

The Influence of Growth Profitability, Leverage and Opportunity on Hedging Activities in State-Owned Enterprises Companies 2012-2016

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Abstract—Hedging is an action that can be carried out by companies that transact international to minimize the risk of exchange rates faced. The purpose of this study was to determine the significance of the effect of profitability, leverage, and the company's growth opportunities on hedging activities in state-owned enterprises (BUMN) in 2012-2016. The sample of this study took as many as 19 state-owned companies listed in Indonesia Stock Exchange during the period 2012-2016 using the purpose sampling method, the data used was secondary data, and then using the analysis technique used in this study was logistic regression analysis. Based on the results of the analysis it was found that the variables of profitability, and leverage significantly had a positive effect on hedging activities, while the opportunity to grow the company had a positive but not significant effect on hedging activities.

Keywords—hedging; profitability; leverage and growth opportunity

I. INTRODUCTION

The development of globalization that swept across countries in the world makes international business an increasingly attractive opportunity, an increasingly international economy rapidly marked by the presence of trade flows both capital and goods between countries. The mechanism that occurs in international trade is the delivery of goods and the payment of a sum of money between the two countries that conduct transactions.

International trade transactions differ from domestic trade transactions because of international trade transactions involving several countries. Payments made in cash can also occur when import debt is followed by payment agreements in certain foreign currencies and agreed time limits, so that countries that have import debt must exchange their domestic currency before making a payment. In this case the company that conducts International trade will face more complicated problems than when the company only deals with the domestic market.

Every country certainly wants its economy to continue to grow and develop, economic growth is driven by several factors, including increased export performance, expanding

investment, and expanding employment, and many others. This factor is very susceptible to changes in exchange rates, when changes in currency exchange rates will also mean changing macroeconomic targets and performance. In connection with the foreign exchange rate of each country fluctuating against other countries, there was uncertainty in the payment of international trade because the transaction value could change in line with the fluctuations in the foreign exchange rate. If a foreign currency depreciates against the foreign currency concerned, the value of the import debt increases. To avoid this, many companies engaged in export import in a country try to do hedging or hedging techniques.

According to Aretz et al. Risk arises because there are conditions of uncertainty can be reflected in high movement fluctuations, the higher the fluctuations, the greater the level of uncertainty [1]. Unexpected changes in the value of a foreign currency can have an impact on sales, prices and profits of exporters and importers. This is a major risk and also as a way to hedge companies involved in import and export transactions and companies that have foreign debt. Company risk can be known by measuring exposure, according to Campbell exposure can be interpreted as a vulnerable object that adversely affects the performance of a company that experiences the occurrence of the risk, besides that risk can also be defined in various ways [2]. Khediri and Folus said that risk can be defined as an adverse event or event. Company losses can be seen in the financial statements that show the burden due to foreign exchange exposure, losses on foreign exchange rates can be seen from the decreasing profits of a company's financial statements [3].

The development of the rupiah weakened in the first quarter to the second quarter of 2013. Before May, the rupiah exchange rate was below Rp.9,700 per US dollar, and since September it was above Rp. 10,000 per US dollar. At the end of 2013, the rupiah fell to the lowest level in five years. The weakening of the rupiah was triggered by the continued high demand for domestic foreign exchange amid limited supply. This creates an imbalance in the domestic forex market.

Exchange rate fluctuations can be avoided by using hedging. According to Allayannis et al. Hedging in the

financial world can be interpreted as a strategy undertaken to reduce or eliminate risks to other investments [4]. In general, Hedging can be interpreted as an action to limit risk and exposure. The principle of hedging is to cover the loss of asset position beginning with the advantage of the position of the hedging instrument. Hedging strategies used by the company for its financial transactions, one of which is using alternative derivative instruments. Derivatives are contracts between two parties to buy or sell a number of items on an agreed-upon date in the future with prices currently agreed upon by Connor and Lie [5].

State-Owned Enterprises have a hedging strategy through natural hedging instruments and hedging instruments such as options, forward, swap. The hedging policy for state-owned enterprises refers to the SOE Minister NO. PER-09 / MBU / 2013 concerning General policy of BUMN Hedging Transactions, Bank Indonesia Regulation (PBI) NO. 16/18 / PBI / 2014 concerning Hedging Transactions to Banks and PB Regulation. 17/15 / PBI / 2015 concerning foreign exchange transactions against Rupiah between banks and domestic parties. Bank Indonesia (BI) as the monetary authority issues BI regulation Number 17/3 / PBI / 2015 Circular Number 17/11 / DKSP 2015 concerning the obligation to use Rupiah in the territory of the Republic of Indonesia. Determination of these policies to support the achievement of the stability of the rupiah exchange rate.

Profitability affects Hedging decisions, because companies that have higher profit levels tend to be quick to expand their business, companies that develop international businesses will experience greater profit possibilities, the greater the profit opportunity, the greater the risk faced, with international market conditions very dynamic, every company that conducts transactions can cause large losses to companies that carry out transactions in large quantities. Therefore the company must always reduce risk by making hedging decisions Connor and Lie [5].

Leverage is stated to have a positive effect against hedging decisions by Clark and Mefteh [6]. The use of debt can leverage the company's ability to improve company performance, the availability of these funds can run the company's operations such as operational needs, business expansion, and others. Due to the fulfillment of funds for the company's operations, the company can obtain greater profits. But the higher the proportion of the debt level to own capital, it will affect the amount of risk that arises. High foreign exchange exposure is faced by companies whose income comes from local money and has debts dominated by foreign currencies. Foreign currency that is appreciated can cause debt in local currency has increased, because it requires more nominal amount for pay the debt. The risk of financial difficulties that will be faced by the company caused by an increase in the company's liabilities, with increasing risks, the company needs to make strategic decisions related to risk management so that the company can avoid any risks that can cause a significant loss to the company. One of the actions in risk management is the use of derivative instruments for hedging activities.

According to the results of previous research by Carter et al. the opportunity to grow has a positive effect on Hedging decisions [7]. Companies that have good growth opportunities, will need more capital to develop their business, one of the capital comes from the company's external capital, namely debt, or investment from investors. Because the higher the growth opportunities, the greater the risk faced by the company because by looking at the opportunity to grow the company, it would indicate the investor's view of the value of the company, the company that is considered good, the shares will be sold higher than the book value. Investment opportunities for funding needs will be even greater and allow insufficient internal cash flow for investment. Debt is an effective way to get cash injections quickly, but this will bring a new impact on the company, namely the emergence of additional risks from users of the debt, namely such as fluctuations in a commodity, foreign exchange and interest rates. To minimize this risk the company can use hedging to protect its debt, so the higher the market to book value of a company, the greater the use of foreign exchange derivative instruments.

II. LITERATURE REVIEW

Profitability ratios can reveal management's effectiveness in operating its business. This ratio is widely used as an indicator of business success [8]. Profitability ratios are a group of ratios that show the combined effect of liquidity, asset and debt management on the results of operations, Brigham and Houston [9]. Profitability is a company indicating the effectiveness and efficiency of a company in using its assets, because profitability ratios show the company's capability in generating profits based on the use of assets [6]. Companies with higher profit levels tend to expand their businesses more quickly because international market conditions are very dynamic so any small changes that occur can cause large losses to companies that carry out large transactions.

Companies with high profitability will tend to expand their business to increase the company's profitability, the broader the company's activities, the higher the risk faced. In other words, companies that have high profitability are more likely to face risk, with international market conditions so dynamic that every company that conducts transactions can cause large losses to companies that carry out large amounts of transactions. Therefore, companies must always reduce risk by making hedging decisions, Connor and Lie [5], supported by the results of research by Aretz et al. [1], and Clark and Mefteh [6].

H1: The higher the profitability, the greater the hedging activity.

Leverage ratio measures the extent to which a company depends on debt financing. If management utilizes too much debt in funding the company's operations, the problem that may arise is in repaying the remaining loans and interest in the future [6] Carter et al. leverage ratios describe the company's ability to pay its long-term obligations or obligations when the company is liquidated [7]. High dependence on debt funding can lead to business failure. Debt to equity ratio itself is one of the most fundamental measures in corporate finance. This ratio is a good test for the company's financial strength. The purpose

of this ratio is to measure the fund mix in the balance sheet and make a comparison between the funds provided by the owner (equity) and borrowed funds or debt. Debt increases the profits of a company but also increases the risk faced by the company.

High debt risk makes the company have many alternative funding to fund all kinds of company activities, both from operational needs and expansion needs that make the company bigger. The availability of these funds facilitates cash flow that supports all kinds of activities to answer market demand and increase profitability. However, this raises new problems, namely rising bankruptcy costs, agency costs, higher interest rates, and the creation of information asymmetry in accordance with the statements of Franco Modigliani and Milton Milter (MM Theory). With increasing problems according to MM theory, there will be exposure to foreign exchange transactions [8].

Aretz et al. found empirical evidence that leverage has a positive effect on the prediction of profitability of hedging activities [1]. The higher the leverage level of a company, the greater the hedging action taken by the company. P this was supported by Cadek et al. [8], and Khediri and Folus [3] states that leverage has a significant positive effect on hedging activities.

H2: The higher the leverage, the greater the hedging activity.

Companies that have high growth tend to invest back into the company. The higher the growth rate, the higher the need for funds for investment. For this reason, the company will use the profits earned to finance its investment, rather than distribute dividends [9]. High growth opportunities show the opportunity for companies to progress more and more, so to answer these opportunities, the need for funds in large enough amounts to finance these growth in the future will be urgently needed [10]. This will be different if the company has a low level of opportunity to grow the company so it does not need external financing.

The proxy for measuring opportunity growth in this study is MTBV (Market To Book Value), the definition of Market To Book ratio as well as Price to book value according to Husnan and Pudjiastuti is a comparison between market prices and book values [11]. For companies that are going well, generally this ratio reaches above one, which shows that the stock market value is greater than the book value. The greater the PBV ratio, the higher the company is valued by relative investors compared to the funds that have been invested in the company. Market to book ratio (MTB) is the ratio included in the market ratio. This ratio is the ratio that is often used in the capital market. This ratio describes the condition or state of the company's performance in the capital market. This indicator is usually used to measure the level of interest in certain stock prices by investors. This ratio shows the comparison of stock prices in the market with the value of the stock book described in the Balance Sheet. The higher the ratio obtained, the higher also investor interest in buying the shares.

Research conducted by Campbell results in that growth opportunities have a positive influence and significant hedging decisions [2]. These results are supported by research

conducted by Carter et al. which states that growth opportunities have a positive effect on hedging activities with derivative instruments [7].

H3: The higher the chance to grow, the greater the hedging activity.

III. RESEARCH METHODS

A. Population and Sample

Population is an area of generalization which consists of objects or subjects that have certain qualities and characteristics set by research to study and then drawn conclusions [12]. The population in this study is a state-owned company (BUMN) listed in Indonesia Stock Exchange with the period of the period 2012-2016.

Determination of the sample is selected from the population, namely companies that meet several criteria with the purposive sampling method (sample selection with certain criteria) as follows:

- BUMN companies listed on the Indonesia Stock Exchange (IDX) during the period of 2012 to 2016.
- BUMN company that publishes financial reports for the period 2012 to 2016.
- State-owned companies that have data in accordance with the research variables during the period of 2012 to with 2016.3.2. Research Variables and Measurement.

In this study the type of data used is secondary data. Secondary data is data obtained from other parties and not obtained from researchers and research subjects which are usually in the form of report data that is already available. Data collection method in this research is by method documentation. Documentation is collecting data by recording documents related to this research. The data used in this study is the 2012-2016 State-Owned Enterprises' corporate financial statements stated in dummy variables, if the company uses derivative instruments as a hedging activity, it is given a number 1 for companies that do hedging activities, while the number 0 for companies that do not doing hedging activities.

In this study profitability is calculated with Return on Assets (ROA). Use of Return on Assets (ROA) because ROA is a ratio that reflects the effectiveness of a company's performance to gain profit. Return on Asset can be calculated with using the formula quoted from the book [13].

Leverage in this study was calculated by Debt to Equity Ratio (DER). The use of Debt to Equity Ratio because DER is the most appropriate ratio to describe the company's capital structure and can indicate the company's financial condition. Debt to Equity Ratio can be calculated by the formula quoted from the book [13].

High growth will require more funds, especially external funds to meet their investment needs or to meet the need to finance their growth. The proxy used to measure the opportunity to grow a company or growth opportunity is MVE / BVE which is a comparison between Market Value of Equity

and Book Value of Equity. According to Cadek et al. High growth opportunities for companies [8].

IV. DATA ANALYSIS

This study uses financial report data and annual reports for the period 2012-2016 from state-owned enterprises (BUMN). The sample used was 19 samples. Data were analyzed using Logistic Regression Analysis. In this case the results of data analysis will be presented based on observations of a number of variables used in logistic regression analysis.

The dependent variable used in this study is Hedging (Y), while the independent variable in this study uses Profitability (X1), leverage (X2), and growth opportunities (X3), but what is shown in the descriptive statistics section is only the independent variable, profitability, leverage, and opportunity to grow. This is due to the hedging variable

(Y) measured by nominal scale is a measurement of a category or group scale [14]. This number only functions as a category label without intrinsic value, therefore, it is not appropriate to calculate the average value and standard deviation of the hedging variable (Y).

V. RESULT AND DISCUSSION

TABLE I. DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean	Std. Deviation
Profitabilitas	95	-10,770	24,369	5,70899	6,361925
Leverage	95	-33,847	1139,583	284,705426	278,705426
opportunity growth variables	95	,187	25,192	2,52857	2,711294
Valid N (listwise)	95				

Source: Secondary data processed, 2017.

Table 1 shows that the descriptive statistical results of the profitability variable are known as the lowest (minimum) range of -10,770 owned by Garuda Indonesia (Persero) Tbk in 2014, while the highest range (maximum) is 24,369 owned by Krakatau Steel (Persero) Tbk in 2015. For the average (mean) value of the profitability variable in the percentage of 5.70899 which indicates that the average sample company has a higher comprehensive profit compared to the total assets. The standard deviation value of 6.361925 which is greater than the average value of 5.70899 means that the data deviation that occurs is high or there is a large gap from the lowest and highest profitability of the company so that the distribution of the data is not normal.

The leverage variable are known that the lowest retang (minimum) of 33,847 owned by PT. Timah Tbk in 2012, while the highest vulnerable (maximum) was 1139,583 owned by the State Savings Bank Tbk in 2015. For the average (mean) variable leverage in percentage of 284.70915 which indicates that the average sample company has a capital composition of debt which is higher than the total capital owned. The standard deviation value is 278,705426 which is smaller than the average value of 284,70915 which means that the data deviation that occurs is low or there is not a large enough gap

from the lowest and highest leverage of the company so that the data distribution is normal.

The opportunity growth variables of the company are known that the lowest range (minimum) is 0.187 owned by Krakatau steel Tbk in 2015, while the highest range (maximum) is 25,192 owned by PT. Indofarma Tbk in 2016. For the average (mean) value of opportunity opportunity variables to grow at a percentage of 2.52857, this indicates that the average company the sample has the highest chance of growth opportunities reflected in higher market prices compared to the book value of shares issued by the company. The standard deviation value of 2.711294 which is greater than the average value of 2.52857 means that the data deviation that occurs is high or there is a large gap from the lowest and highest growth opportunities of the company so that the data distribution is not normal.

Based on the analysis of the regression method shows that the constant value of -6.459, while the variable constant value of profitability is 0.264, the value of the constant variable leverage is 0.008, and the constant value on the opportunity variable grows 0.138, so that the logistic regression model can be known as follows:

$$Y = -6,459 + 0,264 X1 + 0,08 X2 + 0,138 X3$$

TABLE II. HYPOTHESIS TESTING

	B	S.E.	Wald	Df	Sig.	Exp(B)
St Profitabilitas	,264	,088	9,081	1	,003	1,303
Ep Leverage	,008	,002	15,973	1	,000	1,008
1 ^B opportunity growth	,138	,130	1,117	1	,290	1,148
Constant	-6,459	1,444	19,997	1	,000	,002

Source: Secondary data processed, 2017.

A. Effect of Profitability on Hedging Activities

Based on the results of hypothesis testing shows that return on assets as a proxy of profitability has a positive and significant effect on the dependent variable, namely hedging activities using derivative instruments. These results indicate that the first hypothesis which states that the higher the profitability, the greater the hedging activity, is accepted. This is proven by the average value of the profitability variable in 2012-2016 was 5.7%, this indicates that the average sample company from the large-scale profitability variable was reflected in the high comprehensive income obtained by the company compared to the total assets of the company, as well as the variable average value profitability above the lowest value.

B. Effect of Leverage on Hedging Activities

The debt to equity ratio variable which is a proxy of leverage has a positive influence statistically significant towards hedging decisions. These results indicate that the second hypothesis which states that the higher the leverage, the greater the hedging activity, is accepted. This is evidenced by the average value of leverage variables in 2012-2016 amounting to 284.7%. This indicates that the average company sample of large-scale leverage variables is reflected in the

company's total debt compared to the total capital of the company itself.

C. Effect of Growth Opportunities on Hedging Activities

Based on the results of testing the hypothesis shows that the Market Value of equity and the Book value of equity as a proxy of the opportunity to grow the company has a positive and insignificant influence on the dependent variable, namely hedging activities using derivative instruments. These results indicate that the first hypothesis which states that the higher the chance of growth, the greater the hedging activity, is rejected. This means that the higher or lower the opportunity to grow the company, it will not affect hedging activities with derivative instruments. This is evidenced by the average value of the company's opportunity growth variable in 2012-2016 amounting to 2.5%, indicating that the average company sample of the variable opportunity to grow low-scale companies is reflected in the low market prices compared to the book value of shares issued by the company. While the significance value shows a significant value greater than 0.05, meaning that the opportunity growth variable is not significant to hedging activities. This is because the phenomenon of data or research period is not long enough. that the probability of a data phenomenon or a longer period of research time is needed so that the data collected can be more representative of the real situation.

VI. CONCLUSION

Testing the hypothesis H 1 shows that the regression results of firm size variables have a regression coefficient of 0.2640 with a significance value of 0.003 which shows less than 0.05. Due to the significant value of the test is less than 0.05 (0.003 < 0.05) then H 0 is rejected and H 1 accepted. This means that the size of the company's profitability has a positive and significant influence on hedging activities.

Testing the hypothesis H 2 shows that the regression results of the leverage variable have a regression coefficient of 0.008 with a significance value of 0.000 which shows less than 0.05. Because the significance value of the test is smaller than 0.05 (0.000 < 0.05) then H 0 is rejected and H 2 is received. This means that leverage has a positive and significant influence on hedging

Testing the hypothesis H 3 shows that the regression results of the opportunity growth variables of the company have a regression coefficient of 0.138 with a significance value of 0.290 shows greater than 0.05. Because the significance value of the test is greater than 0.05 (0.290 > 0.05) then H 0 is accepted and H 3 rejected. This means that the opportunity to grow the company has a positive but not significant effect on hedging activities.

Based on the limitations in this study, the researcher gives the following suggestions:

- In subsequent studies it is expected to be able to increase the company data of state-owned enterprises that are used so that it can better illustrate the influence of independent variables on the dependent variable in each type of company.
- For further research can use primary data by distributing questionnaires or conducting direct interviews with management, so that the variables used do not only come from secondary data. So that it is expected that further research can predict the causes of companies making more precise hedging decisions.
- Subsequent research can add to the research period with a longer period, so that further research can increase the number of samples that will be examined and consistency can be obtained from the results of the study.

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