood (-2LL) indicates a better regression model or in other words the hypothesized model fits the data.

4.5.2 Feasibility of the Regression Model (Hosmer & Lemeshow's Goodness of Fit)

The feasibility of the regression model was assessed using Hosmer and Lemeshow's Goodness of Fit Test. Hosmer and Lemeshow's Goodness of Fit Test tests the null hypothesis that the empirical data fits or fits the model (there is no difference between the model and the data so the model can be said to be fit). If the Hosmer and Lemeshow's Goodness of Fit Test statistical value is equal to or less than 0.05, then the null hypothesis is rejected, which means there is a significant difference between the model and the observed values so that the goodness of fit of the model is not good because the model cannot predict the observed values. If the Hosmer and Lemeshow's Goodness of Fit Test statistical value is greater than 0.05, then the null hypothesis cannot be rejected and means the model is able to predict the observed value or it can be said that the model is acceptable because it matches the observation data.

4.5.3 Coefficient of Determination (Cox and Snell's R Square)

Cox and Snell's R square are measures that try to imitate the R2 measure in multiple regression which is based on likelihood estimation techniques with a maximum value of less than 1 (one) so it is difficult to interpret. Nagelkerke's R square is a modification of the Cox and Snell coefficients to ensure that their values vary from 0 (zero) to 1 (one). This is done by dividing the Cox and Snell's R2 values by the maximum value.

Nagelkerke's R2 value can be interpreted like the R2 value in multiple regression. A small value means that the ability of the independent variables to explain variations in the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict variations in the dependent variable.

4.5.4 Partial Testing (Wald Test)

In linear regression, both simple and multiple, the test is used to test the significance of partial effects. In logistic regression, the partial effect significance test can be tested using the Wald test. In the Wald test, the statistic being tested is the Wald statistic. The statistical value of the Wald test has a chi-square distribution. Decision making on hypotheses can be done using the probability value approach of the Wald test.

4.5.5 Simultaneous Testing (Omnibus Test)

It should be remembered that in multiple linear regression analysis to test simultaneous significance using the F test, whereas in logistic regression using the Chi-Square value of the difference between -2 Log likelihood before the independent variable enters the model and -2 Log likelihood after the independent variable is entered into the research model . If the calculated chi-square value > table chi-square value or significance value < α (0.05), this indicates that there is an influence of the independent variable on the dependent variable simultaneously. If the calculated chi-square value < table chi-square value or significance value > α (0.05) then this indicates that there is no influence of the independent variable on the dependent variable simultaneously.

4.5.6 Moderated Regression Analysis (MRA)

Moderated Regression Analysis (MRA) aims to test the ability of the moderating variable to strengthen or weaken the influence of the independent variable on the dependent variable. Moderating Regression Analysis (MRA) is a special method of multiple linear regression or logistic regression, where in the regression equation there is a multiplicative interaction between two or more independent variables (Ghozali 2018). In this research, the moderating variable used is capital structure. A moderating variable is declared capable of moderating the influence of the independent variable on the dependent variable if it has a significance value of less than 5% (< 0.05).

Result and Discussion
Result

Descriptive statistics are statistics that describe or describe data into information that is easier to understand. Descriptive statistics are used to provide a description of data in terms of the average (mean), standard deviation (standard deviation) and maximum-minimum. The following are the results of descriptive statistical analysis in this research.

Table 1
Descriptive Statistics Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
Hedging	190	0	1	.74	.439
Foreign Liability	190	.00000	.40090	.0218758	.05763785
Interest Coverage Ratio	190	-7.455	9.390	.43508	1.356432
Growth Opportunity	190	-.398	4.648	.14186	.392481
Firm Size	190	13.407	21.413	17.74596	1.710558
Capital Structure	190	.493	17.071	5.84725	2.820539
Valid N (listwise)	190				

Source: Processed data, 2024

Based on the table above, it can be seen that the dependent variable, namely hedging decisions, has a minimum value of 0, a maximum value of 1, an average value of 0.74 and a standard deviation of 0.439. The foreign liability variable has a minimum value of 0, a maximum value of 0.401, an average of 0.022 and a standard deviation of 0.058. The interest coverage ratio variable has a minimum value of -7.455, a maximum value of 9.390, an average value of 0.435 and a standard deviation of 1.356. The growth opportunity variable has a minimum value of -0.398, a maximum value of 4.465, an average value of 0.142 and a standard deviation of 0.392.

The firm size variable has a minimum value of 13,407, a maximum value of 21,413, an average value of 17,746 and a standard deviation of 1,710. Meanwhile, the moderating variable, namely capital structure, has a minimum value of 0.493, a maximum value of 17.071, an average value of 5.847 and a standard deviation of 2.820.

5.1 Logistic Regression Analysis

The dependent variable (dependent variable) in this research is a dummy variable on a nominal scale, namely hedging decisions, so the analytical method used to test the hypothesis in this research is logistic regression analysis. In its use, logistic regression does not require a normal distribution of the independent variables (independent variables). Besides that, this analysis technique also does not require a normality test, heteroscedasticity test and other classical assumption tests on the independent variables (Ghozali, 2016).

There are 2 categories in the dependent variable, namely the category "Not Hedging" with code 0 and "Hedging" with code 1. This coding is used to explain the dependent variable used in this research model, namely hedging decisions. If a company carries out derivative transactions as a hedging action, it is marked by giving the code "1" which means the company is included in the "Conducting Hedging" category, and conversely if the company does not have derivative transactions as a hedging action, it is given the code "0 " which means the company is included in the "Not Hedging" category. Because what is given code 1 is "Hedging", then "Hedging" is a reference or effect of the cause. The cause in question is an event that is hypothesized to be the cause of an effect or problem. In this research, foreign liability, interest coverage ratio, growth opportunity, and firm size are thought to be causes that can influence companies to hedge.

5.2.1 Assessing the Overall Model (Overall Model Fit)

The first step in logistic regression analysis is to assess the overall model fit to the data (Ghozali, 2016). This test aims to see whether the hypothesized model fits the data or not. The test is carried out by comparing the -2 log likelihood value at the beginning (block number=0) with the -2 log likelihood value at the end (block number=1). Reducing the value between the initial -2 log likelihood (initial -2LL function) with the -2 log likelihood value in the next step shows that the hypothesized variable fits the data. This is because the log likelihood in logistic regression is similar to the "sum of square error" in the regression model so that a decrease in the log likelihood indicates that the regression model is getting better.

Table 2. *Beginning Block* **0**
Iteration History[a,b,c]

			Coefficients
Iteration		-2 Log likelihood	Constant
Step 0	1	217.209	.968
	2	216.921	1.055
	3	216.920	1.057
	4	216.920	1.057

Sumber: Data diolah, 2024

Table 3. *Beginning Block* **1**
Iteration History[a,b,c,d]

Iteration	-2 Log likelihood

Step 1	1	147.556
	2	124.387
	3	116.237
	4	114.777
	5	114.700
	6	114.700
	7	114.700

Source: Processed data, (2024).

Iteration History table at block 0 or when the independent variable is not included in the model: N=190 gets a value of -2 Log Likelihood: 216,920. Meanwhile, in the Iteration History table in block 1 or when the independent variable is entered into the model: N=190 gets a value of -2 Log Likelihood: 114,700. So if the value of -2 Log Likelihood Block 0 is reduced by the value -2 Log Likelihood Block 1, namely 216,920 – 114,700 = 102,220.

Subtracting the value between the initial -2 log likelihood and the -2 log likelihood value in the next step has a difference of 102,220. So these results indicate that the hypothesized variables are fit with the data.

Regression Model Feasibility Test

The goodness of fit test of the regression model can be carried out by paying attention to the output from Hosmer and Lemeshow's. If the Hosmer and Lemeshow statistical value is equal to or less than 0.05, then the null hypothesis (H0) is rejected and this means that there is a significant difference between the model and the observed values so that the Goodness of Fit Test Model is not good because the model cannot predict the observed values. On the other hand, if the Hosmer and Lemeshow statistical value is more than 0.05, then the null hypothesis (H0) cannot be rejected, which means the model is able to predict the observed value.

Table 4
Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	7.781	8	.455

Source: Processed data, 2024

Based on the Hosmer and Lemeshow test results above, it can be seen that the significant value of the Hosmer and Lemeshow Test output is 0.455. The significant value in the Hosmer and Lemeshow table is known to be greater than the 5% probability, namely 0.05. So with these results it can be concluded that the model used in this research is able to predict the observed values.

Coefficient of Determination Test (R^2)

Model summary in logistic regression is the same as testing R^2 in linear regression equations. The purpose of the summary model is to find out how much the combination of independent variables is able to explain variations in the dependent variable. The coefficient of determination value in this research can be seen based on the Nagelkerke's R square value. The results of the coefficient of determination test in this research are as follows.

Table 5
Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	114.700[a]	.416	.611

Source: Processed data, 2024

In the Model Summary table above, to see the ability of the independent variable to explain the dependent variable, the Nagelkerke R Square value is used. This value is also called Pseudo R-Square or in multiple linear regression it is better known as R-Square. It is known that the Nagelkerke R Square value is 0.611, which shows that the ability of the independent variable to explain the dependent variable is 0.611 or 61.1%. Meanwhile, the remaining 38.9% is explained by other variables not included in this research model.

Regression Coefficient Test

In logistic regression, the Wald test is used, which functions to test the constant significance of each independent variable included in the model. Therefore, if the Wald test shows a significance number smaller than 0.05, then the regression coefficient is significant at the 5% confidence level. Determining whether or not H0 is accepted is based on the significance level α (5%) with the following criteria:

1. H0 in this study is accepted if the Wald probability (sig) value > significance level (α) 5%. This means that HA is rejected or the hypothesis which states that the independent variable has a significant effect on the dependent variable is rejected.

2. H0 is rejected if the Wald probability value (sig) < significance level (α) 5%. This means that Ha is accepted or the hypothesis which states that the independent variable has a significant effect on the dependent variable is acceptable.

Table 6
Regression Coefficient Test Results
Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Foreign Liability	-11.048	20.369	.294	1	.588	.000
	Interest Coverage Ratio	-4.639	1.383	11.253	1	.001	.010
	Growth Opportunity	.954	.779	1.499	1	.221	2.597
	Firm Size	2.898	.563	26.456	1	.000	18.136
	Constant	-48.204	9.461	25.961	1	.000	.000

a. Variable(s) entered on step 1: Foreign Liability, Interest Coverage Ratio, Growth Opportunity, Firm Size, Capital Structure, X1*Z, X2*Z, X3*Z, X4*Z.

Source: Processed data, 2024

Based on Table 6 above, the logistic regression analysis model equation in this research is as follows:

$$Ln \frac{P}{1-P} = -48.204 - 11.048 - 4.639 + 0.954 + 2.898 + e$$

The equation above shows that the coefficients of the foreign liability and interest coverage ratio variables are negative. Meanwhile, the regression coefficient of the growth opportunity and firm size variables is positive. If the coefficient is positive then the odds for "Found" (code 1) in the dependent variable will increase. If the coefficient is negative then the odds for "Found" (code 1) in the dependent variable will decrease. If the coefficient is zero then the odds for "Found" (code 1) in the dependent variable will remain.

When the independent variable has been included in the research model (block number = 1). The Wald statistical test produces:

1. The foreign liability variable has a significant value of 0.588 at a significance of 5%. Because the sig value. 0.588 > 0.05, then Ha is rejected while H0 is accepted. Which means it is proven that foreign liability has no significant effect on hedging decisions.

2. The interest coverage ratio variable has a significant value of 0.001, because the sig. 0.001 < 0.05, then Ha is accepted while H0 is rejected. Which means the interest coverage ratio is proven to have a negative and significant effect on hedging decisions.

3. The growth opportunity variable has a significant value of 0.221, because the sig value. 0.221 > 0.05, then Ha is rejected while H0 is accepted. Which means that growth opportunity is proven to have no significant effect on hedging decisions.

4. The firm size variable has a significant value of 0.000, because the sig value. 0.000 < 0.05, then Ha is accepted while H0 is rejected. Which means firm size is proven to have a positive and significant effect on hedging decisions.

Omnibus Tests of Model Coefficients

It should be remembered that in multiple linear regression analysis to test simultaneous significance using the F test, whereas in logistic regression the Chi-Square value is used from the difference between -2 Log likelihood before the independent variable enters the model and -2 Log likelihood after the independent variable enters the model. This test is also called Maximum likelihood testing, namely through Omnibus Tests.

Table 7
Omnibus Tests
Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	102.220	9	.000
	Block	102.220	9	.000
	Model	102.220	9	.000

Source: Processed data, 2024

In the Omnibus Tests of Model Coefficients table you can see the Chi-square, df and significant Omnibus values. The significant value is 0.000, where 0.000 < Alpha 0.05 or the calculated Chi-Square value (difference between -2LL at the beginning and -2LL afterward) is 102.220 > Chi-Square table, namely 16.919 at df 9. So the answer to the hypothesis of the simultaneous influence of the independent variable on the dependent variable is accepting Ha and rejecting H0 or which means that simultaneously foreign liability, interest coverage ratio, growth opportunity and firm size have a significant effect on hedging decisions.

Interaction Test (Moderating)

It is possible that the relationship between the independent variable and the dependent variable can be influenced by other variables that are not included in the statistical model, these variables are what are called moderator variables or moderating variables. A moderating variable is an independent variable that can strengthen or weaken the relationship between the independent variable and the dependent variable.

The moderating variable used in this research is capital structure. To see whether capital structure can be used as a moderating variable in this research model, it can be seen based on its interaction with the research model, the results of which are presented in the following table.

Table 8
Interaction Test Results (Moderating)
Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	Foreign Liability	-11.048	20.369	.294	1	.588	.000
	Interest Coverage Ratio	-4.639	1.383	11.253	1	.001	.010
	Growth Opportunity	.954	.779	1.499	1	.221	2.597
	Firm Size	2.898	.563	26.456	1	.000	18.136
	Struktur Modal	3.953	1.080	13.394	1	.000	52.082
	X1*Z	4.998	4.910	1.036	1	.309	148.094
	X2*Z	.795	.260	9.320	1	.002	2.214
	X3*Z	-.363	.253	2.064	1	.151	.696
	X4*Z	-.230	.062	13.721	1	.000	.794
	Constant	-48.204	9.461	25.961	1	.000	.000

a. Variable(s) entered on step 1: Foreign Liability, Interest Coverage Ratio, Growth Opportunity, Firm Size, Capital Structure, X1*Z, X2*Z, X3*Z, X4*Z.

Based on the data presentation in Table 8 above, it can be seen that of the 4 (four) hypotheses proposed regarding the moderating variable, 2 hypotheses can be accepted while the other 2 hypotheses are rejected.

X1*Z, which is the interaction between capital structure and foreign liability, has a significance value of 0.309 which is greater than 0.05. So it can be concluded that the capital structure is unable to moderate the influence of foreign liability (X1) on hedging decisions. So with these results, capital structure is said to be an exogenous moderator variable, namely a variable that has an influence on hedging decisions but is unable to moderate the influence of foreign liability on hedging decisions.

X2*Z, which is the interaction between capital structure and interest coverage ratio, has a significance value of 0.002 which is smaller than 0.05. So it can be concluded that the capital structure is proven to be able to moderate the influence of the interest coverage ratio (X2) on hedging decisions. So with these results, capital structure is said to be a quasi moderator variable, namely a variable that has an influence on hedging decisions and is also able to moderate the influence of the interest coverage ratio on hedging decisions.

X3*Z, which is the interaction between capital structure and growth opportunity, has a significance value of 0.151 which is greater than 0.05. So it can be concluded that the capital structure is unable to moderate the influence of growth opportunity (X3) on hedging decisions. So with these results, capital structure is said to be an exogenous moderator variable, namely a variable that has an influence on hedging decisions but is unable to moderate the influence of growth opportunity on hedging decisions.

X4*Z which is the interaction between capital structure and firm size has a significance value of 0.000 which is smaller than 0.05. So it can be concluded that capital structure is proven to be able to moderate the influence of firm size (X4) on hedging decisions. So with these results capital structure is said to be a quasi moderator variable, namely a variable that has an influence on hedging decisions and is also able to moderate the influence of firm size on hedging decisions.

5.1   Discussion
5.3.1   Pengaruh *Foreign Liability* terhadap Keputusan *Hedging*

The results of data processing in the research show that foreign liability is proven to have no significant effect on hedging in banking companies listed on the Indonesia Stock Exchange. With these results, H1 or the hypothesis which states that foreign liability has a positive effect on hedging decisions is rejected.

Theoretically, foreign liability is a financial obligation that a company has in foreign currency (Bouabidi, 2023). Examples include foreign debt or purchase contracts paid for in foreign currency. Companies that have foreign liabilities will face currency exchange rate risk, which can affect the amount of debt that must be paid or the cost of purchasing goods. This risk arises due to fluctuations in currency exchange rates, which can cause an increase or decrease in the value of payments to be made in domestic currency.

To overcome this exchange rate risk, companies generally make hedging decisions. Hedging is an action taken to protect a company from the risk of currency exchange rate fluctuations. Hedging can be done through transactions in financial markets, such as buying forward contracts or options (Chaudhry and Gupta, 2023). When a company has a high level of foreign liability, it means that the company will generally be exposed to exchange rate fluctuations. This happens because the exchange rate between the domestic currency and the foreign currency used in the company's obligations can fluctuate, causing the amount to be paid to be uncertain. As a result, the higher the foreign liability ratio, the greater the company's potential for foreign exchange exposure, so that companies tend to make higher hedging decisions.

However, the results obtained in this research show that foreign liability is proven to have no significant effect on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022. This means that even though the level of foreign liability a company has is high or low, this is not what causes the company to make hedging decisions.

Each company certainly has a different approach to risk management, which is influenced by various factors such as business strategy, management experience and company risk tolerance (Rudiansyah, et al., 2023). These factors determine how the company identifies and assesses risks. So the motivation for hedging can be different for each company depending on the company's risk

assessment, not on the level of foreign liability the company has. So it can be concluded that hedging decisions in banking companies in Indonesia are not solely influenced by the level of foreign liability.

One reason is because of the regulations implemented by financial authorities such as Bank Indonesia (Bank Indonesia Regulation No. 24/7/PBI/2022 concerning Transactions in the Foreign Exchange Market) which direct how banking companies must manage exchange rate risk. So banking companies must comply with these regulations to avoid sanctions and maintain the company's reputation.

Compliance with regulations can take the form of using hedging strategies to ensure that exchange rate risks are managed properly. So companies tend to continue making hedging decisions even though the company's foreign liability transactions are low. This can also be because banks will still be exposed to exchange rate risk even though they do not have foreign liability because exchange rate risk can also be caused by other transactions such as international trade transactions, foreign investments, savings, deposits or current accounts in foreign currencies, securities in foreign currencies. , derivative bills or even market fluctuations that generally occur.

This is in line with Shareholders Value Maximization Theory which explains that hedging policies are considered as risk management tools that can help companies minimize business risks that can harm shareholder value. By reducing uncertainty and risk in company operations, hedging policies can help companies to generate greater profits for shareholders. That way, even though the level of foreign liability they have is low, banks still need to protect themselves from potential exchange rate risks that could affect the company's financial stability.

The results obtained in this research are in line with the results of previous research as conducted by Fadillah and Nurlita, (2023); and Satria, et al., (2022) who obtained empirical evidence that foreign liabilities do not cause companies to make hedging decisions. Likewise with the research results of Mayasari and Rahayu (2021); and Hidayah and Prasetiono (2016) who found that foreign liabilities were proven to have no effect on hedging decisions made by companies.

Conclussion and Recommedation

Conclussion

Based on the results of analysis and data processing in this research, several conclusions can be made as follows:

1. Foreign liability is proven to have no effect on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022.
2. The interest coverage ratio has been proven to have a negative and significant effect on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022.
3. Growth opportunity is proven to have no influence on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022.
4. Firm size is proven to have a positive and significant effect on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022.
5. Capital structure is unable to moderate the influence of foreign liability on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022.
6. Capital structure is able to moderate the influence of the interest coverage ratio on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022.
7. Capital structure is unable to moderate the influence of growth opportunity on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022.
8. Capital structure is able to moderate the influence of firm size on hedging decisions in banking companies listed on the Indonesia Stock Exchange in 2018-2022.

Recommedation

The suggestions that can be recommended based on the research results and discussions previously presented include the following:

1. For Banking Sector companies listed on the Indonesia Stock Exchange, the results of this research show that the interest coverage ratio is empirically proven to have a negative and significant influence on hedging decisions. Therefore, it is recommended that Banking Sector companies maintain the company's ability to pay interest with operational profits so that the company's interest coverage ratio will increase and the company does not need to make high hedging decisions. However, if the company has a low interest coverage ratio, it is recommended that banking companies carry out higher hedging activities to reduce the financial risks that the company may face.

2. The results of this research show that firm size is empirically proven to have a positive and significant influence on hedging decisions. So banking companies are expected to consider hedging strategies that are appropriate to the size of the company. Larger companies will generally have more resources and operational complexity that requires more and more expensive hedging strategies compared to smaller companies.

3. Future researchers are advised to research similar topics by uncovering other variables that cannot be revealed in this research, or by using different variables that have not been researched in this research. The variables that can be tested include financial distress, managerial ownership, profitability, liquidity, dividend policy and so on.

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