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Does the growth opportunities have an impact on hedging decision from own-stated companies in Indonesia?

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ABSTRACT

This research aims to find out whether there is a relationship between growth opportunities and hedging. In the current era, all companies that have good growth opportunities will have a preference to expand their business activities to the international level. To reduce the risk of foreign exchange losses due to exchange rate fluctuations, the company will rely on hedging. However, this topic is still being debated because several previous research results have different results on whether growth opportunity affects hedging or not. This research uses a sample of state-owned companies listed on the Indonesia Stock Exchange from 2016 to 2020 whose data is obtained through the documentation method. The method used is purposive sampling and logistic regression analysis to assess the effect and possibility of hedging decisions used based on their growth opportunities. The results of this research indicated that growth opportunities have a significant positive effect on hedging. This is because state-owned companies have a preference to expand their operational activity, and this thing potentially needs international transaction and companies will involve in exchange rate fluctuation, so to reduce the potential losses, companies will need hedging. This research can be a preference for companies, to know the factor that affects the hedging decision, so companies will take the right decision to manage the risks, which is in this case, to do hedging or not do hedging. Based on this research, companies are recommended seeing the growth opportunities as a factor that have an impact on hedging decision. If the growth opportunities of the company increase, it is recommended to do hedging decision to minimize the risks of exchange rate fluctuation. The limitations of the research are the sample used only state-owned companies that listed on Indonesia Stock Exchange, so the research results can not be generalized, and the research period used is still quite short, namely the 2016-2020 period. For future research, it is recommended to use the sample besides state-owned companies so that the research results can be generalized, and to extend the research time longer so that it can provide research results that are more appropriate and comprehensive.

KEYWORDS

growth opportunity; hedging; risk; risk management; exchange rate exposure

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Introduction

Management is always trying to strengthen the company so that it can continue to exist. The management's purpose is to make the company able to survive and earn the maximum profit, also avoid losses from any existing risks. Companies that grow well have the potential to require resources that are not only local but also international. However, problems will arise when transactions are carried out in different currencies and cause foreign exchange differences.

Exchange differences are created when one country's currency is compared to another country's currency. An advantage that the company has if the currency in which the company originates is stronger than the unit of currency used for the transaction agreement. However, it will be a loss if the currency unit owned by the company is smaller than the currency unit for the transaction agreement because foreign exchange losses will arise.

State-owned companies in Indonesia are companies that have good growth. Almost all the operational activities of state-owned companies involve international transactions that can potentially be influenced by foreign exchange differences, knowing that the current rupiah currency is not in a stable condition. For this reason, risk management instruments are needed that can minimize the risks that may arise as a result of foreign exchange differences. One of the instruments for managing foreign exchange risk is to use hedging policies. Hedging is a risk management tool to reduce the risk that comes from currency fluctuations (Ross et al., 2012)

The greater the opportunity for the company to grow, the greater the opportunity for the company to be involved in international transactions to maintain the adequacy of the company's activities. This thing will give a potential reason for companies to carry out hedging. According to research Marhaenis & Artini (2020) and Hidayah & Prasetiono (2016), the company's opportunities to grow will affect the companies to use hedging policies.

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However, the company's opportunity to grow will lead to the consideration that the funds used will be better used to improve operations than for hedging. According to research from Habibah et al. (2020), the company's growth opportunity has a negative effect on hedging decisions. Meanwhile, according to Winasseto & Utami (2019) and Guniarti (2015), growth opportunities have no significant effect on hedging. The emergence of this research gap makes this research interesting to study. This research uses state-owned companies in Indonesia Stock Exchange from 2016 until 2020.

Literature review

Literature review in this study is:

Portfolio Theory

This theory is a theory that explains about companies should not invest only in one sector, but as much as possible the company should divide investments into various sectors so that the risk of loss from the investment will be minimized at the lowest point (Brigham & Ehrhardt, 2011). This theory was put forward by Markowitz which is used to carry out risk management to avoid losses. Investment in the company’s portfolio is not only on strictly positive conditions at all times (Karatzas & Kardaras, 2021). That’s why companies must pay attention to the opportunity when a good time to invest in some sector, to make good quality portfolio and manage the risks in company’s activity. This theory explains that in addition to focusing on operational activities, companies must also pay special attention to investments that can avoid the risk of loss by using hedging.

Risk Management

Risk is identified with something that must be minimized to make sure that the negative impact will not distract the company’s activity (Nobanee et al., 2021). Risk management is a systematic activity to understand problems, process, analyze, and solve problems that arise from risks to reduce these risks (Djohanputro, 2008). Risk is something that must be avoided because it can cause unwanted losses. For this reason, good management is needed in managing risk so that it does not interfere with the company's activities. In terms of currency fluctuations, the risk management that can be carried out by the company is by hedging.

Hedging

Hedging is a risk management activity that has a purpose to reduce risks originating from currency fluctuations (Ross et al., 2012). Hedging is an activity that is carried out by company to minimize the risk that potentially come while the company do currency transaction (Pitangga & Puryandani, 2019). The company use hedging to manage overinvestment (Lobo et al., 2020). Hedging is needed by companies, because hedging can be an alternative of risk management and avoid companies from losses arising from foreign exchange differences. Usually, companies that have broad activities covering international, will have a preference for hedging to reduce the possibility of losses. To measure hedging, you can use a dummy variable (0 = no hedging, and 1 = hedging).

Growth Opportunities

According to Myers (1977) growth opportunities are conditions where companies have the opportunity to grow and develop in carrying out their activities. The more the company has the opportunity to grow and develop, the company will expand its operational and investment activities not only domestically but include activities related to the international world. The wider the company's activities, the greater the company will hedge. The company's Growth Opportunity will affect the amount of dividends paid by the company. The size of a company's growth opportunity will affect the amount of funds needed for investment (Wulandari et al., 2020). This is because international activities include currency fluctuations, thus potentially creating foreign exchange losses. Besides this case, companies that want to increase growth opportunities, will need some funds from another entity to ensure that the company’s growth opportunity is higher (Herawati & Abidin, 2020). For this reason, the company will try to reduce risk by carrying out risk management, one of which is by using hedging. This indicates that the greater the growth opportunities of a company, the greater the company's desire to hedge. Previous research from Marhaenis & Artini (2020), Hadinata & Hardianti (2019), and Hidayah & Prasetiono (2016) explained that growth opportunities have a positive impact on hedging. With the explanation, so the hypothesis in this study is:
H: Growth opportunities have a positive effect on hedging decisions.

Methods

Data Collection Technique

This research takes a population of state-owned companies listed on the Indonesia Stock Exchange from 2016 to 2020. This study uses a purposive sampling technique with the criteria that companies that routinely report annual financial statements during the study period, and have a positive growth opportunity. Based on the processed data, there are 83 research samples. This research is a research that uses secondary data with documentation method.

Variables for The Research

1. Hedging Decision

The company will do everything possible to avoid losses, so the company will hedge to reduce foreign exchange losses due to its operational activities. The dummy variable is used to examine the data, namely 0 for no hedging, and 1 for hedging.

2. Growth Opportunity

Growth opportunity is an opportunity for a company to grow and develop as well as to expand its network of business activities. The way to measure growth opportunity is to calculate the difference between the current total assets and the previous total assets, then compare it with the previous total assets.

$$Growth\ Opportunities = \frac{Current\ Total\ Assets - Previous\ Total\ Assets}{Previous\ Total\ Assets}$$

Analysis Method

This study uses descriptive statistical analysis to know the characteristic of observation data such as the average, minimum, maximum, and standard deviation of the processed data. This study also uses logistic regression analysis. Logistic regression analysis is a test to know the effect of independent variable on dependent variable, especially the dependent variable is using categorical data (Ghozali, 2016). In this research, logistic regression used to examine the possibility of using hedging in terms of growth opportunities. If the *wald statistic* > *chi square* and the probability value (sig) < significance level, so it is mean that there is a significant impact from independent variable on dependent variable. In logistic regression analysis, there are some test to make sure that the data is fit with the model, so the test can be continued to logistic regression test. These tests are Hosmer and Lemeshow test, to test the suitability of the model under the research. If the significance value is greater than 0.05 so that the model can be analyzed, because the model can explain the data. Next test is overall model fit, to know if the independent variable will affect the dependent variable. The model can be good if it is in a condition where -2 Log L step number = 0 > -2 log L step number = 1, and -2 Log L block number = 0 < -2 log L block number = 1. The regression model will be better if there is a decrease in log likelihood. And the last test to know that the model of logistic regression is good, by testing the model summary to know the percentage about the impact of independent variable on dependent variable.

Results

This study obtained the results of the tests that have been carried out, including:

Descriptive Statistical Analysis

Table 1. Descriptive Statistics Table

Descriptive Statistics Table					
Variable	N	Minimum	Maximum	Mean	Std. Deviation
Growth_Opp	83	0,0011	1,4572	0,21149	0,240467

Based on the results of the analysis, the observed data is 83 data, with the minimum value of growth opportunity owned by Aneka Tambang company in 2017 with a value of 0,0011, while the maximum value of growth opportunities is owned by the company Garuda Indonesia in 2020 with a value of 1,457. The average growth opportunity of own-stated companies is 0.211, which shows the average growth of own-stated companies is 21%. The standard deviation is 0.24 which indicates that the data is spread by 24% from the average data.

Hosmer and Lemeshow Test

Table 2. Hosmer and Lemeshow Test

Hosmer and Lemeshow Test		
Chi-square	Df	Sig.

12,137	8	0,145

Based on the Hosmer and Lemeshow table, the chi-square value is 12.137 with a significance of 0.145. This significance value is greater than 0.05 so that the model can be analyzed, because the result represented that the model can explain the data.

Overall Mode Fit

Table 3. Overall Model Fit

Step	**-2 log likelihood**
Step 0	108,605
Step 1	102,888
Block	**Overall Percentage Value**
Block 0	63,9
Block 1	69,9

Based on the overall fit model, there is a decrease in the value of -2 log likelihood where step 0 is 108.605 and step 1 is 102.888 which indicates that the model used in this regression passed the test and shows a good model to be studied. In addition, there was an increase in the overall percentage value, where the overall percentage value of block 0 was 63.9 and block 1 was 69.9, indicating that this independent variable can explain the dependent variable.

Table 4. Model Summary

Model Summary		
-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
102,888[a]	0,067	0,091

Based on the model summary, the Nagelkerke R square value of 0.91 or 91% indicates that growth opportunities can explain hedging by 91% and 9% or the rest is explained by other variables.

Regression Coefficients Test

Table 5. Logistics Regression Coefficeints

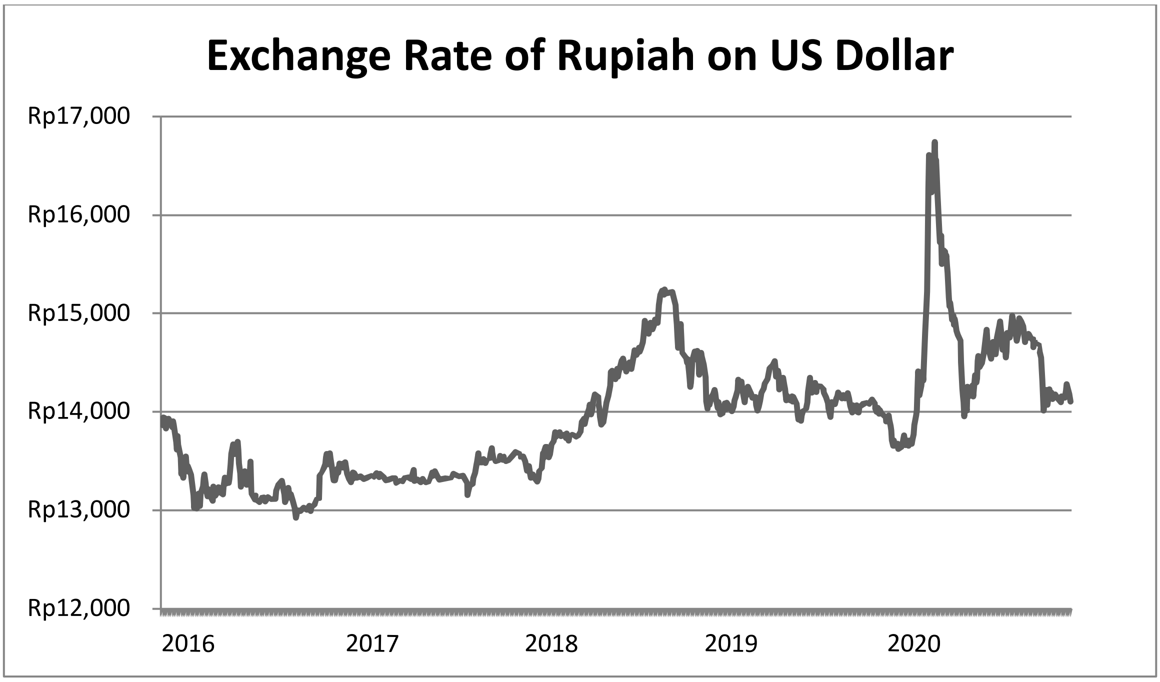
Variables in the Equation					
Variable	B	S.E.	Wald	df	Sig.
Growth_Opp	2,457	1,153	4,542	1	0,033
Constant	1,098	0,337	10,6	1	0,001

The results of this study explained that the beta value is 2,547; shows that the direction of the relationship between growth opportunities and hedging is positive, with a significance of 0.033 and a wald value of 4.542; shows that this relationship has a significant effect because 0.033 < 0.05; and wald value 4,542 < 3,841 (chi square table value). This explains that the research hypothesis is **accepted**, and growth opportunities have a significant positive effect on hedging. This research is supports the previous research from Marhaenis & Artini (2020), Gustira et al. (2018), and Nuzul & Lautania (2015) which state that growth opportunities have a positive effect on hedging. These results contradict with the research from Winasseto & Utami (2019), Dharmiyanti & Darmayanti (2020), and Sudarma & Sari (2020) which state that growth opportunities have no significant effect on hedging, and Habibah et al. (2020) which states that growth opportunities have a negative effect on hedging.

Discussion

. Based on the research results, growth opportunity is a factor that has an influence on hedging decisions. This is because the greater the company's opportunity to grow, the greater the company's desire to develop its business activities, not only at the local or national level, but also at the international level. This event can occur in resource transactions to meet the company's operational needs (Windari & Purnawati, 2019). In relation to transactions involving an international scope, companies will potentially be involved in foreign exchange differences, be it foreign exchange losses or foreign exchange gains.

State-owned companies listed on the Indonesia Stock Exchange are companies that incidentally have positive growth opportunities. From this research, it can be seen that the average growth opportunity of state-owned companies is 21%. This means that the company's average growth compared to the previous year was 21% if judged by the difference in total assets. This is certainly a good thing because it means that state-owned companies continue to experience positive growth. The larger the company has growth opportunities and is involved in exchange rate fluctuations, the state-owned companies must carry out risk management to avoid potential losses that can occur. This is because the current condition of the rupiah currency is not very good and fluctuates. The following is evidence of the volatility of the rupiah when compared to currencies that are often used as a medium of exchange in international transactions, such as the US dollar.



Source: (Bank Indonesia, 2021)

Figure 1. Exchange rate of rupiah on US dollar

Based on the graph of the exchange rate against the US dollar, it can be seen that fluctuations in the rupiah currency during the study period did not show stability. For this reason, in carrying out operational activities that include buying and selling of resources in an international scope, state-owned companies will potentially experience foreign exchange losses. For this reason, risk management instruments are needed to reduce risks that may arise. The trick is to use hedging. Hedging is an activity in order to obtain foreign currency in the future, using local currency so that exchange rate fluctuations will not affect the transaction currency value (Fahmi, 2016).

Apart from buying and selling resources for operational activities, companies that have good growth opportunities will require greater funding to support their business activities (Brigham & Houston, 2019). For this reason, additional funds are needed that can be obtained from external or even foreign funding (Marhaenis & Artini, 2020). For this reason, the company will be faced with foreign exchange differences that can harm the company in conditions of exchange rate uncertainty. For this reason, hedging is needed to avoid foreign exchange losses from foreign debt owned by the company.

This is in line with portfolio theory, where companies should not only focus on investing in one area, but must think about other areas so that when weaknesses arise from one area, at least they can be covered by other fields so that they do not experience total losses. This is explained that the company will manage the risk from overinvestment (Lobo et al., 2020). For example, Garuda Indonesia in 2017 as a state-owned company with the highest growth opportunity compared to other state-owned companies listed on the Indonesia Stock Exchange, also hedged the avtur price in US dollars which could potentially create foreign exchange losses (Hasibuan, 2018).

This explanation shows that growth opportunities have a positive and significant effect on hedging. This study supports research from Livingstone & Ngugi (2017), Marhaenis & Artini (2020), Gustira et al. (2018), and Nuzul & Lautania (2015) which state that growth opportunities have a positive effect on hedging. These results contradict with the research from Seng & Thaker (2018) Winasseto & Utami (2019), Dharmiyanti & Darmayanti (2020), and Sudarma & Sari (2020) which state that growth opportunities have no significant effect on hedging, and Habibah et al. (2020) which states that growth opportunities have a negative effect on hedging.

Conclusion

This study found that growth opportunities have a significant positive effect on hedging. This is because the greater the company's growth opportunities, the greater the desire for state-owned companies to hedge because the scope of their business will increase and not only deal in the national scope, but also internationally where there will be potential losses on foreign exchange due to the instability of the rupiah. the greater the company's growth opportunities, the company will need extra fund from another entity to make the growth opportunities increased. This research is in accordance with portfolio theory which suggests that companies divide risk into various fields even though the company's condition is quite good, in order to minimize future risk in the event of a failure.

The implication of this research is the results of this research can contribute to be a preference for companies, to know the factor that affect the hedging decision, so companies will take the right decision to manage the risks, which is in this case, to do hedging or not do hedging. Based on this research, companies recommended to see the growth opportunities as a factor that have an impact on hedging decision. If the growth opportunities of the company increased, it is recommended to do hedging decision to minimize the risks of exchange rate fluctuation.

This study has limitations in independent variables which only use growth opportunities so that other factors that may affect hedging cannot be ascertained. The sample used only state-owned companies that listed on Indonesia Stock Exchange, so the research results can not be generalized, and the research period used is still quite short, namely the 2016-2020 period. For this reason, it is hoped that future researchers will examine other variables that might affect hedging. For future research, it is recommended to use the sample besides state-owned companies so that the research results can be generalized, and to extend the research time longer so that it can provide research results that are more appropriate and comprehensive.

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