#### **Evaluation Of Policies Hedging Transactions with Derivative Instruments**

#### Teti Rahmawati

Program Studi Akuntansi, Fakultas Ekonomi dan Bisnis, Universitas Kuningan teti.rahmawati@uniku.ac.id

#### Herma Wiharno

Program Studi Magister Manajemen, Sekolah Pascasarjana, Universitas Kuningan herma.wiharno@uniku.ac.id

#### Abstract

The study aims to analyze and obtain empirical evidence to test the effect of internal and external factors on the decision to use derivative instruments in hedging transactions and the disclosure of hedging transactions in the company's annual report. This research is important to obtain data on the determining factors that can encourage companies to carry out hedging transactions and their disclosure in the financial statements. This research was conducted using Logistic Regression analysis. Data were collected from IDX LQ45 from February to June 2023 with purposive sampling so that 34 companies or 170 samples were obtained from 2018-2022. Profitability, leverage, and exchange rate have a significant positive effect on hedging decisions. Thus, the higher the profitability and leverage obtained by the company and the exchange rate also increases, the higher the possibility that the company will make hedging decisions. Meanwhile, liquidity, firm value, and growth opportunity have a significant negative effect on hedging decisions, which indicates that the possibility of hedging transactions will increase if the three variables decrease.

Keywords: Hedging, Profitability, Liquidity, Leverage, Firm Value, Exchange Rate

#### **Abstrak**

Penelitian ini bertujuan untuk menganalisis dan memperoleh bukti empiris guna menguji pengaruh faktor internal dan eksternal terhadap keputusan penggunaan instrumen derivatif dalam transaksi lindung nilai serta pengungkapan transaksi lindung nilai dalam laporan tahunan perusahaan. Penelitian ini penting untuk memperoleh data mengenai faktor-faktor penentu yang dapat mendorong perusahaan melakukan transaksi lindung nilai dan pengungkapannya dalam laporan keuangan. Penelitian ini dilakukan dengan menggunakan analisis Regresi Logistik. Data dikumpulkan dari IDX LQ45 pada bulan Februari sampai dengan Juni 2023 dengan metode purposive sampling sehingga diperoleh 34 perusahaan atau 170 sampel pada tahun 2018-2022. Profitabilitas, leverage, dan nilai tukar memiliki efek positif signifikan terhadap keputusan lindung nilai. Dengan demikian, semakin tinggi profitabilitas dan leverage yang diperoleh perusahaan serta nilai tukar juga meningkat, maka semakin tinggi pula kemungkinan perusahaan akan mengambil keputusan lindung nilai.

Kata kunci: Lindung Nilai, Profitabilitas, Likuiditas, Leverage, Nilai Perusahaan

#### INTRODUCTION

Indonesia's economic development is currently increasingly integrated with the economy (Diana, Integration occurs through international trade or cross-border interstate trade carried out by companies in Indonesia through export and import transactions. Since the enactment of the ASEAN Economic Community (AEC), national borders no longer exist, thus encouraging the rate of economic growth of a region 2016). Foreign (Suartha. trade transactions continue to increase along with the increasing need for a product from one country to another.

International trade transactions are using carried agreed foreign currencies (currencies). The use of foreign exchange causes the exchange of foreign exchange rates to fluctuate from time to time. This can cause the risk of changes in currency exchange rates arising from the uncertainty of the exchange rate itself (Herawati, 2021). In addition, international trade activities also face various challenges and risks due to government political decisions, such as agreements between countries and distribution channels (Ansari, 2017). complexity Plus. very high uncertainty often haunt the business environment in various sectors. (Aditya &; Naomi, 2017). The uncertainty itself causes business entities to be exposed to various financial risks. (Mahendra 2019). To deal with uncertainty in the future, companies should develop a management strategy.

One alternative to the risk management strategy is to use derivative instruments for hedging purposes due to fluctuations in the value of protected items (Niansyah, 2018). *Hedging* or hedging is a way to avoid the risk of loss caused by price fluctuations (Setiawan, 2019). *Hedging* usually transfers risk to other parties who can better manage risk through financial instrument transactions

(Zeinora, Z, 2017). Hedging in the financial world can be interpreted as an investment to reduce, minimize, or eliminate risk in another investment. Furthermore, Hedging or hedging is a strategy chosen to protect the value of company assets from possible losses due to existing risks.

Hedging is a strategy created to reduce the emergence of unexpected business risks; besides that, it is still possible to benefit from investments made to minimize risks in another investment (Widyagoca & Lestari, 2016). Hedging is carried out to protect company assets against future price changes through the use of derivative instruments (Dewi & Purnawati, 2016). something done is companies to protect companies from exposure to foreign exchange. Hedging means protecting all investments that are being carried out or reducing or eliminating the risk of investments that are being carried out (Ramdani & Oktaviani, 2021). Hedging serves as a risk control instrument in the form of losses due to exchange rate fluctuations, the benefits of which can be felt by both the government and business actors, including SOEs.

Hedging activities can be carried out using derivative instruments, which are contract agreements between two parties to sell and buy a number of goods, both commodities, and securities, on a certain date in the future at an agreed price at the current agreed price. Financial derivatives are derivative instruments where the underlying variables are financial instruments, which can be stocks, bonds, stock indices, bond indices, currencies, interest rates, and other financial instruments. Derivative instruments are often used by market (financiers participants and companies) as a means to hedge their (www.idx.co.id). portfolios Bank requires companies Indonesia with

external debt to *hedge* at least 25% of their total foreign currency liabilities

with a liquidity ratio of 70%. ( No 16/21/PBI/2014).

Table 1 List of Companies Not Hedging Strategy

Information	2018	2019	2020	2021	2022
Companies that do not hedge	16	19	17	17	14
Companies that do not do Hedging %	36%	42%	38%	38%	31 %

Source: data processed (2022)

Table 1 shows that there are still many companies that have not carried out *hedging* activities and do not comply with the regulation issued by Bank Indonesia No.16/21/PBI/2014 Indonesia which requires companies with external debt (external debt) to hedge at least 25% of their total foreign exchange liabilities with a liquidity ratio of 70%. In 2018 there were 36% of companies were not hedging. Experienced an increase in the number of companies that do not hedge to 42%. Furthermore, in 2020 and 2021 there were 38%. There was a decrease in 2022 to 31% of companies that did not do hedging. Although from year to year, it has decreased, there are still many companies that are at risk because they do not hedge to protect the company. Several factors can influence the company in determining hedging activities, including internal and external factors. Internal factors are factors originating from within a company, for leverage, company example, liquidity, and so on. At the same time, external factors are factors from outside the company, such as the BI Rate, foreign exchange rates, and interest rate fluctuations (Muslim & Puryandani, 2017).

Profitability is a ratio to measure the level of effectiveness of company management indicated by the amount of profit generated from sales and investment. (Fauzan Haqiqi et al., 2020). The profitability ratio is a ratio to measure the level of effectiveness of the

management (management) company as indicated by the amount of profit generated from sales. The use of profitability ratios can be done by comparing various components in the financial statements, especially balance sheet financial statements and income statements. (Priatna et al., 2021). This ratio measures the effectiveness of the company with the overall funds invested in assets that will be used for the company's operations to generate profits (Dina et al., 2021). Return on assets as a proxy of profitability has a positive and statistically significant effect on hedging decisions with derivative instruments (Jiwandhana & Triaryati, 2016). The higher the level of profitability of the company, the greater the company will be to encourage the company to hedge because of the company's ability to hedge and overcome market risks that may occur in the international market. This shows that a higher profitability ratio in the company will tend to increase the likelihood of using hedging by the company. (Sudiarta &; Setyawan, 2022) (A.saraswati &; N.Suryatini, 2019), (Megawati, et al, 2016). Companies with small, medium, and large sizes and have a level of profitability it is expected to use a *hedging* policy when conducting international scale transactions so that companies can avoid foreign exchange risk (Putri & Santi, 2017)

### LITERATURE REVIEW AND HYPOTHESIS

## H<sub>1</sub>: Profitability affects hedging decisions with derivative instruments

Liquidity is the ability of a company to meet obligations or pay its short-term debts. Liquidity ratios are commonly used to measure how liquid a company is. Investors, in making decisions in investing for a company, need to know the liquidity capabilities of prospective companies to be invested (Prabowo &; Sutanto, 2019). The liquidity ratio is a ratio used to measure a company's ability to settle its maturing short-term debt (Muh. Arif, 2020). The company's high liquidity indicates that the company can meet its short-term obligations and the company has reserve funds to face risks or avoid the risk of financial distress. The more liquid the company, the company will avoid risk is; therefore, the possibility of the company applying hedging is very low. Liquidity risk arises when the company is unable to fulfill its obligations on time, which means the company will be faced with financial distress costs. The higher the liquidity ratio, the lower the *hedging* decisions applied by the company. The more liquid the company, the smaller the possibility of the company hedging. Research conducted by (Ariani et al., 2017) (and Reni et al. 2016) shows that the company's high liquidity indicates that the company is able to meet its shortterm obligations and the company has reserved funds to deal with risks so as to avoid the risk of financial distress.

## H<sub>2</sub>: Liquidity negatively affects hedging decisions with derivative instrument

Leverage describes the ability of a company to fulfill its obligations in the short and long term and to find out how much a company is funded by debt (Kinasih & Mahardika, 2019). A 101

company with a higher leverage ratio indicates that the company is facing the risk of financial distress. In other words, companies will tend to default on loans when borrowing more than creditors (Jiwandhana & Triaryati, According to (Hery, 2016, p. 166), leverage is measured using debt to asset ratio, which is a comparison between total liabilities and total assets. Leverage is used to measure a company's ability to meet long-term obligations. The higher the leverage charged by a company, the higher the hedging actions taken to reduce the impact of bad risks because the debt used is greater than the quantity of capital of a company, which will result in the risk of bankruptcy. The risk is getting bigger; the company needs to overcome it by hedging. Based on signal theory, companies that have debt have obligations for the costs they have, namely interest and principal expense of debt loans. If the company cannot complete its obligations, it will result in losses and may go bankrupt. This means that the higher the company's leverage, the more likely the company is to make hedging decisions. Research conducted (Aqilah & Siti, 2019) (Pangestuti et al., 2020) (A. et al., 2019) (Kristian & Badjra, 2017) shows that the higher the level of leverage, the higher the company will use hedging to protect the company from foreign exchange risk.

### H3: Leverage affects hedging decisions with derivative instruments

Company value is the market value of a company's equity plus the market value of debt. Thus, the addition of the amount of company equity with company debt can reflect the value of the company (Situmeang & Wiagustini, 2018). The value of this company uses a benchmark of the market value of a stock. The higher the stock price, the higher the value of the company. The market price of shares represents the

wealth of shareholders and companies. Company value indicates market confidence in the company, where increased confidence is indicated by the stock price above book value due to market appreciation. (Pramana &; Yasa, 2020). Company value is an investor's perception of the company using the stock price. The high value of the company indicates that investment in assets produces returns that provide a higher value than investment expenditures. This will create investment opportunities so that companies tend to expand. One of the financing for expansion can rely on internal sources or sources of the company. (Kurniawan &: Asandimitra. 2018). Companies prefer internal company funding to finance company expansion, so the company's chances of making hedging decisions are getting smaller. Research conducted (by Edon & Putri, 2021) (Kurniawan & Asandimitra, 2018) the results of the analysis in testing shows that when the company's value tends to increase, it triggers the company to expand. One of the financing for expansion can rely on internal sources or external sources of the company so that the company's chances of making hedging decisions are getting smaller.

# H4: Company value negatively affects hedging decisions with derivative instruments

Growth opportunity is a ratio that measures the company's opportunity to develop its business in the future. High growth opportunity, the opportunity for companies to experience underinvestment problems (Na'imatul Hidayah, 2016). Companies with high growth opportunities will tend to require large amounts of funds to finance this growth in the future (Bodroastuti, 2019). The development of a good company can be seen from the need for funds that are

large enough to finance the company's growth in the future (Muslim & Puryandani, 2017). Companies that have high growth opportunities tend to invest with their capital to avoid the risk of under-investment, namely the non-implementation of all investment projects with positive value by the company (Raodah & Pratiwi, 2020).

With high growth opportunities, companies will finance the growth that is being experienced by the company using internal funding because if you use external funding, it will be more risky there are foreign currency fluctuations. So as to minimize the risks faced by the company. Companies with high growth opportunities can maintain retained earnings to strengthen capital and not allocate unemployment to carry out hedging policies (Bodroastuti, 2019); in this case, management will try to maximize welfare for itself by minimizing various agency costs. This is because companies that have high growth opportunities are likely not to make *hedging* decisions. Research conducted (T. Bodroastuti. 2019) (Melissa Aristya, 2020) and (Pangestuti et al., 2020) the results of testing the Growth Opportunity variable results that state growth opportunity does affect hedging decisions manufacturing companies listed on the Indonesia Stock Exchange in a positive direction

# H<sub>5</sub>: Growth Opportunity negatively affects hedging decisions with derivative instruments

The Exchange Rate of a currency is the price of a domestic currency against a foreign currency. The foreign exchange rate system will depend largely on the nature of the market. In a free market, the exchange rate will change according to changes in demand and supply. Economists divide the exchange rate into

two types (Mankiw: 2012), namely the nominal exchange rate and the rill rate. The exchange rate (exchange rate) is positively related to interest rates, where rising exchange rates (rupiah appreciates against the dollar) will increase interest rates. Then, people will be encouraged to increase the amount of savings by reducing spending on consumption and releasing the Dollars they have. This is done to benefit from increased interest on savings. An increase in the amount of savings will also affect the increase in amount of quasi-money. (Mankiw:2012). Exchange Rate Exposure is an important source of risk for multinational companies. Exchange rate risk is one of the factors of financial risk. Exchange rate risk is the possibility of deviations in expected outcomes or to exposures due exchange fluctuations. To mitigate the impact of exchange rate fluctuations, it has been claimed that multinationals implement risk management strategies not only through financial derivatives. Research produced by Ito, Koibuchi, Sato and Shimizu (2015). Chiang and revealed that (2002)foreign exchange rates have a significant positive effect on operational hedges. Like Chiang and Lin's (2002) research, Du's (2010) research also found that foreign exchange has a significant positive effect on hedges.

## H<sub>6</sub>: Exchange rate positive affects on decisions Hedging with instruments Derivatives

The purpose of this study is to analyze and obtain empirical evidence in testing the model influence of internal factors and external factors on the decision to use derivative instruments in 3.

hedging transactions and disclosure of hedging transactions in the company's annual report. This research is important to obtain data on determining factors that can encourage companies to carry out hedging transactions and their disclosure in financial statements. This topic is an important part of the leading field research topics on the topic of finance and digital banking. In the future, the results of this research will be simplified people who carry out export transactions to protect their transactions by conducting hedging transactions to mitigate the occurrence of risks.

#### RESEARCH METHOD

This research is a quantitative research conducted on IDX LQ45 which is listed on the Indonesia Stock Exchange (IDX) in 2018-2022. This research starts by collecting data related to profitability, Liquidity, Leverage, Company Value, growth opportunity, exchange rate, and hedging derivative instruments. This research conducted using Logistic Regression analysis. The population used in this study is companies incorporated in IDX LO45 February to June 2022 listed on the Indonesia Stock Exchange (IDX) in with as many as 2018-2022, Sample companies. Research The sampling technique used in this study is purposive sampling, which uses certain criteria in sample selection. These criteria are:

- 1. Companies listed on IDX LQ45 listed on the Indonesia Stock Exchange (IDX) in 2018-2022.
- 2. A complete company publishes financial statements

Table 2 Sampling

No.	Criteria	Number of Companies
1	Companies listed on the Stock Exchange Indonesia 2018–2022	45
2	Incomplete company financial statements from 2018 – 2022	(11)
3	Companies that are the object of research	34
	34 x 5 research periods	170

The logistic regression model to be used in this study is as follows:

$$Ln$$
 = +  $\beta$  PR +  $\beta$ 2LQ +  $\beta$ 3 LV +  $\beta$ 4 NP +  $\beta$ 5 GO+

#### Information:

P : Hedging

Ln : Natural logarithm

 $\beta$ 0 : Regression coefficient of constant  $\beta$ 123456 : Regression coefficient of each indicator

PR : Profitability
LK : Liquidity
LV : Leverage
FV : Firm Value

GO : Growth Opportunity
ER : Exchange Rate

E : Error

#### RESULT AND DISCUSSION

The descriptive statistical test used in the early stages of the study aims to determine the description or distribution of data from the dependent and independent variables.

**Table 3 Descriptive Statistical Test Results** 

Hosmer and Lemeshow Test					
Step	Chi-square	f	ay.		
1	9.557				
			.298		

The test results on *Hosmer and Lemeshow's Goodness Test* shown in Table 4 obtained a *Chi-square value of* 9.557 with a significance value of 0.298. Based on these results, it can be seen that 0.298 > 0.05 is accepted, meaning that the null hypothesis is accepted, and there

is no difference between the predicted classification and the observed classification. So, it can be concluded that the logistic regression used has met the adequacy of *fit* so that hypothesis testing can be accepted.

Table 4 Regression M	Andel Feas	sibility Results
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Variable	Minimum	Maximum	Mean	Standard Deviation
PR	-0,057	0,790	0,082	1,898
LQ	0,180	124,660	4,902	31297,704
LV	0,030	8,040	0,734	233,772
PER	-0,260	0,216	0,047	0,513
GO	10,000	48,687	20,540	2844,102
Exchange	13.548	14.265	14.001	268,411
Hedging	0,000	1,000	1,047	92,288

Testing the entire model aims to determine if the model gets better if it is added with independent variables. This test is done by comparing the value of – 2 *initial Log likelihood* (block number =

0 I) with -2 final Log Likelihood (block number = 1). Here is the result of the initial  $-2 \ Log \ Likelihood$  value (block number = 0) as shown in the table below:

**Table 5 Block 0 Test Results** 

Iteration Historya,b,c						
Iteration		-2Log likelihood	Coefficients			
		220g iikemiood	Constant			
	1	209.428	.776			
Step 0	2	209.361	.819			
	3	209.361	.819			

Furthermore, for the results of calculating values based on the table above, the results of calculating values –

2 Log Likelihood last (block number = 1) amounted to 169.103.

**Table 6 Test Results Block 1** 

			Iteration Historya,b,c,d						
		0	Loc		Coefficien	its			
Iteratio:	n		Log lihood		TWO			PER	
		пке	iiiiood	Constant	PEOPLE	CR	To give		THERE
	1	1	173.744	1.174	.748	342	-1.045	-11.244	031
	2	1	69.321	1.169	1.077	417	-1.416	-15.348	072
	3	1	69.104	1.118	1.140	433	-1.502	-16.335	095
	4	1	69.103	1.110	1.143	434	-1.507	-16.389	097
Step 1	5	1	169.103	1.110	1.143	434	-1.507	-16.389	097

**Table 7 Model Summary** 

Model Summary						
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square			
1	169.103a	.211	.298			

In testing the overall *model (overall model fit)* using -2 Log Likelihood, if

there is a decrease in the last -2 Log Likelihood (block number = 1) compared to -2 initial Log Likelihood (block number = 0), it can be concluded that the regression model is a good regression as shown in the table above. In the initial block (block number = 0), the value of -2 Log Likelihood is 209.361, while in the last block ( $block\ number = 2$ ), the value of - 2 Log Likelihood is 169.103. With a decrease in the value of -2 Log Likelihood between the beginning and last, the model is accepted because it

matches the data and it can be concluded that the regression model is a good regression predict hedging. to Furthermore, a regression model will be formed that aims to determine whether profitability, liquidity, leverage, company value, growth opportunity, and exchange rate have a significant effect on hedging decisions. Here are the results of the regression model formed:

**Table 8 Test Results of Logistic Regression Analysis** 

Variables in the Equation								
		В	H.E.	Forest	df	Say.	Exp(B)	
	PR	1.143	.527	4.711	1	.030	3.137	
	LQ	434	.163	7.068	1	.008	.648	
	LV	1.507	.445	11.490	1	.001	.222	
Step 1a	FV	-16.389	5.143	10.156	1	.001	.000	
	GO	546	.259	4.456	1	.035	1.726	
	ER	025	.028	4.026	1	.037	1.025	
	Constant	1.110	1.006	1.219	1	.270	3.035	

So, the results obtained from the calculation of the logistic regression model in this study are as follows:

 $\ln \frac{r}{r} = 1,110 + 1,143 \text{ ROA} - 0.434 \text{ CR} + 1,507 \text{ DAR} - 16.389 \text{ FOR} - 0.546 \text{ GROWTH} + 0.025 \text{ EXCHANGE} + e$ 

#### Information:

: Hedging P

: Natural logarithm Ln

: Regression coefficient of constant  $\beta 0$ : Regression coefficient of each indicator *β*123456

: Profitability PR : Liquidity LK LV : Leverage FV : Firm Value

: Growth Opportunity GO : Exchange Rate ER

: Error

E

Interpretation of logistic regression analysis results in the constant regression coefficient of 1.110, meaning that if liquidity, profitability, leverage, company value, and growth opportunity are considered constant (0), then the regression coefficient value of 1.110 means that the company prefers to hedge

amounted to 1,110. The profitability coefficient of 1.143 can be interpreted if profitability increases assuming other independent variables are constant, then the possibility of the company hedging increases by 1.143. The liquidity coefficient of -0.434 can be interpreted if liquidity decreases assuming other

independent variables are constant, the possibility of the company hedging decreases by -0.434. The leverage coefficient of 1.507 can be interpreted if the leverage increases, assuming the independent variables constant, then the possibility of the company hedging increases by 1.507. The company's value coefficient of -16.389 can be interpreted if the company's value decreases, assuming other independent variables are constant, then the possibility of the company hedging decreases by -16.389. The growth opportunity coefficient of -0.546 can be interpreted if the growth opportunity decreases assuming other independent variables are constant, then the possibility of the company hedging decreases by -0.546. The Exchange rate coefficient of 0.025 can be interpreted if the exchange rate increases assuming other independent variables are constant, then the possibility of the company hedging increases by 0.025

Testing the coefficient of determination aims to determine how much influence the dependent variable is involved in the study. The coefficients of and Snell R Square Nagelkerke's R Square are found in the summary model table, which can be interpreted as the same as the coefficient of determination R2 in multiple linear regression. However. there differences because the maximum values of Cox and Snell R Square are smaller than one; as in the table below, the values of Cox and Snell R Square are 0.211 smaller than one, thus making it difficult to interpret as in R2 and rarely used.

**Table 9 Results of the Coefficient of Determination** 

Model Summary						
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square			
1	169.103a	.211	.298			

The value of Nagelkerke's R Square coefficient in the table above is a modification of the Cox and Snell R Square coefficients so that the maximum value can reach one and can ensure that it has a value that varies in the range of 0 to 1 and is the same as the R2 determination coefficient in multiple linear regression. Based on the table above, Nagelkerke's R Square value of 0.298 or 29.8%, which means profitability, liquidity, leverage, company value, and *growth opportunity* can explain *hedging*.

The simultaneous test aims to determine the overall relationship

between the variables of profitability, liquidity, leverage, company value, growth opportunity and exchange rates simultaneously affect the hedging variable. The significance level used is 0.05, which can be seen in the table of the Omnibus Test of Model Coefficient, which is equivalent to test F. If the value Omnibus Test of Model the Coefficient is less than 0.05, it means that the independent variable simultaneously affects the dependent variable.

**Table 10 Simultaneous Test Results** 

<b>Omnibus Tests of Model Coefficients</b>					
Chi-square Df Say					
Step 1	Step	40.257	5	.000	
	Block	40.257	5	.000	
	Model	40.257	5	.000	

Based on the table, it can be explained that the value of chi-square is 40.257 with degree of freedom (df) 5, while the significant level is 0.000 and the value of  $G^{-p\text{-value}} < \chi^3_{\alpha,p}$   $\alpha$  with  $\alpha$  is a significant level of 0.05. Then, it can be seen that 0.000 < 0.05, meaning that H0 is rejected and Ha is accepted. If H0 is rejected, it means that the model can be said to be statistically significant that it is 0.000, which means less than 0.05. This shows that profitability, liquidity, leverage, company value growth opportunity, and

exchange rate together significantly affect hedging. In logistic regression analysis, partial regression coefficient testing is performed using the Wald test, which can be seen in the Variables in The Equation table. This test is conducted to test how much influence the variables of profitability, liquidity, leverage, company value, growth opportunity, and exchange rate on hedging. Here is a summary table of logistic regression coefficients and significant levels of independent variables:

Table 11 Logistic Regression Coefficients and Significant Level of Independent Variable

Variable	В	Say	Result
Profitability	1.143	0.030	Accepted
Liquidity	-0.434	0.008	Accepted
Leverage	1.507	0.001	Accepted
Company Value	-16,389	0.001	Accepted
Growth opportunity	-0,546	0,035	Accepted
Exchange Rate	0,025	0,037	Accepted

#### 1. The Effect of Profitability, Liquidity, Leverage, Company Value, and Growth Opportunity on Hedging Decisions

The results of the simulation test in this study show that profitability and *leverage* simultaneously have a positive effect. At the same time, liquidity, company value, and *growth opportunity*  simultaneously negatively affect decisions *Hedging*. So, the results of this study show that only 2 (two) variables have a positive effect on decision *Hedging*. This is in accordance with previous research conducted by (Pangestuti et al., 2020), which states that leverage affects decision *Hedging*,

while liquidity, *leverage*, and *growth* opportunity negatively affect decision *Hedging*. Previous research conducted by (Jiwandhana & and Triaryati, 2016) states that profitability positively influences decision *Hedging*. Previous research conducted by (Kurniawan Asandimitra, 2018) states that the value of the company has a significant negative effect on decision *Hedging*.

## 2. The Effect of Profitability on *Hedging Decisions*

The partial test results show that profitability has a positive and significant effect on decision Hedging. A positive profitability variables influence on indicates that companies with a high level of profitability will be more likely to do Hedging. Profitability is the net result based on decisions applied by a company or the company's ability to make profits based on the sale of products or services produced by the company. High profitability can show the company's ability to earn profits from its business, and obtaining high profits can make the company able to do *Hedging*. Significant means that the results of this study can be generated or, in general, in members of the population as a whole. Based on signaling theory explains that management's perception of the company's future growth will affect investors toward the company. Information describing the state of affairs of the company gives certain signals to The company investors. can information about the state of company profitability to be the basis for making decisions *Hedging* What the company does and becomes important information is also to attract investors. When the

a company is in state of high profitability, the company has flexibility to reserve part of the retained earnings with the permission of the GMS to conduct Hedging of all foreign currency transactions with the aim of mitigating the risk of company losses that occur due to foreign currency fluctuations. So that these conditions can be a good signal for investors that the company will not experience financial pressure caused changes by fluctuations in foreign exchange rates because the company has anticipated Various risks by making transactions Hedging Using instruments Derivatives. The implication is that the disclosure of hedging transactions will also be higher. This is in accordance with research conducted by (Jiwandhana & Triaryati, 2016) (Saraswati & Suryantini, 2019), (Megawati et al., 2016), and (Sudiarta & Setyawan, 2022), suggesting that taxes positively affect a company's likelihood of performing *Hedging*.

### 3. The Effect of Liquidity on *Hedging Decisions*

The partial test results show that liquidity negatively affects decisions Hedging. The negative influence shows that the liquidity variable shows that the company with higher liquidity, the lower company performs the Hedging. Significant means that the results of this study can be generated or, in general, in members of the population as a whole. Liquidity is a sign that the company can meet its short-term obligations and that the company has reserve funds to deal with risks. The more liquid the company, the company will be. Therefore, the possibility of the company applying

Hedging is very low. Based on agency theory, there are differences in interests between management and shareholders, where shareholders want to minimize risk by doing Hedging. However, the management minimizes the risk by using trading funds from the company. The high liquidity of the company indicates that the company can meet its short-term obligations and the company has reserve funds to face risks or avoid the risk of financial difficulties (financial distress). The more liquid the company, the company will be: therefore. possibility of the company applying Hedging is very low. The size current ratio indicates the company's ability to pay its short-term obligations and finance its operating activities, as a result of which the risk of failure is reduced. Therefore, the company does not need to do Hedging to manage the risk. Because the company has a reserve fund that is able to handle risks so as to avoid financial difficulties. This accordance with research conducted by (Ariani &; Sudiartha, 2017; Reni et al. &; Purnawati, 2016) suggests that liquidity negatively affects the likelihood of companies doing so *Hedging* 

## 4. The Influence of Leverage on Hedging Results

The partial test results show that leverage has a Positive response to the results of Hedging. A positive influence on liquidity variables indicates that companies with levels of leverage have a high likelihood of the company doing Hedging. Significant means that the results of this study can be generalized or applied generally to members of the population as a whole. Leverage is an

asset and source of funds by companies that have fixed costs in order to increase shareholder profits. Leverage Is the potential use of finance costs on growing the effect of increased changes in profits before interest and taxes. Based on signal theory, companies that have debt have obligations for the costs they have, namely interest and principal expense of debt loans. If the company cannot complete its obligations, it will result in losses and may go bankrupt. This is in accordance with research conducted by (Muslim Puryandani, 2017) and (Saraswati & Suryantini, 2019) suggests that *leverage* positively affects the company's likelihood to do Hedging.

## 5. The Effect of Company Value on *Hedging Decisions*

The partial test results show that the company's value has a negative and significant effect on decisions Hedging. The negative influence on the variable value of the company indicates that the lower the company will make fewer decisions Hedging. The value of the company is the present value of a series of cash inflows that the company will generate in the future. Company value is an investor's perception of the company related to using stock prices. According to signaling theory, The higher the value of the company, the company's internal to allow the funding company's expansion to be available sufficiently so that the possibility of the company doing *Hedging* is declining. This is in accordance with research conducted by (Ramdani Oktaviani. 2021). (and Kurniawan; Asandimitra, 2018) suggests that company value negatively affects decision *Hedging*.

## 6. Influence of Growth Opportunity on Hedging Results

The partial test results show that growth opportunity negatively affects decision Hedging. Negative influence on variables growth opportunity the lower the less the company does Hedging. Significant means that the results of this study can be generalized or applied generally to members of the population as a whole. A growth opportunity is a company investment opportunity that can increase the value of the company in the Future. A company has greater growth opportunities in order to get large profits. Based on agency theory, management will try to maximize welfare for itself by minimizing various agency costs. This is in accordance with what is done by (Bodroastuti, 2019) and (Melissa Aristya, 2020), fattening that growth opportunity has a negative influence on results Hedging.

#### **CONCLUSION**

The purpose of this study is to analyze and obtain empirical evidence in testing the model influence of internal factors and external factors on the decision to use derivative instruments in hedging transactions and disclosure of hedging transactions in the company's annual report. This research is important to obtain data on determining factors that can encourage companies to carry out hedging transactions and their disclosure in financial statements. This topic is an important part of the leading field research topics on the topic of finance and digital banking. In the future, the results of this research will be simplified people who carry out export transactions to protect their transactions by conducting hedging transactions to mitigate the occurrence of risks. This study using Agency Theory as a literature review that discusses factor internal eksternal dan vang mempengaruhi kemungkinan perusahaan melakukan transaksi hedging. Meanwhile, Profitability, leverage and Exchange rate have a significant positive effect on decisions Hedging. Thus, the higher the profitability and leverage obtained by the company and the exchange rate also increases, the more likely the company will make decisions Hedging getting higher. Meanwhile, liquidity, company value, and growth opportunity have a significant negative effect on decisions Hedging, which shows that the possibility of hedging transactions will increase if the three variavels decrease. This study's limitation is that the coefficient of determination test results is 29.8 Percent. These results reflect that other factors influence the research model. Researchers can use other variables predicted to influence kemungkinan hedging dengan transaksi derivative in a further study.

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