THE EFFECT OF LIQUIDITY, GROWTH OPPORTUNITY, AND FINANCIAL DISTRESS ON HEDGING DECISIONS

Ilfat Pratomo[1]*, Nuramalia Hasanah[2], Diah Armeliza[3]

[123] State University of Jakarta

Corresponding Author (ilfatpratomo@gmail.com)

ABSTRACT

This study aims to determine the effect of liquidity, growth opportunity, and financial distress on hedging decisions in manufacturing companies listed on the Indonesia Stock Exchange. The sample selection technique used was a purposive sampling technique which consisted of 320 observations during 2016 – 2020. The data used is secondary data derived from company financial reports obtained from the Indonesia Stock Exchange (IDX) website and several other sources. The data analysis technique used in this study is logistic regression analysis using the Statistical Product and Service Solution (SPSS) version 26 application. The results of this study indicate that liquidity has an influence on hedging decisions, growth opportunity has no effect on hedging decisions, and financial distress has an influence on hedging decisions.

Keywords: liquidity, growth opportunity, financial distress, hedging decisions

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh likuiditas, *growth opportunity*, dan *financial distress* terhadap keputusan *hedging* pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. Teknik pemilihan sampel yang digunakan yaitu teknik purposive sampling yang tediri dari 320 jumlah observasi selama tahun 2016 – 2020. Data yang digunakan merupakan data sekunder yang berasal dari laporan keuangan perusahaan diperoleh dari website Bursa Efek Indonesia (BEI) dan beberapa sumber lainnya. Teknik analisis data yang digunakan dalam penelitian ini yaitu analisis regresi logistik dengan menggunakan aplikasi Statistical Product and Service Solution (SPSS) versi 26. Hasil penelitian ini menunjukkan bahwa likuiditas berpengaruh terhadap keputusan *hedging*, *growth opportunity* tidak berpengaruh terhadap keputusan *hedging*, dan *financial distress* berpengaruh terhadap keputusan *hedging*.

Kata Kunci: likuiditas, *growth opportunity*, *financial distress*, keputusan *hedging*

INTRODUCTION

This globalization era is marked by the many countries that carry out international trade. Many countries, to meet the needs of their people, such as in terms of the demand for goods and services, will carry out international trade, and this is because there is no single country in the world that can meet all the needs of its people, including Indonesia. In conducting international trade, there is an increasing business risk due to price fluctuations and increased competition which can make future trading conditions unstable. This also affects Indonesia, where Indonesia carries out export and import activities to meet its needs. The following is a list of the number of Indonesian export-import activities:

Table 1 Indonesian Export and Import Data

Year	Export (Million US$)	Import (Million US$)
2016	145 186,2	135 652,8
2017	168 828,2	156 985,6
2018	180 012,7	188 711,3
2019	167 497,0	171 275,7
2020	163 191,8	141 568,8

Source: www.bps.go.id

Based on the data above, export values increased from 2016 to 2018 and decreased in 2019 and 2020. On the other hand, import values also experienced the same thing, import values increased from 2016 to 2018 and decreased in 2019 and 2020. This happens for several reasons, one of which is the change in the price of goods and a decrease in the need for an item.

Risk is unavoidable and can appear anytime and anywhere. Risks that are not handled properly can result in problems for the company, such as experiencing losses or failing to pay. One example is a company experiencing a default, as in the case of PT Sri Rejeki Isman Tbk (SRIL) Sritex and PT Tridomain Performance Materials Tbk (TDPM) who experienced default due to failure to pay debt securities which resulted in both being subject to temporary suspension from the IDX in the form of discontinuing securities trading on 18 May 2021 for PT Sri Rejeki Isman Tbk and 27 April 2021 for PT Tridomain Performance Materials Tbk (TDPM) (Aldin, 2021). The company above is a manufacturing company that deals with the daily needs of a society where the company will always carry out production so that it creates risks, therefore the right decision is needed to run its business. In addition, based on Statistics Indonesia (2021), manufacturing companies significantly contribute to the Indonesian economy. Based on the Gross Domestic Product (GDP) figures in 2020, the manufacturing sector's contribution to the Indonesian economy is 19.88%. Risk management is one of the crucial elements that must be carried out within the company. With the current uncertainty in the global economy, hedging is one way to deal with the risks arising from this uncertainty.

Several previous studies have used factors that can influence company decisions in hedgings, such as leverage, liquidity, company size, profitability, growth opportunity, firm value, financial distress, debt, investment growth, growth options, and institutional ownership. In connection with these factors, the researchers decided to use the variables of liquidity, growth opportunity, and financial distress as factors that influence hedging decisions because there are still differences of opinion regarding the research results.

The first factor that can determine the hedging decision taken by a company is liquidity. A company's liquidity can show its ability to pay its short-term financial obligations on time. The higher the company's liquidity, the more liquid the company is. This indicates that the company has more current assets than current liabilities. If current assets are dominated by cash, then the company needs to hedge to protect the company from the risk of loss (Ayuningtyas, Warsini,

& Mirati, 2019). Based on previous research conducted by Ayuningtyas, Warsini, and Mirati, (2019), the liquidity variable proxied by the current ratio has a positive effect on the use of derivative instruments as hedging decisions. Unlike the research conducted by Bodroastuti, Paranita, and Ratnasari (2019),the liquidity variable proxied by the Current Ratio states that liquidity has no effect on company hedging decisions.

Another factor that influences hedging decisions is growth opportunity. Growth opportunity is an opportunity owned by the company to develop itself in the market. Companies with high growth opportunity indicate that these companies have the profitability to grow and are liked by potential investors. Companies with high growth opportunity tend to carry out more overseas operational activities where companies have to face risks from fluctuations in foreign exchange rates, so companies need to hedge to reduce these risks (Utami, Sriyanto, & Purbasari, 2018). Previous research conducted by Utami, Sriyanto, and Purbasari (2018) stated that growth opportunity proxied by comparing MVE with BVE has a positive influence on hedging decisions. This is different from the research of R Br Aritonang, Christina Daat, and Noor Andriati (2018), which states that growth opportunity proxied by a comparison of MVE with BVE does not affect company hedging decisions.

The next factor that researchers often examine is financial distress. Financial distress is the condition of a company where the company fails or is unable to fulfill the company's obligations to debtors because the company experiences a shortage and insufficient funds where total liabilities are greater than total assets. Companies with indications of bankruptcy from financial distress calculations will usually be more careful, especially in managing their finances, so that companies are motivated to protect themselves from various risks that must be faced, one of which is hedging. In previous research conducted by Yustika, Cheisviyanny, and Helmayunita (2019), financial distress proxied by the altman z-score influences company hedging decisions. This is different from research conducted by Manova (2017), which states that financial distress proxied by the altman z-score does not affect company hedging decisions.

Based on the explanation above, it can be seen that there are differences in research results where there are studies that say they have an effect and some say they have no effect, so it is necessary to do a re-test so that researchers are interested in researching the effect of liquidity, growth opportunity, and financial distress on hedging decisions.

LITERATURE REVIEW
Agency theory

Agency theory explains the relationship between the party giving the authority, namely the principal (investor) and the party receiving the authority, namely the agent (manager). The existence of a working relationship between the investor and the manager will cause a conflict of interest. Conflicts of interest occur when management does not always act in the interests of owners (investors), which in this case is the behavior of managers who avoid existing risks, one of which is by making hedging decisions. Hedging activities can result in additional costs that must be incurred in its use, which will reduce the return that will be received by investors. Agency problems can certainly be overcome but will cause agency costs (agency costs) that are borne by the principal and agent. Jensen and Meckling (1976) divide agency costs into monitoring costs, bonding costs, and residual loss. Monitoring costs are costs borne by the principal to monitor agent behavior, for example, to measure, observe, and control agent behavior. Bonding costs are costs borne by agents to establish and comply with mechanisms that guarantee that agents act in the interests of the principal. Residual loss is a sacrifice in the form of reduced principal prosperity as a result of differences in agent decisions and principal decisions.

Hedging

According to Ayuningtyas, Warsini, and Mirati (2019), hedging is an attempt made by a company to protect company from exposure to exchange rate fluctuations. Hedging is policy companies take to protect companies from financial risks caused by increases in foreign exchange rates, interest rates and commodity prices (Yustika, Cheisviyanny, & Helmayunita, 2019). Hedging is a strategy used by companies to reduce business risks that arise unexpectedly. Hedging can be done using derivatives. Derivatives are contracts or agreements between two parties to sell and buy certain goods (commodities and securities) in the future at an agreed price at this time. (R Br Aritonang, Christina Daat, & Noor Andriati, 2018).

From the explanation above, it can be concluded that hedging is a strategy carried out to protect assets owned by companies from unpredictable risks, such as increases in foreign exchange rates, interest rates and commodity prices.

Liquidity

Liquidity is the company's ability to convert the company's assets into cash or to obtain cash to meet short-term obligations (Subramanyam, 2017). According to R Br Aritonang, Christina Daat, and Noor Andriati (2018), liquidity refers to the ease and speed with which assets can be converted into cash (without loss of value). The more liquid a company's assets, the less likely the company will experience problems in paying the company's short-term obligations. The liquidity ratio is a ratio that provides an overview of a company's ability to pay debts that mature within one year (Brigham & Houston, 2018).

From the explanation above, it can be concluded that liquidity is the ability to convert the company's assets into cash to pay short-term obligations on time.

Growth Opportunity

Growth opportunity is the company's ability to develop in the future by taking advantage of existing investment opportunities (Bodroastuti, Paranita, & Ratnasari, 2019). According to Manova (2017), growth opportunity is an opportunity owned by a company to develop itself in the market. Companies with a high growth opportunity value indicate that the company has the profitability to grow and is favored by potential investors. According to Verawaty, Jaya, and Megawati (2020), growth opportunity is an opportunity owned by a company to grow in the future.

From the explanation above, it can be concluded that growth opportunity is the ability or opportunity owned by a company to grow and develop the company in the future by taking advantage of investment opportunities.

Financial Distress

Financial distress is the inability of the company to manage the company's finances and generate negative company operating profits, causing the company to be unable to pay the principal loan and loan interest (Yustika, Cheisviyanny, & Helmayunita, 2019). Financial distress is a process of decreasing position financial problems experienced by companies that can cause companies to experience financial difficulties and lead to bankruptcy (Ayuningtyas, Warsini, & Mirati, 2019).

According to Manova (2017), financial distress is the condition of a company that fails or can no longer fulfill obligations to debtors because the company experiences a lack of funds where the company has total liabilities greater than total assets. Companies with indications of financial difficulties will try to be more careful in managing their finances, which will result in companies being compelled to protect themselves from various risks, including risks from fluctuations in currency exchange rates. The existence of debts and receivables in foreign currency can also worsen the company's financial situation if hedging is not carried out.

From the explanation above, it can be concluded that financial distress is the company's inability to manage the company's finances resulting in a decline in the company's financial

condition, this puts the company in a difficult condition and if it continues, the company may experience bankruptcy in the future.

Hypotheses and a Theoretical Framework
The Effect of Liquidity on Hedging Decisions

Liquidity is the company's ability to convert assets into cash or to obtain cash to meet the company's short-term obligations (Subramanyam, 2017). In research conducted by Megawati, Wiagustini, and Artini (2016) stated that if a company has short-term debt in foreign currency, the value of the debt will also fluctuate following the movement of foreign currency exchange rates, so this will affect the level of liquidity of the company. To avoid or minimize this risk, the company will try to protect the company by hedging. So the lower the liquidity value of a company, the higher the use of hedging, and vice versa, the higher the company's liquidity value, the lower the hedging decision.

H1: Liquidity Affects Hedging Decisions
**The Effect of Growth Opportunity on Hedging Decisions**

Growth opportunity is an opportunity owned by a company to develop itself in the market (Manova, 2017). According to research conducted by Utami, Sriyanto, and Purbasari (2018), a high company growth opportunity indicates a company's opportunity to enlarge its operations and can make the company maintain its viability. The company needs large funds to finance this growth to take advantage of these opportunities. Therefore the company will try to maintain the income earned to be reinvested and at the same time, the company will continue to use alternative funding through large amounts of debt. Funding through this debt will increase the risk that is owned by the company, as a result the company will be encouraged to hedge in order to minimize the impact of the risk.

H2: Growth Opportunity Affects Hedging Decisions
The Effect of Financial Distress on Hedging Decisions

Financial distress is a company condition where the company fails or can no longer fulfill its obligations to debtors because the company experiences a lack of funds where the company's total liabilities are greater than its total assets (Manova, 2017). The higher the financial distress experienced by the company, the more likely the company will experience financial difficulties, which will push the company toward bankruptcy. This makes companies that are experiencing financial difficulties predicted to be motivated to carry out hedging to protect the company from financial risks that could threaten the company's condition in the future. (Fitriani & Khairunnisa, 2020).

H3: Financial Distress Affects Hedging Decisions
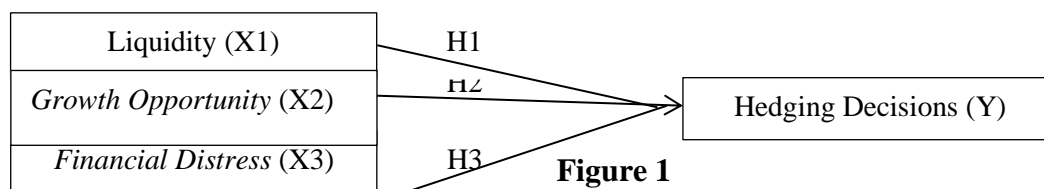
Figure 1
Theoretical Framework
Source: Processed by Researchers

RESEARCH METHODS

This study's population and research objects are manufacturing companies listed on the Indonesia Stock Exchange for 2016-2020. In this study, researchers used a purposive sampling technique. Purposive sampling is a sampling technique using certain considerations and criteria. The criteria for determining the number of samples to be used in this study are as follows:

1. A manufacturing company listed on the Indonesia Stock Exchange (IDX) for 2016-2020.
2. Companies that present consistent and consistent financial reports for 2016-2020.
3. Companies that submit their financial reports in rupiah for 2016-2020.
4. Manufacturing companies with debts and receivables in foreign currencies during 2016-2020.

Based on predetermined sample criteria, the number of samples used in this study is as follows:

Table 2 Sample Selection

No.	Information	Number
1.	Manufacturing companies listed on the Indonesia Stock Exchange (IDX) for 2016-2020.	143
2.	Companies that do not present financial reports consistently for 2016-2020 in a row.	(5)
3.	Companies that do not submit their financial statements in rupiah.	(28)
4.	Manufacturing companies that have no debts and receivables in foreign currency during the 2016-2020 period.	(46)
	Number of samples	64
	Total observations (5 Years)	320

Source: Processed by Researchers

The data analysis method used in this study is the logistic regression. Logistic regression is used when researchers want to test whether the probability of occurrence of the dependent variable can be predicted with the independent variable (Ghozali, 2018). Logistic regression analysis was performed to see the effect of liquidity, growth opportunity, and financial distress on hedging decisions. Logistic regression is used because this study has a dependent variable measured using dummy data. The following is the logistic regression equation model used in this study:

$$\text{Ln } P/1\text{-}P = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Information:

ln	= log of odds
P	= Probability/probability of hedging activity
α	= Constant
β1.β2.β3	= Logit regression coefficient
X1	= liquidity
X2	= Growth opportunity
X3	= Financial distress
ε	= Epsilon (error term)

The following is a description of the variables used in this study:

Hedging

Hedging is a strategy carried out to protect assets owned by a company from unpredictable risks such as increases in foreign exchange rates, interest rates and commodity prices. Hedging in this study will be measured using a dummy variable where companies that use derivative instruments as hedging activities are given a value of 1 and companies that do not use derivative instruments as hedging activities are given a value of 0. This measurement is supported by previous research conducted by Bodroastuti, Paranita, & Ratnasari (2019); Manova (2017); dan Yustika, Cheisviyanny, & Helmayunita (2019).

Liquidity

Liquidity is the ability to convert the company's assets into cash to pay short-term obligations on time. The liquidity ratio used in this study is the Current Ratio which uses current assets to meet the company's short-term obligations. The current ratio is a comparison between current assets and current debt. This calculation is in accordance with research conducted by Ayuningtyas, Warsini, & Mirati (2019); Bodroastuti, Paranita, & Ratnasari (2019); Manova (2017). The current ratio (CR) calculation formula is as follows:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Growth
Opportunity

Growth opportunity is the ability or opportunity owned by the company to grow and develop the company in the future by taking advantage of investment opportunities. Growth opportunity in this study is calculated using market to book value. This calculation is in accordance with the research of Astyrianti and Sudiartha, 2017; Ayuningtyas, Warsini, and Mirati, 2019; Bodroastuti, Paranita, and Ratnasari, 2019 which calculates growth opportunity by comparing the company's market value (Market Value-MV) with the company's book value (Book Value-BV). The formula for calculating market to book value is as follows:

$$\textit{Growth opportunity} = \frac{\text{MVE}}{\text{BVE}}$$

Financial distress

Financial distress is the company's inability to manage its finances resulting in a decline in the company's financial condition, which puts the company in a difficult condition. If it continues, the company can experience bankruptcy in the future. Financial distress in this study is calculated using the Z-Score Altman. This calculation is in accordance with previous research, namely the research of Ayuningtyas, Warsini, and Mirati, 2019; Bodroastuti, Paranita, and Ratnasari, 2019; Manova, 2017; Nuzul and Lautania, 2015 which measure financial distress using Altman's Z-score because Altman's Z-score is a ratio that can measure and predict the tendency and non-bankruptcy of companies (Altman 2000). Altman's Z-score calculation formula is:

$$Z = 1{,}2\ X1 + 1{,}4\ X2 + 3{,}3\ X3 + 0{,}6\ X4 + 1{,}0\ X5$$

Information:
X1 = Working CapitalTotal Assets
X2 = Retained Earnings/Total Assets
X3 = Earning before Interest and Taxes/Total Assets
X4 = Market Value of Equity/Total Liabilities

X5 = Sales/Total Assets
Z   = Overall Index or Score
Score:
Z > 2,99 Safe Zone
1,81 < Z < 2,99 Grey Zone
Z < 1,81 Distress Zone

RESULTS AND DISCUSSION
Descriptive Statistical Analysis

Table 3 Descriptive Analysis Results
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity	320	0,024	13,042	2,18647	1,866073
Growth Opportunity	320	-8,143	82,444	3,18303	8,481597
Financial Distress	320	-12,463	41,335	4,21354	5,314565
Hedging Decisions	320	0,00	1,00	0,2688	0,44400
Valid N (listwise)	320				

Source: SPSS ver. 26, Data Processed by Researchers (2022)

Based on table 3, it can be seen that the minimum value of the liquidity variable is 0,024 and the maximum value is 13,042. The average (mean) liquidity value of all the sampled manufacturing companies was 2,18647, while the standard deviation value was 1,866073. The standard deviation value is smaller than the mean, this indicates that there is no diversity in the liquidity variable.

The growth opportunity variable has a minimum value of -8,143 and the maximum value of the growth opportunity is 82,444. The average (mean) growth opportunity value of all the manufacturing companies that are sampled is 3,18303, while the standard deviation value is 8,481597. The standard deviation value is greater than the mean, this indicates that there is diversity in the growth opportunity variable.

The financial distress variable has a minimum value of -12,463 and the maximum value for financial distress is 41,335. The average (mean) financial distress value of all the sampled manufacturing companies was 4,21354, while the standard deviation value was 5,314565. The standard deviation value is greater than the mean, this indicates that there is diversity in the financial distress variable.

Overall Model Fit

Table 1 Overall Model Fit Results
Iteration History[a,b,c]

Iteration		-2 Log likelihood	Coefficients Constant
Step 0	1	372,855	-0,925
	2	372,488	-1,000
	3	372,487	-1,001
	4	372,487	-1,001

Iteration History[a,b,c,d]

Iteration		-2 Log likelihood	Coefficients			
			Constant	Liquidity (X1)	Growth Opportunity (X2)	Financial Distress (X3)
Step 1	1	345,310	-0,993	-0,135	0,033	0,061
	2	342,262	-1,046	-0,215	0,047	0,078
	3	342,112	-1,041	-0,232	0,055	0,079
	4	342,111	-1,042	-0,232	0,056	0,079
	5	342,111	-1,042	-0,232	0,056	0,079

Source: SPSS ver. 26, Data Processed by Researchers (2022)

Based on the table 4, the results of -2Log likelihood in Block 0: Beginning Block is 372,487, where this assessment is only carried out using the constants without independent variables. Meanwhile, if the variables of liquidity, growth opportunity and financial distress are included in the model, then the -2Log Likelihood value is smaller to 342,111, which means that a decrease in the -2Log Likelihood value can mean that adding independent variables to the model can improve model fit and show a regression model that better or in other words model fits the data.

Determination Coefficient Test (*Nagelkerke R Square*)

Table 2 *Negelkerke's R square* Results

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	342,111[a]	0,091	0,132

Source: SPSS ver. 26, Data Processed by Researchers (2022)

The results of the output data above show that the Nagerkerke R Square value is 0,132, meaning an independent variable of 13,2% can explain the dependent variable. In comparison, the remaining 86,8% is explained by other independent variables outside the research model. Examples of other independent variables outside the research model that might explain the dependent variable are leverage and firm size.

Hosmer and Lemeshow's Goodness of Fit Test

Table 3 *Hosmer and Lemeshow's Goodness of Fit Test* Results

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	14,554	8	0,068

Source: SPSS ver. 26, Data Processed by Researchers (2022)

From the Hosmer and Lemeshow Goodness of Fit Test results, the Chi-square value was 14,554 with a significance of 0,068. Based on the results obtained with a significance value of more than 0,05, it can be concluded that the model can predict the observed value.

Logistic Regression Analysis

Table 4 Logistic Regression Analysis Results

Variables in the Equation

		B	S,E,	Wald	df	Sig,	Exp(B)
Step 1[a]	Liquidity (X1)	-0,232	0,116	3,986	1	0,046	0,793
	Growth Opportunity (X2)	0,056	0,037	2,313	1	0,128	1,058
	Financial Distress (X3)	0,079	0,040	3,855	1	0,050	1,082
	Constant	-1,042	0,237	19,387	1	0,000	0,353

The results of testing the regression coefficients produce the following models:

$$\text{Ln } P/1\text{-}P = -1,042 - 0,232X1 + 0,056X2 + 0,079X3 + e$$

Based on the test, the liquidity variable gets an Exp(B) value of 0,793, which means that companies with a high level of liquidity have a probability of making hedging decisions of 0,793 times less than companies with low liquidity. The growth opportunity variable gets an Exp(B) value of 1,058, which means that companies with high growth opportunity levels have a probability of making hedging decisions of 1,058 times greater than companies with low growth opportunity. The financial distress variable gets an Exp(B) value of 1,082, meaning that companies with a high level of financial distress have a probability of making hedging decisions of 1,082 times greater than those with low financial distress.

Hypothesis Test

Omnibus Tests of Model

Table 5 *Omnibus Tests of Model* Results

Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig,
Step 1	Step	30,377	3	0,000
	Block	30,377	3	0,000
	Model	30,377	3	0,000

Based on the results of table 8, the Omnimbus Test of Model value can be seen from the Chi square test, which has a value of 30,377 with df = 3 and also has a sig 0,000 which means less than 0,05. This shows that all the independent variables (liquidity, growth opportunity and financial distress) in this study are feasible to use and the independent variables simultaneously influence the dependent variable.

Partial Test (*Wald*)

Table 6 *Wald* Test Results

Variables in the Equation

		B	S,E,	Wald	df	Sig,	Exp(B)
Step 1[a]	Liquidity (X1)	-0,232	0,116	3,986	1	0,046	0,793
	Growth Opportunity (X2)	0,056	0,037	2,313	1	0,128	1,058
	Financial Distress (X3)	0,079	0,040	3,855	1	0,050	1,082
	Constant	-1,042	0,237	19,387	1	0,000	0,353

Based on the test, it was found that the regression coefficient for the liquidity variable was -0,232, meaning that every increase in liquidity by 1 unit will cause a decrease in hedging decisions by 0,232. In addition, the liquidity variable shows a significant level of 0,046, which is less than 0,05. This means that it can be concluded that liquidity affects hedging decisions.

The growth opportunity variable has a regression coefficient value of the liquidity variable of 0,056, which means that every increase in growth opportunity by 1 unit will cause an increase in hedging decisions by 0,056. However, the growth opportunity variable has a significant level of 0,128, greater than 0,05. This means that growth opportunity has no significant effect on hedging decisions.

The financial distress variable has a regression coefficient of 0,079, meaning that every increase in financial distress by 1 unit will increase hedging decisions by 0,079. In addition, the financial distress variable shows a significant level of 0,05 at a significance level of 0,05. This means that financial distress has a significant effect on hedging decisions.

Discussion

The Effect of Liquidity on Hedging Decisions

The first hypothesis in this study is that liquidity affects hedging decisions. Liquidity in this study is measured using the quick ratio by dividing the current assets by current liabilities. Based on the hypothesis testing that has been done, the result is that H1 is accepted because the liquidity variable has a significant influence on hedging decisions. A high liquidity value does not make the hedging decision taken by a company high. On the contrary, high liquidity makes a company's hedge probability low, and this can be caused because a high liquidity value indicates that the company is in good financial condition because the company can pay its short-term obligations well and the company is not in a dangerous financial condition so that companies tend to consider hedging decisions using derivative instruments to be unnecessary.

The results of this study are in line with previous research conducted by R Br Aritonang, Christina Daat, and Noor Andriati (2018), who in their research stated that the higher the liquidity value calculated using the current ratio, the lower the probability of making hedging decisions by companies because the risk of financial difficulties experienced by companies tends to be low. The liquidity ratio in this study relates to a company's ability to meet its short-term debt, especially those with foreign currency short-term debt. The lower the liquidity ratio, the greater the risk of a company failing to meet its short-term obligations and the greater the threat of financial difficulties a company may face. The threat of increasing financial difficulties will have an impact on increasing hedging policies that companies can implement to reduce risks that may occur. If the company's liquidity ratio is high, it means that the company has succeeded in fulfilling its short-term obligations (Megawati, Wiagustini, & Artini, 2016).

The Effect of Growth Opportunity on Hedging Decisions

The second hypothesis in this study is that growth opportunity affects hedging decisions. Growth opportunity in this study is measured by dividing the MVE by the company's BVE. Based on the hypothesis testing that has been done, the result is that H2 is rejected, which means that the growth opportunity variable does not affects hedging decisions. These results indicate that even though the company has a good growth opportunity, this does not encourage the company to hedge. This could be due to the small number of assets or debt in foreign currency owned by the company and it could be because the company has other alternatives in dealing with existing risks so that growth opportunity do not affect hedging.

This study's results align with previous research conducted by Manova (2017) and Bodroastuti, Paranita, & Ratnasari (2019), which stated that growth opportunity has no significant effect on hedging decisions. This insignificant result could be due to manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) having limitations in conducting transactions in international trade so that growth opportunity are not a determining factor in hedging decisions. In general, manufacturing companies listed on the Indonesia Stock Exchange (IDX) have a relatively low number of export-import transactions and have debt in foreign currency that is relatively small, so that exposure does not have a significant effect on threatening company value (Bodroastuti, Paranita, and Ratnasari, 2019).

The Effect of Financial Distress on Hedging Decisions

The third hypothesis in this study is that financial distress affects hedging decisions. Financial distress in this study was measured using the altman z-score. Based on the hypothesis testing that has been done, the results show that H3 is accepted because the financial distress variable has a significant influence on hedging decisions. When a company is in financial difficulties, which can be seen by a low z-score, the company will be careful in carrying out the company's operations so as not to worsen the company's financial condition so as to overcome and also minimize existing risks, the company hedges so that the company not adding to existing losses.

This study's results align with previous research conducted by Amaliyah (2020), which stated that financial distress affects hedging decisions. Companies that are in financial trouble as seen through a low z-score, the greater the probability of a company doing hedging and vice versa. Financial distress occurs due to cash flow irregularities, large debts, losses in company operations, and interest on loans that increase the value of debt. In addition, large companies will usually expand their business operations to various countries and use different currencies, which can pose a risk of exchange rate fluctuations. If the company fails to address this risk, the company may face financial difficulties, which is highly undesirable for any company. Therefore, companies must protect themselves from these risks by hedging (Amaliyah,2020).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This research was conducted with the aim of examining the effect of liquidity, growth opportunity, and financial distress on hedging decisions. The data used in this study is secondary data derived from the financial statements of manufacturing companies listed on the IDX for the 2016-2020 period with a total of 320 observations. The tests carried out in this study were carried out using logistic regression analysis with SPSS 26 software. Based on the test results that have been done and also based on the purpose of conducting research, the following conclusions can be drawn:

1. Liquidity has an influence on hedging decisions.
2. Growth opportunity has no effect on hedging decisions.
3. Financial distress has an influence on hedging decisions.

Recommendations

Following are some recommendations for further research:

1. In this study, as previously explained, three variables are used: liquidity, growth opportunity, and financial distress. Because this study only discusses these variables, the researcher recommends for further researchers to add other variables that have not been used in this study, such as leverage and firm size.
2. Future research can examine companies other than the manufacturing sector to find out the conditions that exist in other sector companies.
3. In future research, other variable proxy references can be used, such as for liquidity, the quick ratio and current ratio can be used, for growth opportunity, the capital expenditure to book value of assets (CAPBVA) proxy can be used, and for financial distress, the spingate S-score can be used so can give a variety of results that can be used as a comparison.

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