

FACTORS AFFECTING THE VALUE OF THE COMPANY AND HEDGING ON INDUSTRY COMPANIES LISTED IN BEI

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Abstract - One way to minimize foreign exchange risk is to hedging. Hedging is a strategy created to reduce the incidence of unexpected business risks, while maintaining the possibility to benefit from the investment. The principle of hedging is to cover loss of asset positions beginning with the advantages of the position of hedging instruments. In the current study found a determinant variable mainly hedging variable that affects the value of the company which is very limited which has been conducting research related to hedging. In addition the study makes hedging variable as the dependent variable which is also very rare that have completed the study.

This research consist 18 populations in a sample can amount to 15 companies that meet the criteria, there are eight companies that perform hedging activities, which amounted to 50.3% of the total sample used. While the company Telecommunication, from 8 companies listed in the Stock Exchange there are six companies that meet all the criteria and hedging activities.

The results showed that the company's profitability and debt influence on hedging. From the research of three variables: leverage (DER), profitability (ROA) has positive influence on Hedging. Meanwhile Hedging negatively affect the value of the company (Tobins Q). These results indicate that hedging of foreign exchange risk can be minimized. So, It affects an increase in the level of corporate profits because the company will increase debt.

Keywords: Hedging, Tobins Q and profitability

1. INTRODUCTION

One way to minimize foreign exchange risk is hedging. Hedging is a strategy created to reduce the incidence of unexpected business risks, while maintaining the possibility to benefit from investment. The principle of hedging is to cover loss of asset positions beginning with the advantages of the position of hedging instruments.

By hedging foreign exchange risk can be minimized. It also affects the level of profits obtained. Due to the large reduction in risk will be followed by a decrease in profits. By hedging (hedging) the company can minimize the exchange rate risk. For example, in October 2010 the exchange rate against the dollar at Rp 8938 / \$ and depreciates in December 2010 of Rp 8996 / \$, Rp 58 / \$. If the company made an agreement in December as the maturity period, the company will pay more USD 58 / \$.

But not so if the company did one derivative contracts as hedging instruments (hedging). On the maturity period is the month of December, the company pays the appropriate contractual agreements. Do not pay in accordance with the prevailing exchange rate at the month maturity.

Accordingly, the activity of the hedging derivative instruments is very important for the company and the value of the company. Because it can minimize all possible risks arising from international transactions undertaken by companies that make international transactions.

This study uses the companies listed on the Stock Exchange in 2010-2013 as an object of study. The criteria of this sample is a company that has gone public and is listed on the years 2010-2013 in the Indonesia Stock Exchange, the company which has issued annual financial statements for the period 2010-2013, and companies often make transactions with foreign parties, for example the delivery of raw materials, delivery of equipment, contracting debts and so on. It is making their exposure to foreign exchange transactions in a variety of transactions in the company are chance to undertake hedging activities.

Allayannis and Weston (2001) the researchers who investigate empirically the effect of hedging policy of the company to the value of companies (firm value) with indicators of Tobin's Q Ratio. Based on data obtained from 720 large non-financial companies in the United States during the period 1990-1995, Allayannis and Weston proved that companies that implement the hedging policy of using foreign exchange derivatives have higher company value than the company's non-hedging.

In research being conducted by Jose and Ibmecc (2007) on non-financial Brazilian company listed on the São Paulo Stock Exchange from 1996 to 2005 shows that it obtained a positive influence between hedging policy and the value of the company so that the implementation of a policy of hedging (hedging) can add value to the company.

In this research is conducted find particularly variable hedging determinant variables that affect the value of companies in which very limited which has been conducting research related to hedging. Besides the study makes hedging variable as the dependent variable which is also very rare that have completed the study.

2. LITERATURE REVIEW

Hedging is one way to minimize the risks arising from fluctuations in exchange rates (foreign exchange). Hedging has benefits for the future, which is to protect the value of assets used as a benchmark of the threat risk of uncertainty in the future price changes (Fika, 2011).

If the company decides to hedge part or all of the risk exposure of its companies can use hedging tools such as:

a. Hedging using futures

A company that buys currency futures contract is entitled to receive a certain amount of foreign exchange, at a price, and on a certain date. To protect the foreign currency liabilities in the future, the company may want to buy currency futures contracts that represent the same currency with the currency that dominates these obligations. By holding this contract, the company has locked the country of origin of the amount of currency needed to pay for future liabilities.

b. Hedging using forward

Forward contracts are often used by large corporations who want to do hedging. To hedge forward contracts: Companies must purchase forward contracts for the same currency with the currency mendenominasi future liabilities.

c. Hedging using currency options

Hedging using currency options is a derivative contract with accompanying options (rights) to sell or buy something as stated in the contract. Many of the options exchange-traded options, but often the only option in the form of a private agreement between the company and the bank (in Septama Marcus, 2012). These options contain two types:

1. Sell Option (Put Option) is an instrument of negotiation that allows the owner to sell a particular stock at a certain price within a certain period.
2. Purchase option (Call Option) is an instrument of negotiation that allows the owner to buy a certain stock at a certain price within a certain period (Ang in Septama, 2012).

d. Hedging uses swap

Currency swap is a trade between two or more foreign currencies. Swap actions taken to protect or reduce risk (hedging) caused by fluctuation of foreign exchange rates. Rate of decline in the value of domestic currency reflects the magnitude of losses due to exchange rate difference for companies that have foreign currency debt and could result in the bankruptcy of a company (Mohamad 2010: 140).

Research conducted by José Luiz Rossi Júnior Ibmecc São Paulo (2007) used a variable Firm value (enterprise value), Hedging find results that are positive relationship between firm value and hedging. While it, Rashid Ameer (2010) conducted a study with the title Determinants of Corporate Hedging Practices in Malaysia, find research that There is a strong relationship between the use of derivatives and firm foreign sales, liquidity, growth option, managerial ownership and size in malaysia, George Allayanis & James P. Weston (2001) conducted research with the title The use of foreign currency

derivatives and firm market value, find results that hedging had a positive and significant impact on the market value of companies that proxied by Tobins Q.

The study that have been done in Indonesia as Its Analysis (2011) using the variable value of companies, firm size, leverage, profitability, dividend policy. Find the results that the size of the company and significantly positively related to firm value. The leverage associated positive and not significant to the company's value. Profitability and significantly are positively related to firm value. Devidend policy have negative effect on firm value. Septama Hardanto Putro and M. Chabachib (2012) conducted a study with the title Analysis of factors affecting the use of derivative instruments as hedging decisions, find results that variable Der, Growth Opportunity and firm size significantly influence hedging. While the liquidity of financial distress and had no significant effect.

3. RESEARCH METHOD

3.1 Population and Sample

The population used in this study is an industrial company listed on the Indonesia Stock Exchange (BEI). With several considerations, that is: (1) Number of competitors in the industry, making the company should be able to reduce the risk as effectively as possible, given that consumers can switch to another product quickly. It is making the company many use of means of risk transfer as a hedge or hedging. So it's possible the company to undertake any hedging activities were larger than the types of companies other than industrial companies. (2) Businesses There are in populations of more industrial companies often conduct transactions with foreign parties, for example the delivery of raw materials, delivery of equipment, contracts with foreign currency assets and so forth. It is making their exposure to foreign exchange transactions in a variety of transactions in the company are chance to undertake hedging activities. (3) The type of industry the company has the largest percentage of use of hedging compared to other types of companies. A selected sample of the population that is of companies that meet some criteria by purposive sampling method, thus there are 18 Populations in a sample can amount to 15 companies.

3.2 Data analysis technique

Testing the hypothesis in this study using the analysis used by multiple regression method or multiple regression. To estimate or predict the value of a variable Y, would better take into account the variables that affect Y. thus we have a relationship between a dependent variable (Y) with some other variables that are not free Supranto (2009: 239):

$$Y1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$
$$Y2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where:

Y1 = Value Company

Y2 = Hedging

β_0 = constant

X1 = Profitability
 X2 = Leverage
 X3 = Liquidity
 X4 = Firm size
 X5 = Growth
 X6 = hedge
 ε: Standard Error

4. RESULT AND DISCUSSION

4.1 Regression equation for Corporate Values

From the six independent variables find data processing is not significant so that the data processing is done by reducing the number of variables. After conducting reduction in variable found the following results:

Table 1: Results of multiple regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,501	,107		4,657	,000
	Hed	,293	,118	,274	2,484	,015
	Roa	-,006	,008	-,095	-,856	,395
	Der	,026	,031	,095	,861	,392
	Uji F	,049				
	R	,305				
	R Square	,093				
	Adjusted R Square	,059				

Based on Table 1 above shows only significant variable hedging on firm value. The results showed that the Hedging represented by dummy variables affect positively and significantly related to the Company Values calculated by Tobins Q. This is according to research conducted by José Luiz Rossi Júnior and Ibmecc São Paulo (2007) and Allayannis and Weston (2001) that the hedging activity positively affects firm value proxy for Tobins Q.

Companies that hedging the value of his company will increase. And the companies that stopped in the hedges, the company's value will be down. When the company was hedges the company the possibility of the company to avoid exchange rate risk will be even greater. It can serve as collateral for the investors on the investment made in the company. The greater the possibility of risk that can be avoided, the better the investor perception of the value of the company. Thus increasing the company's value.

Based on these discussions can be concluded that this study supports the hypothesis that has been set in chapter two that there was a significant effect on the value of the company, This means that while the company hedges and a growing number of corporate transactions that hedge the value of the company will increase.

Based on guidelines for the preparation of Standard Operating Procedure (SOP) for hedging activities (hedging) set BUMN explained that the term of the hedging

transaction equal to the maximum term of the underlying. Underlying is an activity that underlies the implementation of a hedging activities (SOP Hedging BUMN, 2014: 9). In this study, the effective period of time the hedging is in a period of 3 (three) years. By evaluation of the effectiveness of hedging report every year at the end of the period. The report views the effectiveness of the evaluation report and the evaluation report on the effectiveness of the implementation of hedging activities both prospectively (before the implementation of hedging) and retrospective (after the implementation of hedging) in the form of an evaluation / impact report on the foreign exchange financial institutions, primarily related extra charges and acceptance.

Can be seen in PT Astra Otoparts, Tbk doing hedging period of time 3 (three) years from 2010-2012 in which the value of the company at the company is likely to increase in the amount of 0.09 (9%) in 2010, 0.16 (16%) in 2011, and 0.18 (18%) in 2012. In essence companies need to conduct hedging activities amid the global economic conditions that tend to be unstable. Based on data from this study, it can be seen that companies that have enterprise value hedging activities are likely to be stable, although many other factors that can affect investors' perception of the value of the company.

4.2 Regression equation for Hedging

The regression coefficient significance test of overall model of the five predictors can be done using the omnibus test of the model coefficient. This test also using the chi square test approach.

Table 2: Omnibus Tests of Model Coefficients

	Chi-square	df	Sig.
Step 1 Step	33.248	5	.000
Block	33.248	5	.000
Model	33.248	5	.000

Table 2: Omnibus Tests of Model Coefficients

The test results obtained omnibus test chi-square value of 33.248 with 0,000 sigifikansi can be concluded that together hedging can be predicted by financial ratio variables in this study.

To determine the magnitude of the variation prediction of five variables against the troubled conditions could be seen from Cox and Snell's R Square and Nagelkerke R Square which is a measure that seeks to imitate the size of R² in the regression. Value Cox and Snell's R Square and Nagelkerke R Square can be seen in the following three.

Table 3: Cox and Snell's R Square dan Nagelkerke R Square

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square

1	49.663 ^a	.425	.568
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a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Based on on the above table it can be seen that the value of Cox & Snell R Square of 0.122 and Nagelkerke R Square of 0.425. Means the size of Cox & Snell derived that 42.5% of the variation of hedging can be predicted using the ratio Tobins, ROA, DER, Growth and size, whereas according to the size of Nagelkerke R Square obtained 56.8% of the variation of hedging can be predicted using the ratio of Tobins, ROA, DER , Growth and size. It shows that the variability of the dependent variable that can be explained by the variability of the independent variables was 56.8% while the rest, that is 43.2% explained by other variables outside the model. Tests of significance Predictor partially done using the Wald test obtained as follows:

Table 4: Test Results Hypothesis

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a Tobins	.767	.659	1.356	1	.244	2.153
Roa	.363	.100	13.079	1	.000	1.437
Der	.772	.378	4.178	1	.041	2.164
Growt	-.194	.227	.729	1	.393	.824
size	-.510	.522	.958	1	.328	.600
Constant	3.051	7.042	.188	1	.665	21.140

a. Variable(s) entered on step 1: tobins, roa, der, growt, size.

The results of the above analysis shows that the variable ROA positive effect on hedging. This shows that companies are hedging will increase profits for the company to protect the exchange rate if there is an increase. Then the companies did not experience a loss that could lower profits from the increase in the dollar exchange rate. Variable DER also produce a significant positive effect of hedging. This shows that companies are hedging corporate debt will increase because the company will increase the loan to pay for the cost of hedging.

5. CONCLUSION

The results showed that the company's profitability and debt influence on hedging. From the research of three variables: the leverage (DER), profitability (ROA) has positive influence on Hedging (Hedging). While it Hedging negative effect on enterprise value (Tobin's Q). These results indicate that by doing ni hedging foreign

exchange risk can be minimized. So It affects an increase in the level of corporate profits because the company will increase debt.

For further research is recommended to further investigate the value of the company with Tobins Q and the influence of other variables by adding or using other variables that may affect the value of the company. Further research is expected to use the object of more extensive research, not only in the automotive and telecommunications companies but also coupled with other companies as well as extending the period of observation, because the longer the time interval will be valid research results. Relating with hedging activities, data processing adapted with previous studies either calculation or data processing applications.

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[Http://www.bi.go.id](http://www.bi.go.id)

Pedoman Penyusunan *Standard Operating Procedure* (Sop) Kegiatan Lindung Nilai (*Hedging*) oleh BUMN 2014.