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## **ANALYSIS OF INTERNAL FACTORS THAT AFFECTING THE DECISION OF HEDGING IN COMPANIES MINING SECTORS LISTED ON BURSA EFEK INDONESIA**

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**ABSTRACT:** *The aim of this studies were determining and analyzing the internal factors influence the hedging decision of mining sector company listed on the IDX from 2015-2018 with internal factors, such as financial distress, underinvestment and asset substitution problem. The population of this study consisted of 41 companies. Which was using purposive sampling obtained 12 sampel companies. The analys technique used is descriptive statistics. Based on the results of descriptive statistical analys showed there were no companies have been able to meet the average standard of internal factors during the year of this study so many companies have not been able to meet the average standard to do hedging to avoid the risk of internal hedging factors. There was one company has been able to meet the average underinvestment standard, it called the Market to Book Value (MBV) variable during the year of the research, it named namely PT. Bumi Resources Tbk. The next study can be expected to use the company's hedging disclosure indicators outside of this studies such as external factors there were interest rates and currency exchange and measure the internal factors by adding the variables which can be used to increase the results of the study over all.*

**Keywords:** *Hedging, Financial Distress, Underinvestment, Asset Substitutio*

**ABSTRAK:** Penelitian ini bertujuan untuk mengetahui dan menganalisis faktor-faktor internal yang mempengaruhi keputusan *hedging* pada perusahaan sektor pertambangan yang terdaftar di BEI periode 2015-2018 dengan indikator faktor internal yaitu *financial distress*, *underinvestment* dan *asset substitution problem*. Populasi penelitian ini terdiri dari 41 perusahaan, kemudian menggunakan *purposive sampling* diperoleh 12 perusahaan sampel. Teknik analisis yang digunakan adalah analisis statistik deskriptif. Berdasarkan hasil analisis statistik deskriptif menunjukkan bahwa belum ada perusahaan yang mampu memenuhi rata-rata standar faktor internal selama tahun penelitian sehingga perusahaan yang belum mampu memenuhi standar rata-rata tersebut cenderung melakukan *hedging* untuk menghindari risiko dari faktor-faktor internal *hedging*. Terdapat satu perusahaan yang mampu memenuhi rata-rata standar *underinvestment* yaitu variabel *Market to Book Value* (MBV) selama tahun penelitian 2015-2018, yaitu hanya PT. Bumi Resources Tbk. Penelitian selanjutnya diharapkan dapat menggunakan indikator pengungkapan *hedging* diluar penelitian ini seperti faktor eksternal yaitu tingkat suku bunga dan nilai tukar mata uang pada perusahaan di Indonesia dan mampu mengukur faktor-faktor internal dengan menambah variabel yang bisa digunakan sehingga dapat meningkatkan hasil penelitian yang lebih menyeluruh.

**Keywords:** *Hedging, Financial distress, Underinvestment, Asset substitution*

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## INTRODUCTION

International trade is now developing very rapidly. This development is seen from the number of business transactions carried out by parties who come from different countries, for example making purchases of goods from one country and sending them to other countries. In international trade, transactions are not free from risks, one of the risks that arise is the difference in the currencies used by each country so that it can cause fluctuations in currency exchange rates (Eiteman and Stonehill, 2014)."

Changes in foreign exchange rates are the biggest risk of multinational transactions. These changes have a direct impact on sales, product designation, and exporters and importers profits. Changes in foreign exchange rates also cause uncertainty about the value of assets and liabilities and can threaten the survival of a company so that it can lead to bankruptcy. The company can anticipate the negative impact of the risk of changes in foreign exchange rates and protect the interests of shareholders by making hedging decisions (Brigham, 2016).

Companies in hedging there are two factors of consideration, namely external factors and internal factors that influence it. External factors are associated with changes in interest rates (BI rate) and currency exchange rates. Whereas internal factors are caused by the financial condition and company performance. In making hedging decisions or not hedging, companies must be careful because in addition to profitable hedging can also be detrimental, if done at the wrong time because hedging also requires costs that must be spent by the company, so in doing hedging must be with the right consideration (Eiteman and Stonehill, 2014).

The hedging decision is driven by several internal factors, namely financial distress which is proxied by an interest coverage ratio (ICR), leverage and profitability. The second factor is underinvestment which is proxied by growth opportunity and firm size, and the third factor is asset substitution proxied by liquidity and dividend policy. According to [www.detikfinance.com](http://www.detikfinance.com), 2013 companies that have the potential to go bankrupt are one of them is a mining sector company. Profit from mining companies in 2012 dropped by 30%. One reason is the decline in coal selling prices compared to the previous year. In addition to the weakening of coal prices, production costs have also increased causing income to decline. Based on this phenomenon, this study is entitled: analysis of internal factors that influence hedging decisions in mining sector companies listed on the Indonesia Stock Exchange in 2015-2018.

## LITERATURE REVIEW

### Hedging

Hedging is an action in taking a position, obtaining a cash flow, an asset or contract that goes up or down in value to cover losses from an increase or decrease in the value of an existing position. Derivatives are financial instruments whose value is based on assets such as stocks, bonds, foreign currencies, interest rates, and other assets. For foreign exchange hedging, companies use foreign exchange derivatives such as futures, forward, swap and option contracts (Eiteman and Stonehill, 2014)".

### Internal factors Financial distress

<sup>2</sup> Financial distress is a measurement measure that indicates difficulties in taking company obligations to creditors or can be referred to as a measure of corporate bankruptcy". "Financial distress is usually faced by companies that use higher debt compared to their capital, besides that financial distress can also be caused by the company's low ability to generate profits from its operating processes. Companies that have high financial distress ratios are usually more likely to hedge.

Financial distress in this study is formulated by calculating the interest coverage ratio (ICR)". Many previous studies used Altman's Z score measuring instrument so this study tried to use a different measurement tool. The greater the value of the ratio produced, it indicates that the cost of financial distress is lower, so the lower the motivation of the company to hedge. Companies that calculate interest coverage ratio (ICR) can find out the condition of the company". Then formulated as follows (Brigham, 2016):

$$ICR = \frac{EBIT}{Interest\ expense}$$

### Leverage

Leverage<sup>3</sup> describes the relationship between a company's debt to assets. Leverage can be used to measure the company's ability to pay off long-term obligations. Good leverage is a company that<sup>3</sup> as assets greater than debt (Klingeberg, 2015). Companies that use leverage ratios can find out the company's ability to meet its obligations can be measured by the ratio of debt to asset ratio (DAR), namely by comparing the total debt of the company and the total assets of the company. "The higher the DAR ratio, it is assumed that companies have a higher risk of liquidity. DAR is formulated as follows (Brigham, 2016):

$$DAR = \frac{Total\ Liabilities}{Total\ asset}$$

### Profitability

Profitability is the company's ability to earn profits to sales, total productive assets and own capital. This profitability ratio provides an overview of the effectiveness of company management (Chaudry and Iqbal, 2014). The higher profitability can increase the prosperity of company owners

and indicate the company is not experiencing financial distress. Companies that have a high level of profitability tend not to make hedging decisions. Return on assets (ROA) is one of the techniques commonly used to measure profitability". "Return on assets (ROA) can be calculated using the following formula (Keown and Arthur, 2015):

$$ROA = \frac{EAT}{Total Asset}$$

#### **Growth opportunity**

Growth opportunity or high growth opportunity of a company can show that the company has a good market value among other companies. Developing companies tend to use many alternatives in their funding. This ratio reflects that the market assesses the return of a company's investment in the future from the expected return of its equity, the difference between market value and the book value of equity indicates the company's growth opportunity. Growth opportunity is formulated as follows (Chaudry and Iqbal, 2014):

$$MBV = \frac{market price}{book value}$$

#### **Firm size**

The size of the company depends on the size of a company can be seen from the value of assets and the ease of obtaining external and internal funding sources. The greater the size of the company, the greater the risk it faces. With that, companies tend to hedge to avoid risk and protect company assets, then it is formulated as follows (Klingeberg, 2015):

$$Size = Ln Total aset$$

#### **Liquidity**

Liquidity illustrates the ability of companies to meet financial obligations that must be met immediately. Companies that have liquid assets tend not to be burdened with asset substitution problems and do not need hedging instruments because they have hedging substitutions, but companies with low liquidity ratios need to do hedging. Liquidity in this study is proxied by the current ratio (CR) and is formulated as follows (Brigham, 2016):

$$CR = \frac{current assets}{current liabilities}$$

#### **Dividend policy**

The dividend policy in this study is proxied through a dividend payout ratio (DPR), which is the annual dividend ratio paid to ordinary shareholders as part of income after interest and taxes". Companies with higher DPR ratios do not need to hedge because the company does not experience asset substitution problems. The DPR is calculated by comparing dividends per share and earnings per share. The DPR is formulated as follows (Keown and Arthur, 2015):

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$$\text{DPR} = \frac{\text{Dividend per share}}{\text{Earning per share}}$$



## METODOLOGY

### Population and sample

The population used in this study are all mining sector companies listed on the Indonesia Stock Exchange with a period of 2015-2018, amounting to 41 companies. Determination of the sample using the purposive sampling method, because the sample selected in this study is following predetermined criteria". The criteria are determined as follows:

1. Mining sector companies currently listed on the Indonesia Stock Exchange.
2. Mining sector companies that have not published their financial reports in a row for the 2015-2018 period (do not meet the sample criteria).
3. Mining sector companies that have no exposure to debt or receivable transactions in foreign currencies for the 2015-2018 period (do not meet the criteria).

Based on predetermined criteria, there are a total of 12 companies that meet the criteria as a sample in this study.

## RESULT AND DISCUSSION

### analysis technique

Analysis of the data used in this study using descriptive statistics which were tested with the help of the SPSS (statistical package for social sciences) version 22.0 program, with the discussion to be carried out by analyzing individual samples and variables in this study and illustrated using tables and graphs.

The results of statistical calculations are presented in a descriptive form to explain the description of the data in this study. Description analysis is carried out to provide a general description of the data used in this study.

**Table 1. Results of the calculation of Descriptive Statistics of PT. Andro Energy Tbk in 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	2.75	6.36	4.7650	1.56082
DAR	4	0.39	0.44	0.4120	0.02061
ROA	4	0.03	0.08	0.0575	0.02217
MBV	4	2.83	11.72	7.7350	3.72498
SIZE	4	15.60	15.77	15.6990	0.07349
CR	4	1.96	2.56	2.3485	0.26666
DPR	4	0.00	0.53	0.3325	0.24405
Valid N (listwise)	4				

Source: 2019 Secondary Data, processed with the SPSS 22.0

<sup>1</sup> Based on table 1, shows that the value of the minimum interest coverage ratio (ICR) of PT. Andro Energy Tbk is 2.75 and the maximum value is 6.36. These results indicate that the ICR of PT. Andro Energy Tbk ranged from 2.75 to 6.36, with an average ICR of 4.7650 at a standard

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deviation rate of 1.56082 ". "The standard deviation value <mean (2.75 <6.36) means that the results indicate that the ICR variable does not have a deviation of results, because the standard deviation is smaller than the average value.

The minimum debt to asset ratio (DAR) value of PT. Andro Energy Tbk is 0.39 and the maximum value is 0.44. This shows that the large DAR of PT. Andro Energy Tbk ranged from 0.39 to 0.44, with an average DAR of 0.4120 at a standard deviation rate of 0.02061. The standard deviation value <mean (0.39 <0.44) means that the results indicate that the DAR variable has no deviation because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Andro Energy Tbk is 0.03 and the maximum value is 0.08. This shows that the great ROA of PT. Andro Energy Tbk ranged from 0.03 to 0.08, with an average ROA of 0.0575 at a standard deviation rate of 0.02217. The standard deviation value <mean (0.03 <0.08) means that the results indicate that the ROA variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum market value to book value (MBV) of PT. Andro Energy Tbk is 2.83 and the maximum value is 11.72. This shows that the large MBV of PT. Andro Energy Tbk ranged from 2.83 to 11.72, with an average MBV of 7.7350 at a standard deviation rate of 3.72498. The standard deviation value <mean (2.83 <11.72) means that the results indicate that the MBV variable has no deviation because the standard deviation is smaller than the average value.

Minimum size value of PT. Andro Energy Tbk is 15.60 and the maximum value is 15.77. This shows that the large size of PT. Andro Energy Tbk ranged from 15.60 to 15.77, with an average size of 15.6990 at a standard deviation rate of 0.07349. The standard deviation value <mean (15.60 <15.77) means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value.

The minimum current ratio (CR) value of PT. Andro Energy Tbk is 1.96 and the maximum value is 2.56. This shows that the CR size of PT. Andro Energy Tbk ranged from 1.96 to 2.56, with an average CR of 2.33485 at a standard deviation rate of 0.26666. The standard deviation value <mean (1.96 <2.56) means that the results indicate that the CR variable has no deviation because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Andro Energy Tbk is 0.00 and the maximum value is 0.53. This shows that the large DPR PT. Andro Energy Tbk ranged from 0.00 to 0.53, with an average DPR of 0.3325 at a standard deviation rate of 0.24405. The standard deviation value <mean (0.00 <0.53) means that the results indicate that the DPR variable does not have any deviation, because the standard deviation is smaller than the average value.

**Table 2. Results of the calculation of Descriptive Statistics of PT. Bumi Resources Tbk in 2015-2018**

N	Minimum	Maximum	Mean	Std. Deviation
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ICR	4	0.33	40.91	13.5500	18.51394
DAR	4	0.87	1.90	1.3870	0.56646
ROA	4	0.04	0.64	0.1975	0.29534
MBV	4	-20.62	612.33	158.0800	303.92553
SIZE	4	21.86	22.09	21.9793	0.10113
CR	4	0.40	4.06	1.4115	1.76755
DPR	4	0.00	0.00	0.0000	0.00000
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0

Based on table 2, shows that the value of the minimum interest coverage ratio (ICR) of PT. Bumi Resources Tbk is 0.33 and the maximum value is 40.91. These results indicate that the ICR of PT. Andro Energy Tbk ranged from 0.33 to 40.91, with an average ICR of 13.5500 at a standard deviation rate of 18.51394 ". The standard deviation value <mean (0.33 <40.91) means that the results indicate the ICR variable has a deviation because the standard deviation is greater than the average value.

The minimum debt to asset ratio (DAR) value of PT. Bumi Resources Tbk is 0.87 and the maximum value is 1.90. This shows that the large DAR of PT. Bumi Resources Tbk ranged from 0.87 to 1.90, with an average DAR of 1.387 at a standard deviation rate of 0.56646. The standard deviation value <mean (0.87 <1.90) means that the results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Bumi Resources Tbk 0.04 and a maximum value of 0.64. This shows that the great ROA of PT. Bumi Resources Tbk ranged from 0.04 to 0.64, with an average ROA of 0.1975 at a standard deviation rate of 0.29534. The standard deviation value <mean (0.04 <0.64) means that the results indicate that the ROA variable has a deviation because the standard deviation is greater than the average value.

The minimum market value to book value (MBV) of PT. Bumi Resources Tbk of -20.62 and a maximum value of 612.33. This shows that the large MBV of PT. Bumi Resources Tbk ranged from -20.62 to 612.33, with an average MBV of 158.0800 at a standard deviation rate of 303.92553. The standard deviation value <mean (-20.62 <612.33) means that the results indicate that the MBV variable has a deviation because the standard deviation value is greater than the average value.

The minimum size value of PT. Bumi Resources Tbk is 21.86 and the maximum value is 22.09. This shows that the large size of PT. Bumi Resources Tbk ranged from 21.86 to 22.09, with an average size of 21.99793 at a standard deviation rate of 0.10113. Standard deviation value <mean (21.86 <22.09) means that these results indicate that the size variable has no deviation because the standard deviation is smaller than the average value.

Minimum current ratio (CR) value of PT. Bumi Resources Tbk is 0.40 and the maximum value is 4.06. This shows that the CR size of PT. Bumi Resources Tbk ranged from 0.40 to 4.06, with an average CR of 1.4115 at a standard deviation rate of 1.76755. The standard deviation value <mean (0.40 <4.06) means that the results indicate that the CR variable has a deviation because the standard deviation is greater than the average value.

The minimum dividend payout ratio (DPR) of PT. Bumi Resources Tbk is 0.00 and the maximum value is 0.00. This shows that the large DPR PT. Bumi Resources Tbk ranges from 0.00 to 0.00, with an average DPR of 0.0000 at a standard deviation rate of 0.00000. This is because the

company does not provide dividends to shareholders.

**Table 3. Results of Descriptive Statistics Calculation of PT. Cita Mineral Investindo Tbk 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	1.11	11.89	5.7350	4.49110
DAR	4	0.54	11.94	3.4463	5.66343
ROA	4	0.02	4.46	1.1750	2.19043
MBV	4	0.00	17.58	4.8375	8.53519
SIZE	4	25.72	28.66	27.9075	1.45777
CR	4	0.47	1.16	0.6900	0.31873
DPR	4	0.00	0.00	0.0000	0.00000
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0

<sup>1</sup> Based on table 3, it shows that the value of the minimum interest coverage ratio (ICR) of PT. Cita Mineral Investindo Tbk is 1.11 and the maximum value is 11.89. These results indicate that the ICR of PT. Cita Mineral Tbk ranges from 1.11 to 11.89, with an average ICR of 5.7350 at a standard deviation rate of 4.4910. The standard deviation value <mean (1.11 <11.89) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Cita Mineral Investindo Tbk is 0.54 and the maximum value is 11.94. This shows that the large DAR of PT. Cita Mineral Investindo Tbk ranged from 0.54 to 11.94, with an average DAR of 3.4463 at a standard deviation rate of 5.66343. Standard deviation value <mean (0.54 <11.94) means that the results indicate that the DAR variable has a deviation because the standard deviation value is greater than the average value.

The minimum return on asset (ROA) value of PT. Cita Mineral Investindo Tbk is 0.02 and the maximum value is 4.46. This shows that the ROA of PT. Cita Mineral Investindo Tbk ranged from 0.02 to 4.46, with an average ROA of 1.1750 at a standard deviation rate of 2.19043. Standard deviation value <mean (0.02 <4.46) means that the results indicate that the ROA variable has a deviation because the standard deviation is greater than the average value.

The minimum market value to book value (MBV) of PT. Cita Mineral Investindo Tbk is 0.00 and the maximum value is 17.58. This shows that the large MBV of PT. Bumi Resources Tbk ranged from 0.00 to 17.58, with an average MBV of 4.8375 at a standard deviation rate of 8.53519. Standard deviation value <mean (0.00 <17.58) means that the results indicate that the MBV variable has a deviation because the standard deviation is greater than the average value.

Minimum size value of PT. Cita Mineral Investindo Tbk is 25.72 and the maximum value is 28.66. This shows that the large size of PT. Cita Mineral Investindo Tbk ranged from 25.72 to 28.66, with an average size of 27.9075 at a standard deviation rate of 1.45777. Standard deviation value <mean (25.72 <28.66) means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value.

Minimum current ratio (CR) value of PT. Cita Mineral Investindo Tbk is 0.47 and the maximum value is 1.16. This shows that the CR size of PT. Cita Mineral Investindo Tbk ranged from 0.47 to 1.16, with an average CR of 0.6900 at a standard deviation rate of 0.31873. Standard deviation value <mean (0.47 <1.16) means that the results indicate that the CR variable does not

have any deviation, because the standard deviation is smaller than the average value. The minimum dividend payout ratio (DPR) of PT. Cita Mineral Investindo Tbk is 0.00 and the maximum value is 0.00. This shows that the large DPR PT. Cita Mineral Investindo Tbk ranges from 0.00 to 0.00, with an average DPR of 0.0000 at a standard deviation rate of 0.00000. This is because the company does not provide dividends to shareholders.

**Table 4. Results of Descriptive Statistics Calculation of PT. Darma Henwa Tbk 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	0,25	0,96	0,5500	0,29676
DAR	4	0,40	0,44	0,4212	0,02156
ROA	4	0,00	0,01	0,0050	0,00577
MBV	4	0,31	16,85	5,3300	7,73110
SIZE	4	19,74	19,84	19,7878	0,04867
CR	4	0,80	1,25	0,9775	0,20973
DPR	4	0,00	0,00	0,0000	0,00000
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0

<sup>1</sup> Based on table 4, shows that the value of the minimum interest coverage ratio (ICR) of PT. Darma Henwa Tbk is 0.25 and the maximum value is 0.96. These results indicate that the ICR of PT. Darma Henwa Tbk ranged from 0.25 to 0.96, with an average ICR of 0.5500 at the standard deviation level of 0.29676. The standard deviation value <mean (0.25 <0.96) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Darma Henwa Tbk is 0.40 and the maximum value is 0.44. This shows that the large DAR of PT. Darma Henwa Tbk ranged from 0.40 to 0.44, with an average DAR of 0.4212 at a standard deviation rate of 0.02156. Standard deviation values <mean (0.40 <0.44) means that these results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Cita Mineral Investindo Tbk is 0.02 and the maximum value is 4.46. This shows that the ROA of PT. Cita Mineral Investindo Tbk ranged from 0.02 to 4.46, with an average ROA of 1.1750 at a standard deviation rate of 2.19043. Standard deviation value <mean (0.02 <4.46) means that the results indicate that the ROA variable has a deviation because the standard deviation is greater than the average value.

The minimum return on asset (ROA) value of PT. Darma Henwa Tbk is 0.00 and the maximum value is 0.01. This shows that the ROA of PT. Darma Henwa Tbk ranges from 0.00 to 0.01, with an average ROA of 0.0050 at a standard deviation rate of 0.00577. Standard deviation value <mean (0.00 <0.01) means that the results indicate that the ROA variable has a deviation because the standard deviation is greater than the average value.

The minimum market value to book value (MBV) of PT. Darma Henwa Tbk is 0.31 and the maximum value is 16.85. This shows that the large MBV of PT. Darma Henwa Tbk ranged from 0.31 to 16.85, with an average MBV of 5.3300 at a standard deviation rate of 7.73110. Standard deviation value <mean (0.31 <16.85) means that the results indicate that the MBV variable has a deviation because the standard deviation is greater than the average value.



Minimum size value of PT. Darma Henwa Tbk is 19.74 and the maximum value is 19.84. This shows that the large size of PT. Darma Henwa Tbk ranged from 19.74 to 17.84, with an average size of 19.7878 at the standard deviation level of 0.04867. Standard deviation value <mean (19.74 <19.84) means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value. Minimum current ratio (CR) value of PT. Darma Henwa Tbk is 0.80 and the maximum value is 1.25. This shows that the CR size of PT. Darma Henwa Tbk ranged from 0.80 to 1.25, with an average CR of 0.9775 at the standard deviation level of 0.20973. The standard deviation value <mean (0.80 <1.25) means that the results indicate that the CR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Darma Henwa Tbk is 0.00 and the maximum value is 0.00. This shows that the large DPR PT. Darma Henwa Tbk ranges from 0.00 to 0.00, with an average DPR of 0.0000 at a standard deviation rate of 0.00000. This is because the company does not provide dividends to shareholders.

**Table 5. Results of Descriptive Statistics Calculation of PT. Delta Dunia Makmur Tbk Year 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	0,15	2,09	1,3300	0,83086
DAR	4	0,78	0,90	0,8386	0,05184
ROA	4	0,01	0,06	0,0400	0,02160
MBV	4	7,34	21,26	12,9150	6,49959
SIZE	4	20,54	20,89	20,6740	0,15446
CR	4	1,37	3,00	1,8920	0,74902
DPR	4	0.00	0.00	0.0000	0.00000
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0 program.

<sup>1</sup> Based on table 5, it shows that the value of the minimum interest coverage ratio (ICR) of PT. Delta Dunia Makmur Tbk is 0.15 and the maximum value is 2.09. These results indicate that the ICR of PT. Delta Dunia Makmur Tbk ranged from 0.15 to 2.09, with an average ICR of 1.3300

at a standard deviation rate of 0.83086. Standard deviation value <mean (0.15 <2.09) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Delta Dunia Makmur Tbk is 0.78 and the maximum value is 0.90. This shows that the large DAR of PT. Delta Dunia Makmur Tbk ranged from 0.78 to 0.90, with an average DAR of 0.8386 at a standard deviation rate of 0.05184. Standard deviation value <mean (0.78 <0.90) means that the results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Delta Dunia Makmur Tbk is 0.01 and the maximum value is 0.06. This shows that the ROA of PT. Delta Dunia Makmur Tbk ranged from 0.01 to 0.06, with an average ROA of 0.0400 at a standard deviation rate of 0.02160. Standard deviation value <mean (0.01 <0.06) means that the results indicate that the ROA variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum market value to book value (MBV) of PT. Delta Dunia Makmur Tbk is 7.34 and the maximum value is 21.26. This shows that the large MBV of PT. Delta Dunia Makmur Tbk ranged from 7.34 to 21.26, with an average MBV of 12.9150 at a standard deviation rate of 6.49959. Standard deviation value <mean (7.34 <21.26) means that the results indicate that the MBV variable has no deviation because the standard deviation is smaller than the average value.

Minimum size value of PT. Delta Dunia Makmur Tbk is 20.54 and the maximum value is 20.89. This shows that the large size of PT. Delta Dunia Makmur Tbk ranged from 20.54 to 20.89, with an average size of 20.6740 at a standard deviation rate of 0.15446. Standard deviation value <mean (20.54 <20.89) means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value company does not provide dividends to shareholders.

Minimum current ratio (CR) value of PT. Delta Dunia Makmur Tbk is 1.37 and the maximum value is 3.00. This shows that the CR size of PT. Delta Dunia Makmur Tbk ranged from 1.37 to 3.00, with an average CR of 1.8920 at a standard deviation rate of 0.74902. Standard deviation value <mean (1.37 <3.00) means that the results indicate that the CR variable has no deviation because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Delta Dunia Makmur Tbk is 0.00 and the maximum value is 0.00. This shows that the large DPR PT. Delta Dunia Makmur Tbk ranges from 0.00 to 0.00, with an average DPR of 0.0000 at a standard deviation rate of 0.00000. This is because the company does not provide dividends to shareholders.

**Table 6. Results of Descriptive Statistics Calculation of PT. Harum Energy Tbk. 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	0,79	3,46	1,8525	1,13691
DAR	4	0,10	0,17	0,1365	0,02955
ROA	4	0,04	0,12	0,0750	0,0697
MBV	4	0,11	1,71	0,6550	0,72113
SIZE	4	19,76	19,96	19,8768	0,09678
CR	4	4,56	6,91	5,4978	1,01221
DPR	4	0.00	1,10	0,2750	0,55000
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0 program.

<sup>1</sup> Based on table 6, shows that the value of the minimum interest coverage ratio (ICR) of PT. Harum Energy Tbk is 0.79 and the maximum value is 3.46. These results indicate that the ICR of PT. Harum Energy Tbk ranged from 0.79 to 3.46, with an average ICR of 1.8525 at a standard deviation of 1.13691. The standard deviation value <mean (0.79 <3.46) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Harum Energy Tbk is 0.10 and the maximum value is 0.17. This shows that the large DAR of PT. Harum Energy Tbk ranged from 0.10 to 0.17, with an average DAR of 0.1365 at a standard deviation rate of 0.02955. Standard deviation values <mean (0.10 <0.17) means that the results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Harum Energy Tbk is 0.04 and the maximum value is 0.12. This shows that the ROA of PT. Harum Energy Tbk ranged from 0.04 to 0.12, with an average ROA of 0.0750 at a standard deviation rate of 0.0697. Standard deviation values <mean (0.04 <0.12) means that the results indicate that the ROA variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum market value to book value (MBV) of PT. Harum Energy Tbk is 0.11 and the maximum value is 1.71. This shows that the large MBV of PT. Harum Energy Tbk ranged from 0.11 to 1.71, with an average MBV of 0.6550 at a standard deviation rate of 0.72113. Standard deviation value <mean (0.11 <1.71) means that the results indicate that the MBV variable has a deviation because the standard deviation is greater than the average value.

Minimum size value of PT. Harum Energy Tbk is 17.76 and the maximum value is 19.96. This shows that the large size of PT. Harum Energy Tbk ranged from 17.76 to 19.96, with an average size of 19.8768 at a standard deviation rate of 0.09678. Standard deviation value <mean (17.76 <19.96) means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value.

Minimum current ratio (CR) value of PT. Harum Energy Tbk is 4.56 and the maximum value is 6.91. This shows that the CR size of PT. Harum Energy Tbk ranged from 4.56 to 6.91, with an average CR of 5.4978 at a standard deviation level of 1.01221. Standard deviation value <mean (4.56 <6.91) means that the results indicate that the CR variable has no deviation because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Harum Energy Tbk is 0.00 and the maximum value is 1.10. This shows that the large DPR PT. Harum Energy Tbk ranges from 0.00 to 1.10, with an average DPR of 0.2750 at a standard deviation rate of 0.55000. The standard deviation value <mean (0.00 <1.10) means that the results indicate that the DPR variable has a deviation because the standard deviation value is greater than the average value.

**Table 7. Results of Descriptive Statistics Calculation of PT. Indo Tambangraya Megah Tbk Year 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	6,19	12,44	9,7925	2,00783
DAR	4	0,25	0,33	0,2913	0,03197
ROA	4	0,05	0,18	0,1125	0,05315
MBV	4	0,19	0,59	0,4250	0,19070
SIZE	4	13,98	14,18	14,0725	0,09560



**Mutiara Indah, Isni Andriana & Kemas M. Husni Thamrin, *Analysis of Internal Factors That Affecting the Decision of Hedging in Companies Mining Sectors Listed on Bursa Efek Indonesia***

CR	4	1,80	2,43	2,1148	0,28407
DPR	4	0,28	5,39	1,9750	2,31105
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0 program.

<sup>1</sup> Based on table 7, shows that the value of the minimum interest coverage ratio (ICR) of PT. Indo Tambangraya Megah Tbk is 6.19 and the maximum value is 12.44. These results indicate that the ICR of PT. Indo Tambangraya Megah Tbk ranged from 6.19 to 12.44, with an average ICR of 9.7925 at a standard deviation rate of 2.00783. The standard deviation value <mean (6.19 <12.44) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Indo Tambangraya Megah Tbk is 0.25 and the maximum value is 0.33. This shows that the large DAR of PT. Indo Tambangraya Megah Tbk ranged from 0.25 to 0.33, with an average DAR of 0.2913 at a standard deviation rate of 0.03197. Standard deviation value <mean (0.25 <0.33) means that the results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Indo Tambangraya Megah Tbk is 0.05 and the maximum value is 0.18. This shows that the ROA of PT. Indo Tambangraya Megah Tbk ranged from 0.05 to 0.18, with an average ROA of 0.1125 at a standard deviation rate of 0.05315. Standard deviation value <mean (0.05 <0.18) means that the results indicate that the ROA variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum market value to book value (MBV) of PT. Indo Tambangraya Megah Tbk is 0.19 and the maximum value is 0.59. This shows that the large MBV of PT. Indo Tambangraya Megah Tbk ranged from 0.19 to 0.59, with an average MBV of 0.4250 at a standard deviation rate of 0.19070. Standard deviation values <mean (0.19 <0.59) means that the results indicate that the MBV variable does not have any deviation, because the standard deviation is smaller than the average value.

Minimum size value of PT. Indo Tambangraya Megah Tbk is 13.98 and the maximum value is 14.18. This shows that the large size of PT. Indo Tambangraya Megah Tbk ranged from 13.98 to 14.18, with an average size of 14.0725 at a standard deviation rate of 0.09560. Standard deviation value <mean (13.98 <14.18) means that the results indicate that the SIZE variable has no deviation because the standard deviation is smaller than the average value.

Minimum current ratio (CR) value of PT. Indo Tambangraya Megah Tbk is 1.80 and the maximum value is 2.43. This shows that the CR size of PT. Indo Tambangraya Megah Tbk ranged from 1.80 to 2.43, with an average CR of 2.1148 at a standard deviation rate of 0.28407. Standard deviation value <mean (1.80 <2.43) means that the results indicate that the CR variable has no deviation because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Indo Tambangraya Megah Tbk is 0.28 and the maximum value is 5.39. This shows that the large DPR PT. Indo Tambangraya Megah Tbk ranged from 0.28 to 5.39, with an average DPR of 1.9750 at a standard deviation rate of 2.31105. Standard deviation value <mean (0.28 <5.39) means that the results indicate that the DPR variable has a deviation because the standard deviation value is greater than the average value.

**Table 8. Results of Descriptive Statistics Calculation of PT. Medco Energi International Tbk 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	1,10	3,54	2,0550	1,08497
DAR	4	0,73	0,76	0,7438	0,01424
ROA	4	0,01	0,06	0,0375	0,2217
MBV	4	0,17	11,45	4,0650	5,25335
SIZE	4	21,79	22,38	22,1350	0,28822
CR	4	1,32	1,98	1,6218	0,27915
DPR	4	0,00	0,000	0,0000	0,00000
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0

<sup>1</sup> Based on table 8, shows that the value of the minimum interest coverage ratio (ICR) of PT. Medco Energi International Tbk is 1.10 and the maximum value is 3.54. These results indicate that the ICR of PT. Medco Energi International Tbk ranges from 1.10 to 3.54, with an average ICR of 2.0550 at a standard deviation level of 1.08497. Standard deviation value <mean (1.10 <3.54) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Medco Energi International Tbk is 0.73 and the maximum value is 0.76. This shows that the large DAR of PT. Medco Energi International Tbk ranged from 0.73 to 0.76, with an average DAR of 0.7438 at a standard deviation rate of 0.01424. Standard deviation value <mean (0.73 <0.76) means that the results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Medco Energi International Tbk is 0.01 and the maximum value is 0.06. This shows that the ROA of PT. Medco Energi International Tbk ranges from 0.01 to 0.06, with an average ROA of 0.0375 at a standard deviation rate of 0.2217. Standard deviation value <mean (0.01 <0.06) means that the results indicate that the ROA variable has a deviation because the standard deviation is greater than the average value.

The minimum market value to book value (MBV) of PT. Medco Energi International Tbk is 0.17 and the maximum value is 11.45. This shows that the large MBV of PT. Medco Energi International Tbk ranged from 0.17 to 11.45, with an average MBV of 4.0650 at a standard deviation rate of 5.25335. Standard deviation value <mean (0.17 <11.45) means that the results indicate that the MBV variable has a deviation because the standard deviation is greater than the average value.

Minimum size value of PT. Medco Energi International Tbk is 21.79 and the maximum value is 22.38. This shows that the large size of PT. Medco Energi International Tbk ranged from 21.79 to 22.38, with an average SIZE of 22.1350 at a standard deviation rate of 0.28822. Standard deviation value <mean (21.79 <22.38) means that the results indicate that the SIZE variable has no deviation because the standard deviation is smaller than the average value.

Minimum current ratio (CR) value of PT. Medco Energi International Tbk is 1.32 and the maximum value is 1.98. This shows that the CR size of PT. Medco Energi International Tbk ranged from 1.32 to 1.98, with an average CR of 1.6218 at a standard deviation rate of 0.27915. The standard deviation value <mean (1.32 <1.98) means that the results indicate that the CR variable has no deviation because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Medco Energi International Tbk is 0.00 and the

maximum value is 0,000. This shows that the large DPR PT. Indo Tambangraya Megah Tbk ranges from 0.00 to 0,000, with an average DPR of 0.0000 at a standard deviation rate of 0.00000. This is because there is no distribution of dividends to shareholders.

**Table 9. Results of Descriptive Statistics Calculation of PT. Perdana Karya Perkasa Tbk Year 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	0,09	6,25	2,3275	2,71375
DAR	4	0,01	0,57	0,4237	0,27921
ROA	4	0,03	0,36	0,1400	0,14900
MBV	4	0,00	0,17	0,0625	0,07588
SIZE	4	18,67	18,96	18,8090	0,13040
CR	4	0,71	111,31	31,6293	53,47130
DPR	4	0,00	0,000	0,0000	0,00000
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0

<sup>1</sup> Based on table 9, shows that the value of the minimum interest coverage ratio (ICR) of PT. Perdana Karya Perkasa Tbk is 0.09 and the maximum value is 6.25. These results indicate that the ICR of PT. Perdana Karya Perkasa Tbk ranged from 0.09 to 6.25, with an average ICR of 2.3275 at a standard deviation rate of 2.71375. The standard deviation value <mean (0.09 <6.25) means that the results indicate the ICR variable has a deviation because the standard deviation value is greater than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Perdana Karya Perkasa Tbk is 0.01 and the maximum value is 0.57. This shows that the large DAR of PT. Perdana Karya Perkasa Tbk ranged from 0.01 to 0.57, with an average DAR of 0.4237 at a standard deviation level of 0.27921. Standard deviation value <mean (0.01 <0.57) means that the results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Perdana Karya Perkasa Tbk is 0.03 and the maximum value is 0.36. This shows that the ROA of PT. Perdana Karya Perkasa Tbk ranged from 0.03 to 0.36, with an average ROA of 0.1400 at a standard deviation level of 0.14900. Standard deviation values <mean (0.03 <0.36) means that these results indicate that the ROA variable has a deviation because the standard deviation is greater than the average value.

The minimum market value to book value (MBV) of PT. Perdana Karya Perkasa Tbk is 0.00 and the maximum value is 0.17. This shows that the large MBV of PT. Perdana Karya Perkasa Tbk ranged from 0.00 to 0.17, with an average MBV of 0.0625 at a standard deviation rate of 0.07588. Standard deviation values <mean (0.00 <0.17) means that the results indicate that the MBV variable has a deviation because the standard deviation is greater than the average value.

Minimum size value of PT. Perdana Karya Perkasa Tbk is 18.67 and the maximum value is 18.96. This shows that the large size of PT. Perdana Karya Perkasa Tbk ranged from 18.67 to 18.96, with an average size of 18.8090 at a standard deviation level of 0.13040. Standard deviation value <mean (18.67 <18.96) means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value.

Minimum current ratio (CR) value of PT. Perdana Karya Perkasa Tbk is 0.71 and the



maximum value is 111.31. This shows that the CR size of PT. Perdana Karya Perkasa Tbk ranged from 0.71 to 111.31, with an average CR of 31.6293 at a standard deviation rate of 53.447130. Standard deviation value <mean (0.71 <111.31) means that the results indicate that the CR variable has a deviation because the standard deviation value is greater than the average value.

The minimum dividend payout ratio (DPR) of PT. Perdana Karya Perkasa Tbk is 0.00 and the maximum value is 0,000. This shows that the large DPR PT. Perdana Karya Perkasa Tbk ranged from 0.00 to 0,000, with an average DPR of 0.0000 at a standard deviation rate of 0.00000. This is because there is no distribution of dividends to shareholders.

**Table 10. Results of Descriptive Statistics Calculation of PT. Petrosea Tbk 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	0,47	1,65	0,7950	0,57164
DAR	4	0,52	0,66	0,5998	0,5709
ROA	4	0,02	0,04	0,0275	0,00957
MBV	4	0,01	0,33	0,1525	0,14245
SIZE	4	12,88	13,23	13,0148	0,14888
CR	4	1,55	2,16	1,7645	0,26946
DPR	4	0,00	0,56	0,1400	0,28000
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0

<sup>1</sup> Based on table 10, shows that the value of the minimum interest coverage ratio (ICR) of PT. Petrosea Tbk is 0.47 and the maximum value is 1.65. These results indicate that the ICR of PT. Petrosea Tbk ranged from 0.47 to 1.65, with an average ICR of 0.7950 at a standard deviation rate of 0.57164. The standard deviation value <mean (0.47 <1.65) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Petrosea Tbk is 0.52 and the maximum value is 0.66. This shows that the large DAR of PT. Petrosea Tbk ranged from 0.52 to 0.66, with an average DAR of 0.5998 at a standard deviation rate of 0.5709. Standard deviation value <mean (0.52 <0.66) means that the results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Petrosea Tbk is 0.02 and the maximum value is 0.04. This shows that the ROA of PT. Petrosea Tbk ranged from 0.02 to 0.04, with an average ROA of 0.0275 at a standard deviation rate of 0.00957. The standard deviation value <mean (0.02 <0.04) means that the results indicate that the ROA variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum market value to book value (MBV) of PT. Petrosea Tbk is 0.01 and the maximum value is 0.33. This shows that the large MBV of PT. Petrosea Tbk ranged from 0.01 to 0.33, with an average MBV of 0.1525 at a standard deviation rate of 0.14245. Standard deviation value <mean (0.01 <0.33) means that the results indicate that the MBV variable does not have any deviation, because the standard deviation is smaller than the average value.

Minimum size value of PT. Petrosea Tbk is 12.88 and the maximum value is 13.23. This shows that the large size of PT. Petrosea Tbk ranged from 12.88 to 13.23, with an average size of 13.0148 at a standard deviation rate of 0.14888. Standard deviation value <mean (12.88 <13.23)

means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value

Minimum current ratio (CR) value of PT. Petrosea Tbk is 1.55 and the maximum value is 2.16. This shows that the CR size of PT. Petrosea Tbk ranged from 1.55 to 2.16, with an average CR of 1.7645 at a standard deviation rate of 0.26946. Standard deviation value <mean (1.55 <2.16) means that the results indicate that the CR variable has no deviation because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Petrosea Tbk is 0.00 and the maximum value is 0.56. This shows that the large DPR PT. Petrosea Tbk ranged from 0.00 to 0.56, with the DPR average of 0.1400 at a standard deviation rate of 0.28000. The standard deviation value <mean (0.00 <0.56) means that the results indicate that the CR variable has a deviation because the standard deviation is greater than the average value.

**Table 11. Results of Descriptive Statistics Calculation of PT. Radiant Utama Interinsco Tbk in 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	0,33	0,49	0,4025	0,07182
DAR	4	0,59	0,69	0,6293	0,04428
ROA	4	0,02	0,04	0,0300	0,00816
MBV	4	0,00	0,15	0,0425	0,07228
SIZE	4	27,59	27,72	27,6350	0,05745
CR	4	0,90	1,11	1,0078	0,08708
DPR	4	0,00	0,18	0,800	0,09381
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0

<sup>1</sup> Based on table 11, shows that the value of the minimum interest coverage ratio (ICR) of PT. Radiant Utama Interinsco Tbk is 0.33 and the maximum value is 0.49. These results indicate that the ICR of PT. Radiant Utama Interinsco Tbk ranged from 0.33 to 0.49, with an average ICR of 0.4025 at a standard deviation rate of 0.07182. The standard deviation value <mean (0.33 <0.49) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Radiant Utama Interinsco Tbk is 0.59 and the maximum value is 0.69. This shows that the large DAR of PT. Radiant Utama Interinsco Tbk ranged from 0.59 to 0.69, with an average DAR of 0.6293 at a standard deviation rate of 0.04428. Standard deviation value <mean (0.59 <0.69) means that the results indicate that

the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Radiant Utama Interinsco Tbk is 0.02 and the maximum value is 0.04. This shows that the ROA of PT. Radiant Utama Interinsco Tbk ranged from 0.02 to 0.04, with an average ROA of 0.0300 at a standard deviation rate of 0.00816. The standard deviation value <mean (0.02 <0.04) means that the results indicate that the ROA variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum market value to book value (MBV) of PT. Radiant Utama Interinsco Tbk is 0.00 and the maximum value is 0.15. This shows that the large MBV of PT. Radiant Utama Interinsco Tbk ranged from 0.00 to 0.15, with an average MBV of 0.0425 at a standard deviation rate of 0.07228. Standard deviation values <mean (0.00 <0.15) means that the results indicate that the MBV variable has a deviation because the standard deviation is greater than the average value.

Minimum size value of PT. Radiant Utama Interinsco Tbk is 27.59 and the maximum value is 27.72. This shows that the large size of PT. Radiant Utama Interinsco Tbk ranged from 27.59 to 27.72, with an average size of 27.6350 at a standard deviation rate of 0.05745. Standard deviation value <mean (27.59 <27.72) means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value.

Minimum current ratio (CR) value of PT. Radiant Utama Interinsco Tbk is 0.90 and the maximum value is 1.11. This shows that the CR size of PT. Radiant Utama Interinsco Tbk ranged from 0.90 to 1.11, with an average CR of 1.0078 at a standard deviation rate of 0.08708. Standard deviation values <mean (0.90 <1.11) means that the results indicate that the CR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Radiant Utama Interinsco Tbk is 0.00 and the maximum value is 0.18. This shows that the large DPR PT. Radiant Utama Interinsco Tbk ranged from 0.00 to 0.18, with an average DPR of 0.800 at a standard deviation rate of 0.09381. Standard deviation value <mean (0.00 <0.18) means that the results indicate that the CR variable does not have any deviation, because the standard deviation is smaller than the average value.

**Table 12. Results of Descriptive Statistics Calculation of PT. Timah (Persero) Tbk, 2015-2018**

	N	Minimum	Maximum	Mean	Std. Deviation
ICR	4	0,33	1,01	0,7625	0,30369
DAR	4	0,41	0,41	0,4720	0,07400
ROA	4	0,01	0,01	0,0300	0,01414
MBV	4	0,50	0,50	3,1000	3,07442
SIZE	4	16,04	16,53	16,2340	0,22662
CR	4	1,49	2,06	1,7680	0,23501
DPR	4	0,00	0,35	0,0875	0,17500
Valid N (listwise)	4				

Source: Secondary Data 2019, processed with the SPSS 22.0 program.

<sup>1</sup> Based on table 12, shows that the value of the minimum interest coverage ratio (ICR) of PT. Timah (Persero) Tbk of 0.33 and a maximum value of 1.01. These results indicate that the ICR of PT. Timah (Persero) Tbk ranged from 0.33 to 1.01, with an average ICR of 0.7625 at a standard



deviation rate of 0.30369. The standard deviation value  $\leq$  mean ( $0.33 \leq 1.01$ ) means that the results indicate that there is no deviation from the ICR variable because the standard deviation is smaller than the average value.

The minimum value of debt to asset ratio (DAR) of PT. Timah (Persero) Tbk is 0.41 and the maximum value is 0.41. This shows that the large DAR of PT. Timah (Persero) Tbk ranged from 0.41 to 0.41, with an average DAR of 0.4720 at a standard deviation rate of 0.07400. Standard deviation value  $\leq$  mean ( $0.41 \leq 0.41$ ) means that the results indicate that the DAR variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum return on asset (ROA) value of PT. Timah (Persero) Tbk is 0.01 and the maximum value is 0.01. This shows that the ROA of PT. Timah Persero Tbk ranged from 0.01 to 0.01, with an average ROA of 0.0300 at a standard deviation level of 0.01414. The standard deviation value  $\leq$  mean ( $0.01 \leq 0.01$ ) means that the results indicate that the ROA variable does not have any deviation, because the standard deviation is smaller than the average value.

The minimum market value to book value (MBV) of PT. Timah (Persero) Tbk is 0.50 and the maximum value is 0.50. This shows that the large MBV of PT. Timah (Persero) Tbk ranged from 0.50 to 0.50, with an average MBV of 3.1000 at a standard deviation rate of 3.07442. Standard deviation value  $\leq$  mean ( $0.50 \leq 0.50$ ) means that the results indicate that the MBV variable has no deviation because the standard deviation is smaller than the average value.

Minimum size value of PT. Timah (Persero) Tbk of 16.04 and the maximum value of 16.53. This shows that the large size of PT. Timah (Persero) Tbk ranged from 16.04 to 16.53, with an average size of 16.2340 at a standard deviation level of 0.22662. Standard deviation value  $\leq$  mean ( $16.04 \leq 16.53$ ) means that the results indicate that the size variable has no deviation because the standard deviation is smaller than the average value.

Minimum current ratio (CR) value of PT. Timah (Persero) Tbk is 1.49 and the maximum value is 2.06. This shows that the CR size of PT. Timah (Persero) Tbk ranged from 1.49 to 2.06, with an average CR of 1.7680 at a standard deviation rate of 0.23501. The standard deviation value  $\leq$  mean ( $1.49 \leq 2.06$ ) means that the results indicate that the CR variable has no deviation because the standard deviation is smaller than the average value.

The minimum dividend payout ratio (DPR) of PT. Timah (Persero) Tbk is 0.00 and the maximum value is 0.35. This shows that the large DPR PT. Timah (Persero) Tbk ranged from 0.00 to 0.35, with an average DPR of 0.0875 at a standard deviation rate of 0.17500. Standard deviation value  $\leq$  mean ( $0.00 \leq 0.35$ ) means that the results indicate that the CR variable has a deviation because the standard deviation value is greater than the average value.

## **CONCLUSION**

Based on research results from descriptive statistical analysis and discussion of the analysis of internal factors that influence hedging decisions on mining sector companies listed on the Indonesia Stock Exchange in 2015-2018 in the previous chapter, the following conclusions can be drawn:

1. Based on the results of the study it was stated that there were no companies that we're able to meet the average standard interest coverage ratio (ICR) during the 2015-2018 research year. Then there are also no companies that can meet the average standard debt to asset ratio (DAR) during the 2015-2018 research year. None of the companies were able to meet the average Return on Assets (ROA) standard during the 2015-2018 research year. No company has been able to meet the average Firm Size standard during the 2015-2018 study year. No company is able to meet the average standard current ratio (CR) and dividend

payout ratio (DPR) during the 2015-2018 research year on an ongoing basis. Companies that have not been able to meet the average standard tend to do hedging to avoid the risk of internal hedging factors, namely financial distress, underinvestment, and asset substitution problems.

2. There is one company that can meet the average market to book value (MBV) standard during the research year, namely 2015-2018, namely only PT. Bumi Resources Tbk. This is caused by the average market to book value (MBV) of PT. Bumi Resources Tbk, which has been increasing during the research year, companies with a higher market to book value (MBV) tend to hedge to protect the company's assets from the risk of financial distress, underinvestment, and asset substitution problems. Meanwhile, other companies do not meet the market to book value (MBV) average standard so the company does not hedge.

### **LIMITATION AND FUTURE RESEARCH**

Realizing that in this study there are still many shortcomings and limitations, the following suggestions are given by researchers for further research on the same topic:

1. It is expected to be able to use hedging disclosure indicators for companies in Indonesia for further research.
2. For companies, it is expected to be able to improve strategy and prudence in hedging decision making to protect corporate transactions to avoid the risk of financial distress, underinvestment, and asset substitution.
3. It is expected to be able to measure internal factors with other research methods or add variables that can be used so that it can improve research results more thoroughly.

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# ANALYSIS OF INTERNAL FACTORS THAT AFFECTING THE DECISION OF HEDGING IN COMPANIES MINING SECTORS LISTED ON BURSA EFEK INDONESIA

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