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Financial Distress, Growth Opportunities, and Dividend Policy on Firm Value through Company Hedging Policies: Empirical Study on Property and Real Estate Companies Listed on the Indonesian Stock Exchange

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Abstract

This study aims to obtain empirical evidence of the effect of financial distress, growth opportunities, and dividend policies on firm value through company hedging policies. This research was conducted on property and real estate companies listed on the Indonesian stock exchange in 2016-2018. The sampling technique used purposive sampling, with several criteria, to get a sample size of 55 companies. The data analysis technique used is path analysis. Hypothesis testing shows that financial distress has a positive effect on hedging, while growth opportunities and dividend policy have no significant effect on hedging. Financial distress hurts firm value. Growth opportunities and dividend policy have a positive effect on firm value. This study also found that hedging has no significant effect on firm value. Also, this study is unable to prove the company's hedging policy as a mediating variable.

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1 Introduction

The main purpose of the company is to maximize shareholder wealth or firm value (value of the firm) (Salvatore, 2005). Certain company value enhancement strategies require companies to expand into foreign markets, this is because foreign markets provide better opportunities in terms of increasing corporate cash flow (Madura, 2006). The tight business competition requires each company to continuously develop innovations and improve its performance in various aspects to continue to survive and compete in their respective industries. Companies that are unable to do these things will usually be eroded by their highly competitive competitors. As a result, the company will face financial difficulties that can lead to bankruptcy (Atmaja, 2008).

Investors always expect high returns on their invested capital, of course, this can only be done if the company is not facing financial distress. The occurrence of financial difficulties in a company will result in a decrease in the value of the company (Kanyugi, 2016). The company can increase firm value, by reducing information asymmetry. One way to reduce information asymmetry is by providing a signal to outsiders. One of them is in the form of reliable financial information and will reduce uncertainty about the company's prospects (Mak & Kusnadi, 2005; Villalonga & Amit, 2006).

Growth opportunity reflects the success of the company's operations in the past period and can be used as a prediction for future growth. Investors will be attracted to companies with high growth opportunities because this is a signal that the company has profitable prospects in the future. Companies with high growth opportunities tend to spend their investment expenditures with their capital to avoid the underinvestment problem, namely not implementing all investment projects with positive values by the company managers (Goyal et al., 2002; Choi et al., 2015). Company growth opportunities provide positive aspects to investors regarding the company's market value and gain the trust of investors to invest their funds in the company and hope to get high returns in the future so that this will increase the company's value.

Apart from growth opportunities, the dividend policy implemented by the company is also a signal from the company to investors. Companies that pay high dividends to investors will increase the confidence of investors. Investors tend to want the certainty of the return they invested and minimize the uncertainty of the investment they provide. If the dividends distributed to investors get bigger, it will increase the share price which will also increase company value (Pattenden & Twite, 2008; Denis & Osobov, 2008).

The importance of company value for the company itself has made company management make various efforts to make the company value remain good in the eyes of investors. One of the efforts made by the company to increase company value is to expand its market share abroad. Companies that increase their corporate value by expanding their market share to international markets, of course, will use more than one currency. This can create a financial risk for the company due to changes in currency rates. This risk can be avoided by making cash transactions. However, not all transactions that occur in the company can be made in cash, as a result, debt and receivables in a foreign currency will arise. So that if there is a change in foreign exchange rates, the company will experience a loss of profit due to the change. This risk will also be faced by importers and exporters as well as companies that transact or have liabilities and assets in foreign currency.

Several things must be considered by companies that often transact with everything related to exchange rates and interest rates. Among them, the company must forecast the movement of foreign exchange rates, monitor the company's performance against the risk of loss caused by foreign exchange fluctuations, and design strategies to avoid losses from the risk of foreign exchange fluctuations. For this reason, companies need to implement hedging strategies to avoid the risk of loss due to foreign currency fluctuations. Hedging is a strategy created to reduce the emergence of unexpected business risks, in addition to the possibility of obtaining a profit from this investment. The principle of hedging is to cover the loss of the initial asset position with the gain from the position of the hedging instrument. Before implementing the hedging policy, the hedger only held several initial assets. After implementing the hedging policy, the hedger holds several initial assets and hedging instruments known as the hedging portfolio (Sunaryo, 2007).

Suriawinata (2004), found evidence that the company's hedging policy is an activity to increase the company's value or activity to increase firm value, where it is proven that the market provides more value to companies implementing the hedging programs. Aretz et al. (2007), stated that company hedging decisions can increase firm value by reducing cash flow volatility which has an impact on decreasing the probability of companies dealing with the risk of bankruptcy and financial distress. The company's risk management strategy by using hedging can also help companies provide cash flow availability and the need for funds to invest so that the company avoids underinvestment problems. Hedging is said to be able to assist companies in providing funds when the company has the opportunity to

invest in a project and has a positive net present value of the company, but the company does not have the cost to fund the project, so hedging can be used as a means to assist the company in providing cash flow for the investment.

Several companies listed on the Indonesia Stock Exchange are affected by fluctuations in foreign exchange rates. The Bakrie Group property company, PT Bakrieland Development Tbk (ELTY), also recorded a loss of Rp 78 billion in the second quarter of 2015. One of the losses suffered by the company was due to foreign exchange losses, the large amount of the company's debt was in US dollars so that the company experienced a fairly large dollar debt exposure. Another phenomenon that has occurred due to currency depreciation is PT Alam Sutera Tbk (ASRI), recorded a decrease in net profit in the third quarter of 2015 by 93.58% to Rp 62.58 billion or Rp 3.24 per share from the net profit in the same period in 2014 which was Rp 818.92 billion or Rp 41.68 per share. The decline in ASRI's performance was mainly due to the huge foreign exchange loss in the third quarter of 2015, namely Rp. 791.32 billion.

Research on the factors that influence firm value has been widely carried out in Indonesia, but few have linked it to company hedging policies. In this regard, researchers feel the need to research the use of hedging as an alternative to currency risk mitigation, especially in property and real estate companies listed on the Indonesia Stock Exchange (IDX). The researcher wants to examine the influence of several factors that are thought to influence the company's hedging policy, namely financial distress, growth opportunity, and dividend policy, as well as the impact on firm value. This research was conducted on property and real estate companies listed on the IDX, considering that the industry is exposed to the risk of exchange rate fluctuations and theoretically the hedging policy can be used as a means to mitigate this risk.

Signaling theory explains why companies have the urge to provide financial statement information to external parties. The encouragement of companies to provide information is because there is information asymmetry between the company and outside parties. One way to reduce information asymmetry is to provide signals in the form of information to outsiders. Shareholder value maximization theory explains that the rationality of the hedging policy is to maximize shareholder value by overcoming financial distress problems, underinvestment problems, and asset substitution problems.

Hypothesis:
H1: Financial distress has a positive effect on the company's hedging policy.
H2: Growth opportunities have a positive effect on the company's hedging policy.
H3: Dividend policy has a negative effect on company hedging policy.
H4: Financial distress has a negative effect on firm value.
H5: Growth opportunity has a positive effect on firm value.
H6: Dividend policy has a positive effect on firm value.
H7: Firm hedging policy has a positive effect on firm value.
H8: Hedging policy is able to mediate the effect of financial distress on firm value
H9: Hedging policy is able to mediate the effect of growth opportunity on firm value.
H10: Hedging policy is able to mediate the effect of dividend policy on firm value.

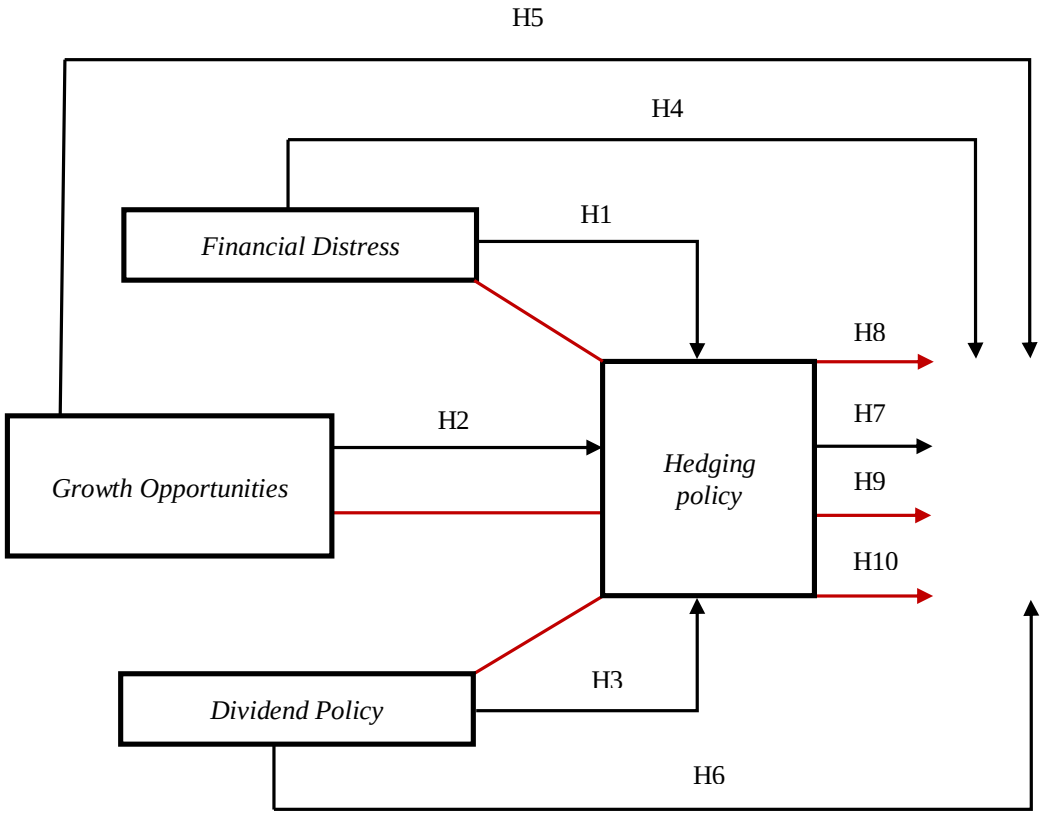

Figure 1. The research concept

2 Materials and Methods

The location of this research was conducted at property and real estate companies listed on the Indonesia Stock Exchange. The population in this study were all property and real estate companies listed on the IDX for the 2016-2018 period. The sampling technique in this study was purposive sampling, with the following criteria:

1) Property and real estate companies that are not delisted and publish financial and annual reports for the 2016-2018 period.
2) Companies that have complete data to calculate financial distress variables, growth opportunities, dividend policies, hedging policies, and firm value.
3) Companies that publish their financial statements using the Indonesian Rupiah.

Definition operational

1) Financial Distress

Financial distress is measured using the Z Score Altman model,

$Z = X1 + X2 + X3 + X4$ ..... (1)

Information:

Z = Z-Score Index
X1 = Working capital / Total assets
X2 = Retained Earning / Total Assets
X3 = Earning Before Interest and Tax / Total Assets
X4 = Market Value of Equity to Book Value of Total Debt

2) Growth Opportunities

Growth is calculated by calculating the ratio of MVE (market value of equity) and BVE (book value of equity). It can be formulated as follows:

value of equity). It can be formulated as follows:

Growth = MVE / BVE ……. (2)

Information :

MVE = EAT / EPS x closing price

BVE = Total Asset-Total Liabilities

3) Dividend Policy

Dividend policy is proxied through the Dividend Payout Ratio or DPR (Horne & Wachowicz, 2012).

$$\text{Dividend Payout Ratio} = \frac{Dividend\ per\ share}{Earning\ per\ share} \ldots\ldots\ldots\ldots\ldots (3)$$

4) Hedging Policy

Hedging is represented by hedging foreign exchange derivatives, which is a measure of the nominal value of foreign currency derivatives divided by the value of the total asset. This variable is a proxy for the amount of foreign currency exposure hedged by the company.

$$\text{FX } Derivative = \frac{\text{Nilai } Foreign\ Currency\ Derivative}{\text{Total } Assets} \ldots\ldots\ldots (4)$$

5) Company Value

One of the alternatives used in assessing firm value is to use Tobin's Q. The formula is as follows:

$$Q = \frac{(EMV + D)}{(EBV + D)} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (5)$$

Where :

Q = Company value

EMV = Market value of equity

EBV = Book value of total assets

D = Book value of total debt

EMV is obtained from the multiplication of the closing share price at the end of the year (closing price) with the number of shares outstanding at the end of the year. EBV is obtained from the difference between the company's total assets and its total liabilities. The analysis used in this research is path analysis, which is a method for analyzing the direct effects and indirect effects of the measured variables (Ghozali, 2013). The SPSS application program is used to assist in analyzing the data used in research. This research model is divided into two sub-structures, as follows:

1) The first sub-structure analyzes the effect of financial distress, growth opportunities, and dividend policy on hedging policy.
2) The second sub-structure analyzes the effect of financial distress, growth opportunities and dividend policy, and hedging policy on firm value.

The effect of mediation needs to be tested with the Sobel test by comparing the t value of the indirect effect of the independent variable on the dependent variable through the intervening variable with the t-table. The purpose of testing classical assumptions is to get a good regression model that is truly capable of providing reliable and unbiased estimates following the rules of Best Linear Unisex Eslimator (BLUE) (Gujarati 2006). The classical assumption test carried out in this study includes the Normality Test, Heterskedasticity Test, and Multicollinearity Test.

3 Results and Discussions

The number of companies registered in the period 2015-2018 is 55 companies. With the purposive sampling method, 38 companies were selected. However, at the time of data processing, there had been data outliers, according to 7 companies, so that the processed data in this study are 31 companies or 93 observations.

3.1 Descriptive statistics

The results of descriptive statistical tests in this study are presented to provide information about how the proxies of the research variables are.

Table 1
Descriptive Statistics of Research Data

	N	Min	Max	Mean	Std. Deviation
X1	93	0,169	15,887	5,00450	3,478352
X2	93	-0,296	26,477	1,29052	3,146003
X3	93	0,000	102,740	4,65688	13,161290
Y1	93	0,000	0,395	0,05355	0,115405
Y2	93	0,213	7,955	1,19788	1,199683

Source: Data processed (2020)

3.2 Results of data analysis

Substructure Analysis
1) Substructure Analysis I

Table 2
Substructure Analysis I

Model	Unstandardized Coefficients	T	Sig
	Beta		
(Constant)	0.109	4.935	0
X1	-0.010	-2.796	0.006
X2	-0.002	-0.662	0.510
X3	-0.001	-0.864	0.390
F_{hitung}	2,972		
Sig. F_{hitung}	0,036		
R^2	0,091		
Adjusted R^2	0,060		

3.3 Results of data analysis

According to Table 2, it can be seen that the R2 value is 0.091. This means that 9.1 percent of the variance in the hedging policies of property and real estate companies listed on the Indonesia Stock Exchange in 2015-2018 is explained by the variance of financial distress, growth opportunities, and dividend policy, while the remaining 90.9 percent is influenced by another factor. There are not included in the research. The sig value. F- count = 0.036 <α = 0.05. This means that the independent variables, namely financial distress, growth opportunities, and dividend policy, are statistically significant explanations for the hedging policies of property and real estate companies listed on the Indonesia Stock Exchange in 2015-2018.

If -table ≤ t.count ≤ t.table then Ho is accepted and Ha is rejected, but if t-count ≤ -table or tcount> t-table then Ho is rejected and Ha is accepted. The amount of the t-table number with the provisions α = 0.05 and df = (n-k) or (93-4) = 89. From these provisions, the t-table number is 1.986.

a) The Effect of Financial Distress on Hedging Policy

Based on Table 2, the results of the t-test on the financial distress variable show t.count (-2.796) <t.table (1.986) and the significant value of t.count (0.006) <α (0.05), so that H0 is rejected and H1 is accepted. This means that financial distress has a significant positive effect on property and real estate hedging policies listed on the Indonesia Stock Exchange in 2015-2018. This is in line with research conducted by Sianturi & Pangestuti (2015), which states that financial distress has a positive effect on company hedging policies.

Companies that have a low Z-Score value indicate the company is classified as unhealthy, or a high tendency for bankruptcy. Financial Distress is a stage of decline in financial conditions that occurred before bankruptcy (Fenandar & Raharja, 2012). A company will not go bankrupt suddenly but in a long process of time. Companies experiencing financial difficulties will be careful in managing their finances so that they are motivated to protect themselves from various risks, one of which is the risk of foreign exchange fluctuations. Therefore, the higher the level of the company's financial distress, the greater the company's motivation to hedge.

b) The Influence of Growth Opportunities on Hedging Policies

Based on Table 2, the t-test results on the growth opportunity variable show - t table (-1,986) <t.count (-0,662) <t.table (1.986) and the significant value t.count (0.51)> α (0.05), so that H0 is accepted and H1 rejected. This means that growth opportunities have no significant effect on hedging property and real estate policies listed on the Indonesia Stock Exchange in 2015-2018. The second hypothesis in this study which states that growth opportunities have a positive effect on hedging policy is rejected. The results of this study are not in line with research conducted by Klimczak (2008); Ameer (2010); and Ahmad & Haris (2012); which stated that growth opportunities have a positive effect on hedging policy. However, this study obtained the same results as research conducted by Judge (2007); Guniarti (2014); and Chaundry et al. (2014).

Some companies prefer to do natural hedging by not making any transactions using foreign currencies. Companies that have a high growth rate will experience the problem of a lack of investment costs. This research proves that companies prefer not to source their funds from foreign parties so that companies do not need to make transactions using foreign currencies. Property and Real Estate Companies that have a high growth opportunity, prefer to get an injection of funds from within the country so that companies do not need to protect from risks arising from foreign currency transactions.

c) Effect of Dividend Policy on Hedging Policy

Based on Table 2, the t-test results on the dividend policy variable show - t table (-1,986) <tcount (-0,864) <t.table (1.986) and the significant value t.count (0.39)> α (0.05), so that H0 is accepted and H1 rejected. This means that the dividend policy has no significant effect on hedging property and real estate policies listed on the Indonesia Stock Exchange in 2015-2018. The third hypothesis in this study which states that the dividend policy has a negative effect on hedging policy is rejected. The results of this study are not in line with research conducted by Haushalter (2000); Sprcic & Sevic (2012); and Chaundry et al. (2014).

This indicates that the higher the DPR (dividend payout ratio), the smaller the probability of the company to make hedging decisions. Investors only see the company's ability to pay its obligations, the higher the dividend distribution ratio, the better the company's finances will be. If the company distributes dividends in cash, the company will receive a small amount of retained earnings, the retained earnings are used by the company for investment so that the funds used for hedging will decrease and the company tends not to hedge using derivative instruments as risk management.

2) Substructure Analysis II

Table 3
The Influence of Financial Distress, Growth Opportunities, Dividend Policy, and Partial Hedging Policy on Firm Value

Model	Unstandardized Coefficients Beta	T	Sig
(Constant)	0.75	3.057	0.003
X1	0.037	1.046	0.298
X2	0.135	3.643	0.000
X3	0.023	2.532	0.013

Y1	-0.345	-0.33	0.742
F_{hitung}	5,198		
Sig. F_{hitung}	0,001		
R^2	0,191		
Adjusted R^2	0,154		

Based on Table 3, it can be seen that the R2 value is 0.191. This means that 19.1 percent of the variance in the value of property and real estate companies listed on the Indonesia Stock Exchange in 2015-2018 is explained by the variance of hedging policies, financial distress, growth opportunities, and dividend policy, while the remaining 80.9 percent is influenced by the variance of other factors not included in the study model. Sig value. F.count = 0.001 <α = 0.05. This means that the independent variables, namely hedging policy, financial distress, growth opportunities, and dividend policy, are statistically significant explanations for the value of property and real estate companies listed on the Indonesia Stock Exchange in 2015-2018. If –table ≤ t-count ≤ t-table then Ho is accepted and Ha is rejected, but if t-count ≤ -table or tcount> t-table then Ho is rejected and Ha is accepted. The amount of the t-table number provided that α = 0.05 and df = (n-k) or (93-5) = 88. From these provisions, the t-table number is 1.987.

a) The Effect of Financial Distress on Firm Value

Based on Table 3, the results of the t-test on the financial distress variable show - t table (-1,987) <tcount (1.046) <ttable (1.987) and a significant value of t-count (0.298)> α (0.05), so that H0 is accepted and H1 is rejected. This means that financial distress does not have a significant effect on the value of property and real estate companies listed on the Indonesia Stock Exchange in 2015-2018. The fourth hypothesis in this study which states that financial distress has a negative effect on firm value is rejected. The results of this study are not in line with research conducted by Lasmanah (2012); Wijaya et al. (2014); and Kanyugi (2016); which states that financial distress has a negative effect on firm value.

The results showed that financial distress had a negative but insignificant effect on firm value. Investors seem to be less responsive to financial distress experienced by property and real estate companies listed on the IDX. The types of investors who invest in property and real estate companies listed on the IDX appear to be long-term investors, as well as a trust or loyal investors. These investors are not affected by the level of financial distress experienced by the company, because they believe the company can overcome the problems experienced, which causes the company to experience financial distress. Investors who invest in property and real estate companies on the IDX also seem to have different analyzes in investing, and the level of financial distress from the company is not one of them so that the level of financial distress experienced by the company does not affect the response of investors as reflected in the stock price (Hertzel et al., 2008; Simpson & Gleason, 1999; Widhiadnyana & Wirama, 2020).

b) The Influence of Growth Opportunities on Firm Value

Based on Table 3, the results of the t-test on the growth opportunities variable show t count (3.643)> t table (1.987) and a significant value of t (0.000) <α (0.05), so that H0 is rejected and H1 is accepted. This means that growth opportunities have a significant positive effect on the value of property and real estate companies listed on the Indonesia Stock Exchange in 2015-2018. The fifth hypothesis in this study which states that financial distress has a negative effect on the company's hedging policy is accepted. This is in line with research conducted by Hermuningsih (2013).

Growth opportunities have a positive effect on changes in stock prices, this means that investors will respond positively to information about company growth, thereby increasing firm value as reflected in increased share prices. In signal theory, states that the actions taken by companies can provide clues to how investors view the company's prospects in the future (Brigham & Houston, 2006). These signals can provide information that states that the company is better than other companies.

Companies that have high growth opportunities indicate that the market assesses that the return on the company's investment will be greater in the future. The company's growth opportunities provide positive aspects to investors regarding the company's market value and gain the confidence of investors to invest their funds in the company with the hope of getting high returns in the future.

c) The Effect of Dividend Policy on Firm Value.
Based on Table 3, the results of the t-test on the dividend policy variable show t-count (2.532)> t-table (1.987) and a significant value t-count (0.013) <α (0.05), so that H0 is rejected and H1 is accepted. This means that the dividend policy has a significant positive effect on the value of property and real estate companies listed on the Indonesia Stock Exchange in 2015-2018. Based on the results of hypothesis testing, it shows that the dividend policy has a significant positive effect on firm value. The sixth hypothesis in this study which states that dividend policy has a positive effect on firm value is accepted. This is in line with research conducted by Soliha & Taswan (2002) and Budagaga (2017) which state that dividend policy has a positive effect on firm value.

Dividend policy has a positive effect on firm value, this indicates that the higher the dividends distributed by the company, the more it will increase the value of the company as reflected in the stock price. Dividends are part of a profit paid by the company to shareholders, therefore dividends will be distributed if the company makes a profit. The greater the dividends that are distributed, the more the value of a company is increased (Taswan & Soliha, 2002). The return that investors expected after investing their funds in the company is in the form of dividends and an increase in the stock value. Companies that pay high dividends to investors will increase the high confidence of investors. Investors tend to want the certainty of the return they invested and minimize the uncertainty of the investment they provide. The increase in dividend payments is seen as a signal that the company has good prospects.

d) The Effect of Hedging Policy on Firm Value
Based on Table 3, the results of the t-test on the hedging policy variable show - t table (-1,987) <t-count (-0,330) <t-table (1.987) and a significant value of t-count (0.742)> α (0.05), so H0 is accepted and H1 is rejected. This means that the hedging policy does not have a significant effect on the value of property and real estate companies listed on the Indonesia Stock Exchange in 2015-2018.

Based on the results of hypothesis testing, it shows that the hedging policy has no significant effect on firm value. The seventh hypothesis in this study which states that hedging policy has a positive effect on firm value is rejected. The results of this study are not in line with the research conducted by Suriawinata (2004) which stated that hedging policies have a positive effect on firm value. However, this study has the same results as research conducted by Khediri (2010); Naito & Laux (2011); and Guo (2013), which states that hedging policy does not have a significant effect on firm value.

The hedging policy implemented by the company does not affect company value, which is reflected in the movement of share prices. The use of derivative products does not affect firm value (Khediri, 2010). Firm value is influenced by company risks and the use of hedging is considered not related to efforts to mitigate these risks (Naito & Laux, 2011). According to research conducted by Guo (2013), when interest rates increase and are volatile, hedging can cause unexpected interest rate losses and lower financial performance of REIT (Real Estate Investment Trust).

Mediation Variables Test

1) The Effect of Financial Distress on Firm Value Mediated by the Hedging Policy

The effect of mediation needs to be tested with the Sobel test as follows:

$$\begin{aligned} Sab &= \sqrt{b^2Sa^2 + a^2Sa^2 + Sb^2Sa^2} \\ &= \sqrt{(-0{,}345)^2(0{,}003)^2 + (-0{,}010)^2(0{,}003)^2 + (1{,}045)^2(0{,}003)^2} \\ &= \sqrt{0{,}0000010712 + 0{,}0000000009 + 0{,}0000098282} \\ &= 0{,}0033015678 \end{aligned}$$

The next step is to calculate the t statistical value of the effect of mediation with the following formula:

$$t = \frac{ab}{Sab} = \frac{-0{,}010\,x - 0{,}345}{0{,}0033015678} = \frac{0{,}00345}{0{,}0033015678} = 1{,}0449580924$$

Because of t count = 1.04495 is smaller than the t table with a significance level of 0.05, which is 1.96, it can be concluded that the mediation coefficient of 0.00345 is not significant and means that there is no mediating effect

of hedging policy in mediating the effect of financial distress on firm value. The results showed that the hedging policy was not able to mediate the effect of financial distress on firm value. Financial distress has a positive effect on the company's hedging policy, while the hedging policy has no significant effect on firm value, which is because investors think that the hedging policy does not add value to the company that does it.

2) The Influence of Growth Opportunities on Firm Value Mediated by Hedging Policies
The effect of mediation needs to be tested with the Sobel test as follows:

$$\begin{aligned} Sab &= \sqrt{b^2Sa^2 + a^2Sa^2 + Sb^2Sa^2} \\ &= \sqrt{(-0{,}345)^2(0{,}004)^2 + (-0{,}002)^2(0{,}004)^2 + (1{,}045)^2(0{,}004)^2} \\ &= \sqrt{0{,}0000019044 + 0{,}0000000001 + 0{,}0000174724} \\ &= 0{,}0044019159 \end{aligned}$$

The next step is to calculate the t statistical value of the effect of mediation with the following formula:

$$t = \frac{ab}{Sab} = \frac{-0{,}0002\ x - 0{,}345}{0{,}0044019159} = \frac{0{,}00069}{0{,}0044019159} = 0{,}1567499263$$

Because of t count = 0.15674 is smaller than the t-table with a significance level of 0.05, which is 1.96, it can be concluded that the mediation coefficient of 0.00069 is not significant and means that there is no mediating effect of hedging policy in mediating the effect of growth opportunities on firm value. The results showed that the hedging policy was not able to mediate the effect of growth opportunities on firm value. Growth opportunities in this study do not have a significant effect on hedging policy, and hedging policy does not affect firm value. Growth opportunities do not affect hedging policy because companies prefer to practice natural hedging, by obtaining sources of funds for companies from within the country, so as not to cause transactions in foreign currencies. The hedging policy does not affect firm value, because investors think that the hedging policy does not add value to the company that does it.

3) The Effect of Dividend Policy on Firm Value Mediated by the Hedging Policy
The effect of mediation needs to be tested with the Sobel test as follows:

$$\begin{aligned} Sab &= \sqrt{b^2Sa^2 + a^2Sa^2 + Sb^2Sa^2} \\ &= \sqrt{(-0{,}345)^2(0{,}001)^2 + (-0{,}001)^2(0{,}001)^2 + (1{,}045)^2(0{,}001)^2} \\ &= \sqrt{0{,}0000001190 + 0{,}0000000000 + 0{,}0000010920} \\ &= 0{,}0011004776 \end{aligned}$$

The next step is to calculate the t statistical value of the effect of mediation with the following formula:

$$t = \frac{ab}{Sab} = \frac{-0{,}001\ x - 0{,}345}{0{,}0011004776} = \frac{0{,}000345}{0{,}0011004776} = 0{,}3135002408$$

Because of t count = 0.31350 is smaller than the t-table with a significance level of 0.05, namely 1.96, it can be concluded that the mediation coefficient of 0.00069 is not significant and means that there is no mediating effect of hedging policies in mediating the effect of growth opportunities on firm value. The results showed that the hedging policy was not able to mediate the effect of the dividend policy on firm value. Dividend policy has no significant effect on company hedging policy, and hedging policy does not affect firm value. The dividend policy does not affect the hedging policy because companies that pay dividends tend to have less retained earnings. Later the retained earnings will be reused by the company so that the funds used for hedging will be reduced, and the company tends not to hedge. The hedging policy does not affect firm value, because investors think that the hedging policy does not add value to the company that does it.

4 Conclusion

1) Financial distress has a positive effect on the company's hedging policy.
2) Growth opportunities do not have a significant effect on the company's hedging policy.
3) The dividend policy does not have a significant effect on the company's hedging policy.
4) Financial distress has a negative effect on firm value.
5) Growth opportunities have a positive effect on firm value.
6) Dividend policy has a positive effect on firm value.
7) The company's hedging policy does not have a significant effect on firm value.
8) The hedging policy is unable to mediate the effect of financial distress on firm value.
9) The hedging policy is unable to mediate the effect of financial distress on firm value.
10) The hedging policy is unable to mediate the effect of financial distress on firm value.

Suggestions

1) For Property and Real Estate companies listed on the Indonesia Stock Exchange
   a) We recommend that the company still pay attention to the hedging policy adopted by the company, although in this study hedging does not affect firm value. Because hedging is an obligation that must be done, following Bank Indonesia Regulation No. 16 of 2014, especially for companies that have transactions in foreign currencies.
   b) Based on the descriptive statistical results of the growth opportunities variable, several companies had minus values. The company should pay attention to this since in this study growth opportunities have a positive effect on firm value. This is so important because company value is the investor's perception of the company's success rate which is closely related to its share price. High share prices make the company's value becomes high, and increase market confidence not only in the company's current performance but also in the company's prospects.

2) For further research
   This study has several limitations, including the following:
   a) To add to the scientific repertoire related to company value and hedging, further research can be carried out in other sectors outside of the property and real estate. Also, research can use a large number of samples from various types of companies with a longer research period.
   b) Further research can examine the types of hedging transactions that have the most influence on firm value by taking into account the sector or type of company; reviewing the right hedging composition for the company; determine how much hedging price is adequate for the company and other matters. The various results of these studies are expected to help companies hedge appropriately considering that hedging is not only a necessity but also an obligation for the company.

Conflict of interest statement
The authors declared that they have no competing interests.

Statement of authorship
The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

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