

## The Effect of Agency Costs on Hedging Policy in Indonesian Public Companies

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### Abstract

The purpose of this study is to examine the effect of agency costs on company hedging policies. This study use the concept of hedging policies derived from synchronizing foreign exchange derivatives based on agency theory and hedging with foreign exchange debt based on balancing theory. The novelty of this research is the application of the synthesis of agency theory and balancing theory as indicators of hedging policies. The hedging policy based on foreign exchange derivatives is synchronized with the hedging policy based on foreign debt. The population was companies listed on the Indonesia Stock Exchange (IDX) in 2012-2017. Using the purposive sampling method, 78 companies for each year from 2012 - 2017 were obtained with a total of 468 data. This research used a panel data regression method. The hypotheses were tested with the Hausman Test, which shows the best research model is the Fixed Effect Model. The results of the study concluded that financial distress and underinvestment had a significant positive effect on hedging policies, while business risk did not affect hedging policies because most companies had relatively low foreign sales. The findings of this study have theoretical implications that support agency and balancing theory.

## Pengaruh Agency Cost terhadap Kebijakan Hedging pada Perusahaan Publik di Indonesia

### Abstrak

*Tujuan penelitian ini untuk menganalisis pengaruh biaya keagenan terhadap kebijakan hedging perusahaan. Penelitian ini menggunakan kebijakan hedging yang diturunkan dari sinkronisasi derivatif valuta asing berdasarkan teori keagenan dan hedging dengan hutang valuta asing berdasarkan teori balancing. Kebaruan penelitian ini adalah penerapan sintesis teori agency dan teori balancing sebagai indikator kebijakan hedging. Kebijakan hedging berdasarkan derivatif valuta asing disinkronisasikan dengan kebijakan hedging berdasarkan foreign debt. Populasinya adalah perusahaan terdaftar di Bursa Efek Indonesia (BEI) pada tahun 2012-2017. Menggunakan metode sampling purposive, terkumpul 78 perusahaan dari tahun 2012-2017 dengan total 468 data. Penelitian ini menggunakan metode regresi data panel. Hipotesis diuji dengan Hausman Test, yang menunjukkan model penelitian terbaik adalah Fixed Effect Model. Hasil penelitian menyimpulkan financial distress dan underinvestment berpengaruh positif terhadap kebijakan hedging secara signifikan, sedangkan business risk tidak berpengaruh terhadap kebijakan hedging karena sebagian besar perusahaan memiliki foreign sales yang relatif rendah. Temuan penelitian ini memiliki implikasi teoretis yang mendukung teori agency dan balancing.*

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## INTRODUCTION

For multinational companies, access to capital in the global market will reduce the cost of equity and debt costs compared to domestic companies. Access to capital in global markets also allows multinational companies to manage their debt ratios. Multinational companies are in a more advantageous position than domestic companies because cash flows are diversified internationally (Eiteman et al., 2010).

However, international trade poses a risk of fluctuations in foreign exchange rates which causes uncertainty about the value of assets and liabilities. Fluctuations in foreign exchange rates not only have the potential to have a negative impact on cash flow and shareholder value but can also threaten the survival of the company concerned (Modigliani & Miller, 1958).

Therefore, to anticipate the negative impact of fluctuations in foreign exchange rates and protect the interests of shareholders, multinational companies adopt a hedging policy. Hedging as a financial strategy will guarantee that the value of foreign exchange used to pay (outflow) or the amount of foreign exchange that will be received (inflow) in the future will not be affected by changes in foreign exchange rate fluctuations (Faisal, 2011).

Agency problems have the potential to occur in companies with large free cash flow because the agent will invest the excess cash obtained to optimize its personal profit by not making cash payments to shareholders. Besides, agency problems can occur due to information asymmetry between the principal and the agent. In the field of corporate risk management, agency problems are shown in managerial behavior towards risk and hedging. Efforts to overcome agency problems will have agency cost consequences (Jensen & Meckling, 1976).

Several studies analyze the determinants of hedging policies that are affected by foreign exchange exposure. The rationality of hedging policy explains that the use of foreign derivatives is intended to maximize the value of its

shareholders through reducing agency costs in the form of financial distress, underinvestment, and business risk (Fitriasari, 2011; Nguyen, 2015; Nuzul & Lautania, 2015; Bodroastuti et al., 2019). Research on financial distress and hedging policies still meet mixed results. The higher the financial distress, the more volatile the net cash flow of the company so that the greater the motivation for implementing hedging policies (Bartram et al., 2010; Sprčić, 2011; Afza & Alam, 2016; Bodroastuti et al., 2019). However, several studies conclude that financial distress does not affect the company's hedging policies, because financial distress is not significant compared to the value of the company (Belghitar et al., 2013; Chaudhry et al., 2014; Nuzul & Lautania, 2015).

Corporate hedging activities are carried out to reduce underinvestment arising from the need to increase or extend the economic life of fixed assets (Al-Shboul & Alison, 2001; Gay & Nam, 2008). Companies with stable cash flow, low financial bonds, and flexible financials can ignore underinvestment (Magee, 2009; Fitriasari, 2011; Robiyanto et al., 2017).

By reducing cash flow fluctuations, hedging will reduce business risk triggered by the risk of loss due to foreign exchange differences from international trade transactions (MacMinn & Han, 2006; Chaudhry et al., 2014). Companies that have liquid assets tend not to be burdened with business risk and needless hedging instruments because they have hedging substitutes (Clark & Judge, 2009; Afza & Alam, 2016). The role of capital market imperfections in determining the demand for hedging (Belghitar et al., 2013). If access to external financing is expensive, companies with investment projects that require financing will hedge their cash flows to avoid losses, and immediately enter the capital market (Clark & Mefteh, 2011; Fitriasari, 2011; Chanzu & Gekara, 2014; Robiyanto et al., 2017).

Based on the balancing theory (trade-off theory), corporate funding uses an optimal capital structure that balances the benefits and returns of using debt. If the benefits of using debt are still large, then the debt can be added. But if

the sacrifice of using debt is greater than the benefits, then the debt does not need to be added again (Myers, 1984; Stulz, 2013).

The concept of equilibrium theory underpins companies increasing foreign debt to hedge foreign exchange exposures. Foreign debt can act as a natural hedge because companies with certain foreign exchange earnings can manage debt in the same foreign exchange to reduce the risk of foreign exchange (Nguyen, 2015; Nuzul & Lautania, 2015).

This study used the concept of hedging policies derived from synchronizing foreign exchange derivatives based on agency theory and hedging with foreign exchange debt based on balancing theory. In several studies based on agency theory, hedging policies are proxied with hedge ratios, whereas in previous studies based on balancing theory, hedging policies were proxied with foreign debt ratios. Derivation hedging policy proxy is formulated as follows (Paranita, 2019):

HED = hedge ratio x foreign debt ratio

$$\begin{aligned} \text{HED} &= \frac{\text{forex derivative}}{\text{total assets}} \times \frac{\text{foreign debt}}{\text{forex derivative}} \\ &= \frac{\text{foreign debt}}{\text{total assets}} \end{aligned}$$

Foreign debt to total assets indicates the effective use of foreign currency debt compared to the total assets owned by the company.

This study starts with some research gaps and contradictions in the results of the empirical research. This study will re-analyze the effect of agency cost on company hedging policies. Research on corporate hedging policies in Indonesia is still relatively limited due to the lack of disclosure of hedging policies in annual reports. Previous studies in Indonesia have used dummy variables as an indicator of company hedging policies. The novelty of this study is the use of foreign debt to total assets ratio as an indicator of hedging policy. The research objectives include analysis of the effect of financial distress, underinvestment, and business risk on company hedging policy.

### Hypothesis Development

Statement of Financial Accounting Standards (PSAK) 55 does not require public companies in Indonesia to disclose the notional value of the derivatives used. Some public companies listed on the Indonesia Stock Exchange state the use of derivatives in their hedging policies, without data on their notional values. Some other companies disclose the use of foreign currency debt as natural hedging. Therefore, in studies on public companies in Indonesia, it is most appropriate to use foreign debt to total assets as a proxy for corporate hedging policies (Paranita, 2019).

This study uses the long term debt as a proxy of financial distress (Stulz, 2013; Afza & Alam, 2016; Bodroastuti et al., 2019). Financial distress is a condition when a company experiences difficulties in paying its liabilities to creditors. The higher the long term debt indicates the higher the financial risk faced by the company and the probability of financial distress. Financial distress will increase costs related to bankruptcy costs, legality costs, and most importantly, shift the attention of managers from the focus of creating shareholder value. A high probability of financial distress does not support companies to invest in profitable projects in the future (Stulz, 2013). Then the higher the long term debt, the more accurately the company must manage its cash flow optimally and tend to apply hedging policy to secure its cash flow. So hypothesis 1 is formulated as follows:

H1 : Financial distress has a positive effect on corporate hedging policy.

The capital expenditure used as a proxy for underinvestment (Al-Shboul & Alison, 2001; Fitriasisari, 2011; Robiyanto et al., 2017). Leveraged companies will forego valuable investment opportunities in prospective projects if the expected project benefits only captured by creditors, while shareholders only get insufficient returns (underinvestment). Companies tend to allocate their debt and retained earnings for capital expenditure to maximize

shareholder value (Myers, 1984). Capital expenditure is the company's expenditure to buy a fixed asset or add value to a fixed asset, increase the production capacity of a fixed asset, or extend the economic life of a fixed asset. High concentrated cash flow for capital expenditure will divert the company's focus from potential investment projects, while also threatening liquidity. Underinvestment conditions will encourage higher capital expenditure, but subsequently, cash flows need to be secured with hedging policies. So hypothesis 2 is formulated as follows:

H2 : Underinvestment has a positive effect on corporate hedging policy.

While foreign sales to total sales ratio used as a proxy of business risk (Al-Shboul & Alison, 2009; Clark & Mefteh, 2011; Chanzu & Gekara, 2014). Business risk is a condition when companies face the possibility of lower profits than targeted, or experience a loss. When a company has liabilities or receivables in foreign currencies, the company faces foreign currency exposure because its cash flow in the local currency will be affected by the contract. In a global business that is increasing, contracts with foreign currency denominations have become so common that the urgency of managing foreign exchange exposures is greatly increased. Foreign exchange fluctuations force companies to do foreign sales in the hope of optimal profits. However high foreign sales contain greater foreign exchange exposure that has the potential to threaten cash flow liquidity. In this condition, it is urgent to control the corporate risk with hedging policy. So hypothesis 3 is formulated as follows:

H3 : Business risk has a positive effect on corporate hedging policy.

## METHOD

Data collected from the Indonesian Capital Market Directory (ICMD); company financial statements; and IDX Fact Book for 2012-2017. The population is all companies

listed on the Indonesia Stock Exchange (BEI) from 2012 to 2017. The number of companies in that period are 433, 463, 487,503, 518, and 555 companies.

The sampling method used in this study was purposive sampling (Greene, 2013), based on the following criteria: 1) Non-financial companies that have foreign debt as their hedging strategy; 2) the company has foreign exchange exposures arising from international transactions, export sales, foreign exchange assets, and liabilities, or has overseas subsidiaries; 3) the company has data relating to the measurement of agency costs. Based on the purposive sampling criteria, a sample of 78 companies per year was obtained during the year 2012-2017 or a total of 468 data.

This research applies panel data regression model. According to Gujarati (2015), there are four options in the data regression model panel, namely the Pooled Ordinary Least Squares (OLS) model, the Cross-Section Fixed Effects Model (FEM), the Period Fixed Effects Model (FEM), and the Random Effects Model (REM). To determine a better model between the Pooled OLS Model and the Fixed Effects Model, the Redundant Test is used. As for determining a better model between the Fixed Effects Model and the Random Effects Model, the Hausman test was used. If the chosen model is the Fixed Effects Model, a classic assumption test will be performed so that the predictive model meets the Best Linear Unbiased Estimation rules.

The operational definitions of each variables are presented in the Table 1. Based on the research hypotheses, the following structural equations are arranged:

$$HED = \beta_0 + \beta_1 FD + \beta_2 UI + \beta_3 BR + \varepsilon$$

Notes :

HED : Hedging Policy

$\beta_0$  : Intercept

$\beta_{1,2,3}$  : Regression Coefficients

FD : Financial Distress

UI : Underinvestment

BR : Business Risk

$\varepsilon$  : Error Term

**Table 1.** Operational Definition of Variables

Variables	Operational Definition	Proxy
Financial Distress	Natural logarithm of long-term debt.	Ln Long Term Debt
Underinvestment	Natural logarithm of expenses to buy fixed assets, increase value of fixed assets, or extend the economic life of fixed assets.	Ln Capital Expenditure
Business Risk	Ratio of total sales comes from international transactions to total sales affected by foreign exchange.	Foreign Sales to Total Sales Ratio
Hedging Policy	Ratio of foreign debt to total assets affected by foreign exchange.	Foreign Debt to Total Assets Ratio

**RESULT AND DISCUSSION**

**Descriptive**

A descriptive statistical illustration of all the variables analyzed is listed in Table 2. The Hedging Policy Variable (HED) has an average of 0.45 with a standard deviation of 0.19, a minimum value of 0.20 and a maximum value of 0.91. The average company selected as a sample is a company with a moderate hedging policy in terms of foreign debt to total assets because its foreign debt is 45% compared to the company’s total assets.

**Table 2.** Descriptive Statistic

	HED	FD	UI	BR
Mean	.446553	4.532352	11.12129	.438592
Median	.406120	3.602224	10.85000	.261578
Maximum	.911087	12.89734	27.46000	6.434298
Minimum	.201852	.972802	1.010000	.035885
Std. Dev.	.189644	3.027961	5.954101	.678926

The Financial Distress (FD) variable has an average of 4.53 with a standard deviation of 3.03, a minimum value of 0.97 and a maximum value of 12.89. The average company selected as a sample is a company with an excellent financial position in terms of its relatively low long-term debt.

The Underinvestment (UI) variable has an average of 11.12 with a standard deviation of 5.95, a minimum value of 1.01 and a maximum value of 27.46. The average company selected

as a sample is a company with good investment and growth opportunities in terms of its moderate capital expenditure.

The Business Risk (BR) variable has an average of 0.43 with a standard deviation of 0.67, a minimum value of 0.03 and a maximum value of 6.43. The average company selected as a sample is a company with a relatively safe business risk in terms of foreign sales to total sales ratio because foreign sales are 43 percent compared to total company sales.

The Hausman test shows that the Fixed Effect Model is the best research model, so a classic assumption test needs to be done.

**Normality Test**

Based on the Histogram-Normality Test, the results of the residual normality test are described in Table 3.

**Table 3.** Normality Residual Test

Mean	-2.75e-16
Median	-.247010
Maximum	6.663378
Minimum	-3.257058
Std. Dev.	1.586694
Skewness	1.600326
Kurtosis	6.463095
Jarque-Bera	244.6092

The test produces Jarque-Bera value of 244.6092 and the significance of the probability value of 0.00000. The Jarque-Bera value compa-

red to the Chi-square table with a degree of freedom 462 of 124.303 was significant at 0.05. Therefore, it can be concluded that  $H_0$  which states that normally distributed residuals can be rejected. Gujarati (2015) states that the assumption of the normal distribution is mainly for small samples. This study uses a sample of 468 data obtained from all companies listed on the Indonesia Stock Exchange based on purposive sampling. Greene (2013) suggested that in the multiple regression there should be at least ten data for each variable. This study even has more than a hundred times the minimum sample, so the assumption of residual normality can be ignored.

**Heteroscedasticity Test**

This test was carried out with the White test and the Breusch-Pagan-Godfrey test. Both tests are carried out with the output in Table 4.

The White Test results show that all variables were not significant at 0.05, indicating there is no heteroscedasticity. Besides, the value of  $Obs \cdot R^2$  has a Chi-square probability which is not significant at 0.05 so that the alternative hypothesis can be rejected. In other words, the White test shows that there is no heteroscedasticity in the model.

The results of the Breusch-Pagan-Godfrey Test also showed that all variables were not significant at 0.05, indicating there was no heteroscedasticity. In addition, the value of  $Obs \cdot R^2$  has a Chi-square probability which is not significant at 0.05 so that the alternative hypothesis can be rejected. In other words, the Breusch-Pagan-Godfrey test shows that there is no heteroscedasticity in the model.

**Table 4.** Heteroskedasticity Test

Variable	White Test		BPG Test	
	Coefficient	Prob.	Coefficient	Prob.
HED	87.61061	.5096	-17.37064	.5654
FD	12.08563	.2564	3.031928	.1270
UI	3.044318	.0718	1.330562	.0632
BR	10.28359	.8364	-7.012937	.4132
$Obs \cdot R^2$	14.04090	.4467	7.998933	.0916

**Multicollinearity Test**

One of multicollinearity detection is by analyzing at Variance Inflation Factor (VIF). VIF calculations are described in Table 5. All variables did not exceed 10, so it can be stated that there is no multicollinearity in the regression model.

**Table 5.** Variance Inflation Factor (VIF)

Variable	Coefficient Variance	Centered VIF
HED	1.565684	1.102936
FD	.006743	1.068316
UI	.000874	1.030533
BR	.125844	1.084693

**Autocorrelation Test**

This test can be detected by the Durbin-Watson test. The Durbin-Watson test calculation produces a Durbin-Watson value of 0.806656. The Durbin-Watson value is compared with the Durbin-Watson Table value with a significance level of 5 percent, the number of observations 460 (closest to 468 data), and K of 5 (the number of independent variables and constants). The critical value table for the Durbin-Watson test shows the value of  $dL = 1.76558$  and  $dU = 1.82803$ . The Durbin-Watson value of 0.806656 is located in the  $0 < d < dL$  area or the Durbin-Watson value is lower than the lower limit. This indicates that the autocorrelation is greater than zero so it cannot reject the alternative hypothesis.

To complete the Durbin-Watson test, an autocorrelation test was performed with the Lagrange Multiplier (LM) test. Calculation of the LM test with the Eviews program produces an  $obs \cdot R^2$  value of 95.56315 with a probability of 0.0000. The LM test results are statistically significant so that it indicates the occurrence of autocorrelation in the regression model. The LM test results are in line with the results of the Durbin-Watson test.

To correct the autocorrelation problem, standard error correction was developed by Newey-West. This procedure is the development

of the white heteroscedasticity-consistent standard error. With the Newey-West procedure, the standard error that has been corrected is called HAC (heteroskedasticity and autocorrelation consistent) standard error or Newey West standard error. This procedure is superior to White heteroscedasticity-consistent standard error because it can correct the problem of autocorrelation and heteroscedasticity at once. The correction results with the Newey Test procedure produce differences in the value of the standard error, t value statistics, and p value.

Tables 6 and 7 describe the comparison before and after the autocorrelation correction with the Newey-West procedure which produces the same coefficient, but different standard error, t-value statistics, and p-values. The change in standard HAC error that occurs for each regression coefficient is greater than the previous standard error value. The results of the handling carried out indicate that the standard error value that is biased becomes unbiased after the Newey-West procedure is applied.

**Table 6.** Fixed Effect Model Standar Error

Predictor	Coeff.	Std.Error	t-Stat.	Prob.
$\beta_0$	.2127	.0432	4.9195	.0000
$\beta_1$	.0254	.0060	4.2541	.0000
$\beta_2$	.0096	.0020	4.8103	.0000
$\beta_3$	.0274	.0396	.6926	.4894

**Table 7.** HAC Standard Error

Predictor	Coeff.	Std.Error	t-Stat.	Prob.
$\beta_0$	.2127	.0865	4.9195	.0000
$\beta_1$	.0254	.0132	4.2541	.0000
$\beta_2$	.0096	.0041	4.8103	.0000
$\beta_3$	.0274	.0470	.6926	.3280

**Model Specifications Test**

The model specification test is used to analyze the accuracy of model specifications. Testing the specifications of this research model using the Ramsey Reset Test.

The results of the Ramsey Reset Test show that the F-statistic value is 1.858174 with a probability value of 0.1740 so it is not significant. This shows that the null hypothesis cannot be rejected, or in other words, the regression model in this study has been correctly specified.

The results of the Redundant Test and the Hausman Test on the panel data method are summarized in Table 8. The redundant test on the Cross-Section Fixed Effect Model is used to test the null hypothesis that the Cross Section Fixed Effect Model estimator has no difference with the Pooled OLS Model. The F-statistic value of 4.6926 with a probability of 0.0000 is significant at  $\alpha = 0.05$  indicating that the null hypothesis is rejected, or in other words, the Cross-Section Fixed Effect Model is better than the Pooled OLS Model.

**Table 8.** Redundant and Hausman Test

Redundant Test	F-statistic	4.6926
Cross Section Fixed Effect Model		(.0000)
Redundant Test	F-statistic	.6989
Period Fixed Effect Model		(.5534)
Hausman Test	Chi-squared	9.8056
Cross Section Random Effect Model		(.0203)

The redundant test on the Period Fixed Effect Model is used to test the null hypothesis that the Period Fixed Effect Model estimator has no difference with the Pooled OLS Model. The F-statistic value of 0.6989 with a probability of 0.5534 is significant at  $\alpha = 0.05$  indicating that the null hypothesis cannot be rejected, or in other words, the Period Fixed Effect Model has no difference and is no better than the Pooled OLS Model.

The Hausman Test on the Cross-Section Random Effect Model is used to test the null hypothesis that the Cross Section Fixed Effect Model estimator has no difference with the Cross Section Random Effect Model. The statistical test developed by Hausman has a distribution of

$\chi^2$  asymptotic. If the null hypothesis is rejected, it means that the Cross Section Random Effect Model is not appropriate because the random-effect might be correlated with one or more independent variables. A value of  $\chi^2$  9.8056 with a probability of 0.0203 is significant at  $\alpha = 0.05$  indicating that the null hypothesis can be rejected, or in other words, the Cross-Section Fixed Effect Model is more appropriate than the Cross-Section Random Effect Model.

Based on the Redundant Test and the Hausman Test, it can be stated that in this regression model, the most appropriate panel data model is the Cross Section Fixed Effect Model (FEM). Thus, the results of the analysis of the regression model data can be stated as follows :

$$HED_{it} = .2127 + .0254 FD_{it} + .0096 UI_{it} + .0274 BR_{it}$$

Based on these structural equations and panel data test results, it is known that the influence of Financial Distress (FD) on Hedging Policy (HED) is indicated by a coefficient value of 0.0254 with the direction of a positive relationship in the direction of the statement in the hypothesis. The test results of this causality relationship show sufficient evidence to accept hypothesis 1. This is because the t-statistic value of 4.2541 with a probability value of 0.0000 is smaller than  $\alpha = 0.05$ . This means that the influence of Financial Distress (FD) on Hedging Policy (HED) is significant. This finding support previous research (Bartram et al., 2010; Sprčić, 2011; Afza & Alam, 2016; and Bodrostuti et al., 2019). Financial distress which is proxy by long term debt is the most dominant variable influencing company hedging policies. Thus, companies must maintain long term debt at a moderate level because, in financing and investment decisions, investors assess the company's performance by perceiving it with long term debt. Higher long term debt will encourage the implementation of corporate hedging policy.

Based on these structural equations and panel data test results, it is known that the effect of Underinvestment (UI) on Hedging Po-

licy (HED) is indicated by a coefficient value of 0.0096 with the direction of a positive relationship in the direction of the statement in the hypothesis. The test results of this causal relationship show sufficient evidence to accept hypothesis 2. This is because the t-statistic value of 4.8103 with a probability or significance value of 0.000 is smaller than  $\alpha = 0.05$ . This means that the influence of Underinvestment (UI) on Hedging Policy (HED) is significant (Al-Shboul & Alison, 2001; Gay & Nam, 2008). Underinvestment which is proxy by capital expenditure is influencing company hedging policies significantly. Thus, companies must manage their capital expenditure accurately because higher capital expenditure will cause the loss of valuable project opportunities and cause fluctuations in cash flow. Cash flow uncertainly will drive the implementation of corporate hedging policy.

Based on the structural equation and panel data test results, it is known that the effect of Business Risk (BR) on Hedging Policy (HED) is indicated by a coefficient value of 0.0274 with the direction of a positive relationship in the direction of the statement in the hypothesis. But the test results of this causal relationship do not show sufficient evidence to accept hypothesis 3. This is because the t-statistic value of 0.6926 with a probability or significance value of 0.4894 is greater than  $\alpha = 0.05$ . This means that the effect of Business Risk (BR) on Hedging Policy (HED) is not significant (Clark & Mefteh, 2011; Fitriyanti, 2011; Chanzu & Gekara, 2014; Robiyanto et al., 2017). Business risk which in this study is proxied by foreign sales to total sales ratio does not play a role in increasing the company's hedging policy. This is because most companies selected as a sample is a company with a relatively safe business risk.

The findings of this study support agency theory because debt contracts will monitor company operations and minimize agency conflict. In addition, the findings of this study also support the theory of balancing because companies must balance the amount of long-term debt in a certain amount so that the benefits of using debt are more optimal than the cost of debt.



Foreign debt-based hedging can be used as a comprehensive choice of funding policy strategy. The foreign debt-based hedging policy illustrates the intensity of corporate hedging compared to the corporate total assets. Companies should manage their financial distress and underinvestment more accurately and prudent. Financial distress and underinvestment play an important role in encouraging corporate management to adopt hedging policies. Investors can use financial distress and underinvestment as benchmarks for prospective non-financial companies for they have secured their foreign exchange exposures.

## CONCLUSION AND RECOMMENDATION

The effect of Financial Distress on Hedging Policy shows the direction of the positive and significant coefficient. So the higher Financial Distress encourages the adoption of corporate hedging policies. The effect of Underinvestment on Hedging Policy also shows the direction of positive and significant coefficients. So the higher Underinvestment encourages the adoption of corporate hedging policies.

While the effect of Business Risk on Hedging Policy shows a positive but not significant coefficient, indicate that most companies selected as sample is company with a relatively low business risk. Hedging policies are mainly carried out to minimize the risk of foreign exchange influenced by macro indicators of the national economy, trade and international finance. This study only analyzes a number of internal company factors that influence hedging policies. It is recommended that future studies analyze company internal factors and company external factors to provide more comprehensive implications.

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