

# Analysis of Financial Ratios to Measure Financial Performance in the Oil and Gas Industry Listed on the Indonesia Stock Exchange for the Period 2017-2021

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## ABSTRACT

*This study aims to determine the financial performance of oil and gas companies listed on the IDX for the 2017-2021 period. This type of research is a descriptive qualitative research with secondary data, namely in the form of financial reports of oil and gas companies listed on the IDX obtained from the website [www.idx.co.id](http://www.idx.co.id) with time series and cross sectional analysis. The samples used in this study are three oil and gas companies listed on the IDX for the 2017-2021 period, namely PT. Astrindo Nusantara Infrastructure Tbk, PT. Elnusa Tbk and PT. Main radiant interinsco Tbk with sampling technique using purposive sampling method. Analysis of the data used is the analysis of financial ratios. The results showed that in the ratio analysis of the overall company finances which became the object of research the company had a good performance.*

*Keywords: analysis of financial statements, financial performance, financial ratios*

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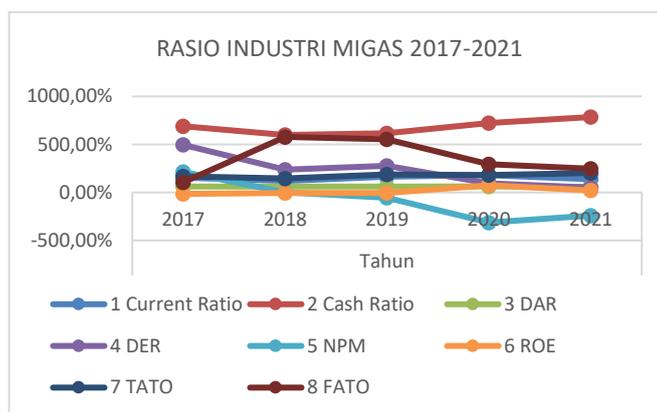
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## Introduction

The development of the Industrial sector is very rapid, in Indonesia the company consists of several sectors that produce various types of natural resources, one of which is the natural resources of oil and gas mining. Mining industry companies engaged in the oil and gas sector have a very important role and contribute greatly to the revenue of the state budget (State revenue and expenditure budget) activities carried out include resource exploration, conducting production to distribution and where activities take place also get economic contributions. Information about the oil and gas industry that was negatively affected during the Covid-19 pandemic in 2019 the oil and gas industry experienced a decrease in demand, a decrease in prices and overproduction (although production decreased) the whole community carried out all activities at home doing work activities, economic activities. Based on Widyastuti & Nugroho's research, (2020) the demand for fuel oil in the transportation sector has also decreased the most, the demand for crude oil which has started to occur in the first quarter of 2020, will continue to decline until it reaches its lowest point at the end of the 2nd quarter, then it is assumed that it will increase and reach its balance point with the supply of petroleum at the end of the 3rd quarter of 2020. . During this period of declining demand, the consumptive behavior of oil consumption will be reduced by more than 10 million barrels per day, or even 15-20 million barrels per day. Or about 20%-30%. According to research by Cahyono & Yunita L. (2021) the oil and gas industry also produces fluctuating financial ratios and shows poor financial condition. Rapid economic development also results in companies having to determine policies and need to increase business efficiency and effectiveness to keep the company running actively and continuously (going concern). One way to find out internal and external conditions is to analyze financial statements to determine the company's financial performance. Financial performance is an assessment of a company's performance on the company's ability to generate profits. Financial performance analysis tools that have been widely used by companies include financial ratios, balanced scorecard and economic value added. one way to measure the company's financial performance is to use financial ratio analysis by analyzing each nominal listed in the financial statements it will be easier to know the company's financial condition. The oil and gas industry company in the table above shows that it has publishes its financial statements on the IDX for the period 2017-2021 with different profit fluctuations every year. According to Cashmere (2018; in this time or in a certain period. Based on the financial statements published by the company, it can be calculated the number of ratios that are used as a basic reference to assess the company's financial performance. The financial ratios used in this financial performance assessment are liquidity, solvency, activity and profitability ratios. Based on the analysis of financial statements, the average value of the Current Ratio, Cash

Ratio, Debt to Equity Ratio, Debt To Assets Ratio and Return On Equity and Net Profit Margin can be obtained. in the Oil and Gas Mining sub-sector companies listed on the IDX in 2017-2021..



*Gambar 1. Nilai rata-rata Current ratio, cash ratio, Debt to assets ratio, Debt to Equity ratio, Total aset turnover, Fixed aset turnover, Net profit margin dan Return of equity oil and gas industry listed on the IDX in 2017-2021.*

From the results of the Current Ratio calculation in Figure 1. shows that the resulting ratio fluctuates and tends to decrease according to the average standard, indicating that it is in a condition that is considered unfavorable because all the results of the current ratio calculation in 2017-2021 are below the industry average. This study was conducted to examine the company's financial performance based on the analysis of its financial statements and the effect of ratio analysis used in measuring the level of liquidity, solvency, activity and profitability on company value over the past few years including when the oil and gas industry was affected by the Covid 19 pandemic. Therefore, to compare the performance of the previous years in order to see large revenues or profits is not an absolute measure of the company's financial performance. therefore it is necessary and important to analyze using liquidity ratios, solvency ratios and profitability ratios to measure company performance so that more accurate results are obtained. The information obtained during the research made the author re-examine the ratio analysis of the company's performance with a different time and measurement of its financial performance, especially because in 2017-2021. Thus, to measure financial performance based on the phenomena that occurred during preliminary research so that researchers are interested in conducting research with the title "Analysis of Liquidity Solvency and Profitability Ratios to Measure Financial Performance in the Oil and Gas Industry Sub-Sector listed on the Indonesia Stock Exchange (IDX). "

## Research Methods

### Objects and research data

According to Sugiyono (2013; 20) the object of research is defined as a form of a characteristic or trait in the assumption of the value of people, objects or activities that have certain variations determined by the researcher to be studied and then conclusions can be drawn. In this study, the object of research to be studied is financial ratios, namely; liquidity ratio, solvency ratio, activity ratio and profitability ratio. The research conducted is qualitative research.

### The data used

The data used is secondary data obtained from annual reports and financial reports from oil and gas industry companies for the period 2017-2021. This research is a panel data study that combines data from cross sectional and time series data. The research data used in this study is secondary data. states that secondary data is data that cannot be directly obtained from the object of research.

### Data collection techniques

The data collection technique used for research is documentation study, this study is a series of data collection processes and makes detailed data, namely in the form of financial data that is considered related to this research.

### Research variables

According to Sugiyono, (2016: 2) The variable in this study is ratio analysis to measure financial performance as measured by financial ratios, namely liquidity ratios, solvency ratios, and profitability ratios. The independent variable in this study is financial ratio analysis. The dependent variable Financial performance is the result or achievement that has been and will be achieved by the company's management in carrying out its function of effectively managing the company's assets during a certain period.

The following is the financial ratio analysis used in this study:

#### a. Liquidity Ratio

Liquidity ratios or often also called working capital ratios are financial ratios to measure how much a company is liquid.

##### Current Ratio

According to Hery (2015) the liquidity ratio is a ratio used to measure the company's ability to pay its short-term liabilities that are due immediately using available current assets. The formula is as follows:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Payables}}$$
$$\text{Cash Ratio} = \frac{\text{Cash and Cash Equivalents}}{\text{Current Liabilities}}$$

##### Cash ratio

According to Kasmir (2019) cash ratio is a ratio used to determine and measure the company's ability to pay obligations that must be met immediately with cash owned or available. The formula is as follows:

#### a. Rasio solvabilitas

According to Rudianto, (2013; 193) Solvency Ratio is a ratio that describes the company's ability to fulfill all its obligations. This ratio is measured by two ratios, namely:

##### Debt to equity ratio (DER)

According to Rudianto (2013; 193) Debt to Equity Ratio (DER) is a ratio that describes how much the owner's capital can cover the overall debt to the lender. The formula is as follows:

$$DER = \frac{\text{Total Liabilitas}}{\text{Total Ekuitas}}$$

##### Debt To Assets Rasio (DAR)

According to Rudianto (2013: 194) is the comparison of total long-term debt and short-term debt with total assets, how much the role of assets to finance or guarantee total debt. This ratio measures how much the company's assets are financed by debt or how much the company's debt affects asset management. The formula is as follows:

$$DAR = \frac{\text{Total Liabilitas}}{\text{Total Aset}}$$

#### b. Rasio Aktivitas

According to Indah & Tyas, (2020) the activity ratio is a ratio that describes the company's ability to manage its assets. The activity ratio can be measured by several ratios, namely:

##### 1. Total assets turn over (TATO)

According to Yayuk Indah (2020) is a ratio turnover of assets, this ratio is a ratio used to measure the company's ability to manage its assets well, the more frequent the turnover rate, the better an entity manages its assets. The formula used:

$$\text{Total assets turn over} = \frac{\text{sales}}{\text{total aktiva}}$$

##### Fixed assets turn over (FATO)

According to (Indah & Tyas, 2020) is the ratio of turnover of fixed assets available in an entity, the calculation of the ratio is carried out to show the company's ability to generate sales or income based on available fixed assets. The formula used:

$$\text{Fixed Assets Turn over} = \frac{\text{sales}}{\text{total aktiva tetap}}$$

**c. Rasio profitabilitas**

According to Hery, (2016; 192) the ratio used to measure the company's ability to earn profits from its normal business activities is used to measure the company's ability to generate profits (profits) in a certain period. Profitability ratios can be measured by several ratios, namely:

**Net profit margin**

According to Hery (2016; 197) is a ratio measurement of company profits by comparing earnings after interest and taxes compared to sales or revenue in another sense showing the company's net income on sales. used to show the company's net income on sales. The formula is as follows.

$$NPM = \frac{\text{Profit After Interest and Tax}}{\text{Sales}}$$

**Return of equity**

According to Hery (2016; 194) Return on equity (ROE) is a ratio to measure net profit after tax with own capital. To show how much equity contributes to creating net income. The higher this ratio, the better it will be in the sense that the position of the company owner is increasingly considered strong and vice versa. The formula used is:

$$ROE = \frac{\text{Profit After Interest and Tax}}{\text{Total Equity}}$$

**Gross profit margin**

According to Hery (2016; 195) the ratio used for measuring the amount of gross profit on net income. Then to assess the company's ability to earn gross profit from each rupiah of sales. Gross profit margin is a ratio that shows how much production efficiency and sales performance to generate profits. The formula is as follows:

$$GPM = \frac{\text{Gross profit}}{\text{Sales}}$$

**Return on Assets**

According to Hery (2016; 193) shows how much the contribution of assets creates net profit is a ratio that is used and provides an assessment of the measurement of the ability of capital that has been invested in all company assets and generates net profit. the formula is as follows;

$$ROI = \frac{\text{Net profit}}{\text{Total Asset}}$$

**Results**

The financial ratio analysis that researchers use includes liquidity ratios (current ratio, cash ratio), solvency ratios (debt to assets ratio and debt to equity ratio), activity ratios (total assets turn over and fixed assets turn over) and profitability ratios (net profit margin and return of equity, gross profit margin, and return on assets). The following are the results of the calculation and analysis of liquidity ratios, solvency ratios, activity ratios and profitability ratios to measure financial performance in the oil and gas industry consisting of 3 companies that actively publish their financial reports and meet the research sample criteria, namely consisting of: PT Astrindo Nusantara Infrastruktur Tbk (BIPI), PT Elnusa Tbk (ELSA), PT Radiant Utama Interinsco Tbk (RUIS).

**a. Liquidity Ratio Calculation**

**Tabel 1 . Current Ratio calculation results Oil and gas industry period 2017-2021 (in rupiah)**

Company Name	Year	Current assets	Current payables	Current ratio	Keterangan
(1)	(2)	(3)	(4)	(3):(4)	(5)
BIPI	2017	1.862.086.375.198	8.891.599.445.334	20,94%	No Liquidity
	2018	4.000.884.390.888	6.845.813.803.752	58,44%	No Liquidity
	2019	4.954.302.598.536	4.245.151.739.328	116,70%	No Liquidity
	2020	2.826.785.025.090	7.435.274.274.116	38,02%	No Liquidity
	2021	2.945.394.515.840	6.089.659.057.132	48,37%	No Liquidity
ELSA	2017	2.379.465.000.000	1.757.781.000.000	135,37%	No Liquidity
	2018	3.158.507.000.000	2.116.898.000.000	149,20%	No Liquidity
	2019	3.698.370.000.000	2.504.335.000.000	147,68%	No Liquidity
	2020	4.217.325.000.000	2.573.467.000.000	163,88%	Liquidity
RUIS	2021	4.446.784.000.000	2.561.234.000.000	173,62%	Liquidity
	2017	473.183.146.618	471.048.328.188	100,45%	No Liquidity
	2018	524.126.165.449	473.216.197.423	110,76%	No Liquidity
	2019	611.756.617.722	591.403.183.354	103,44%	No Liquidity
	2020	665.500.151.752	620.170.304.014	107,31%	No Liquidity

2021	705.432.871.300	614.886.507.240	114,73%	No Liquidity
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Sumber : data diolah

**Table 2. Cash Ratio calculation results Oil and gas industry period 2017-2021 (in rupiah)**

Company Name	Year	Kas	Current payables	cash ratio	Description
(1)	(2)	(3)	(4)	(3):(4)	(5)
BIPI	2017	143.766.556.598	8.891.599.445.334	<b>1,62</b>	No Liquidity
	2018	122.769.857.056	6.845.813.803.752	<b>1,79</b>	No Liquidity
	2019	36.281.189.016	4.245.151.739.328	<b>0,85</b>	No Liquidity
	2020	58.930.995.266	7.435.274.274.116	<b>0,79</b>	No Liquidity
	2021	109.220.318.312	6.089.659.057.132	<b>1,79</b>	No Liquidity
ELSA	2017	902.563.000.000	1.757.781.000.000	<b>51,35</b>	Liquidity
	2018	719.457.000.000	2.116.898.000.000	<b>33,99</b>	Liquidity
	2019	856.122.000.000	2.504.335.000.000	<b>34,19</b>	Likuiditas
	2020	1.231.867.000.000	2.573.467.000.000	<b>47,87</b>	Likuiditas
	2021	1.144.769.000.000	2.561.234.000.000	<b>44,70</b>	Liquidity
RUIS	2017	69.890.081.340	471.048.328.188	<b>14,84</b>	Likuiditas
	2018	78.089.064.310	473.216.197.423	<b>16,50</b>	Likuiditas
	2019	64.265.573.911	591.403.183.354	<b>10,87</b>	Likuiditas
	2020	83.012.966.127	620.170.304.014	<b>13,39</b>	Likuiditas
	2021	86.930.311.209	614.886.507.240	<b>14,14</b>	Likuiditas

Sumber : data diolah

#### b. Solvency Ratio Calculation

**Table 3. The results of the calculation of Debt To Assets Ratio of the oil and gas industry for the period 2017-2021 (in rupiah)**

Company Name	Tahun	Total liabilitas	Total assets	Debt to Assets Ratio	Description
(1)	(2)	(3)	(4)	(3):(4)	(5)
BIPI	2017	15.029.160.011.096	17.973.005.031.586	<b>83,62%</b>	Not solvable
	2018	12.058.691.239.672	17.468.585.412.432	<b>69,03%</b>	solvable
	2019	12.582.169.551.216	17.720.202.689.352	<b>71,00%</b>	Not solvable
	2020	13.925.289.163.032	19.529.124.795.388	<b>71,31%</b>	Not solvable
	2021	7.839.969.230.940	13.642.974.819.460	<b>57,47%</b>	Solvable
ELSA	2017	1.803.449.000.000	4.855.369.000.000	<b>37,14%</b>	Solvable
	2018	2.357.127.000.000	5.657.327.000.000	<b>41,67%</b>	Solvable
	2019	3.228.339.000.000	6.805.037.000.000	<b>47,44%</b>	Solvable
	2020	3.821.876.000.000	7.562.822.000.000	<b>50,54%</b>	Solvable
	2021	3.456.723.000.000	7.234.857.000.000	<b>47,78%</b>	Solvable
RUIS	2017	579.058.872.159	959.347.737.750	<b>60,36%</b>	Solvable
	2018	584.415.358.540	990.372.318.692	<b>59,01%</b>	Solvable
	2019	818.355.397.777	1.251.357.407.016	<b>65,40%</b>	Solvable
	2020	888.702.914.518	1.347.091.507.257	<b>65,97%</b>	Solvable
	2021	813.265.050.471	1.297.577.363.103	<b>62,68%</b>	Solvable

Source: Data processed

**Table 4. The results of the calculation of Debt To Equity Ratio of the oil and gas industry for the period 2017-2021 (in rupiah)**

Nama Perusahaan	Tahun	total liabilitas	Total ekuitas	Debt to equity ratio	Keterangan
(1)	(2)	(3)	(4)	(3):(4)	(5)
BIPI	2017	15.029.160.011.096	2.943.845.020.490	<b>510,53%</b>	Not solvable
	2018	12.058.691.239.672	5.409.894.172.760	<b>222,90%</b>	Solvable
	2019	12.582.169.551.216	5.138.033.138.136	<b>244,88%</b>	Not solvable
	2020	13.925.289.163.032	5.603.835.632.356	<b>248,50%</b>	Not solvable
	2021	7.839.969.230.940	5.803.005.588.520	<b>135,10%</b>	Solvable
ELSA	2017	1.803.449.000.000	3.051.920.000.000	<b>59,09%</b>	Solvable
	2018	2.357.127.000.000	3.300.200.000.000	<b>71,42%</b>	Solvable
	2019	3.228.339.000.000	3.576.698.000.000	<b>90,26%</b>	Solvable
	2020	3.821.876.000.000	3.740.946.000.000	<b>102,16%</b>	Solvable
	2021	3.456.723.000.000	3.778.134.000.000	<b>91,49%</b>	Solvable
RUIS	2017	579.058.872.159	380.288.865.591	<b>152,27%</b>	Solvable
	2018	584.415.358.540	405.956.960.152	<b>143,96%</b>	Solvable
	2019	818.355.397.777	433.002.009.239	<b>189,00%</b>	Solvable
	2020	888.702.914.518	456.448.592.739	<b>194,70%</b>	Solvable

2021	813.265.050.471	484.312.312.632	<b>167,92%</b>	Solvable
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Source: Data processed

**c. Activity Ratio Calculation Table 5. The results of the calculation of Total assets turn over (TATO) Oil and gas industry for the period 2017-2021 (in rupiah)**

Company Name	Year	Sales	total aktiva	Perputaran total aset	Description
(1)	(2)	(3)	(4)	(3):(4)	(5)
BIPI	2017	43.700.962.762	17.973.005.031.586	1,00	Likuiditas
	2018	384.804.537.656	17.468.585.412.432	1,00	Likuiditas
	2019	1.002.072.414.600	17.720.202.689.352	1,00	Likuiditas
	2020	1.141.091.940.066	19.529.124.795.388	1,00	Likuiditas
	2021	938.407.950.536	13.642.974.819.460	1,00	likuiditas
ELSA	2017	4.978.986.000.000	4.855.369.000.000	1,03	likuiditas
	2018	6.624.774.000.000	5.657.327.000.000	1,17	likuiditas
	2019	8.385.122.000.000	6.805.037.000.000	1,23	likuiditas
	2020	7.726.945.000.000	7.562.822.000.000	1,02	likuiditas
	2021	8.136.563.000.000	7.234.857.000.000	1,12	likuiditas
RUIS	2017	1.125.128.522.648	959.347.737.750	1,17	likuiditas
	2018	1.298.117.469.650	990.372.318.692	1,31	likuiditas
	2019	1.596.396.576.716	1.251.357.407.016	1,28	likuiditas
	2020	1.616.390.151.557	1.347.091.507.257	1,20	likuiditas
	2021	1.645.636.804.155	1.297.577.363.103	1,27	likuiditas

Source : data processed

**Table 6. The results of the calculation of Fixed Assets turnover (FATO) Oil and gas industry for the period 2017-2021 (in rupiah)**

Company Name	Year	sales	Total fixed assets	Fixed assets turnover	Description
(1)	(2)	(3)	(4)	(3):(4)	(5)
BIPI	2017	43.700.962.762	200.605.531.418	1,00	No liquidity
	2018	384.804.537.656	1.397.284.529.256	1,00	No liquidity
	2019	1.002.072.414.600	1.292.261.311.560	1,00	No liquidity
	2020	1.141.091.940.066	1.812.504.313.386	1,00	No liquidity
	2021	938.407.950.536	1.584.623.676.888	1,00	No liquidity
ELSA	2017	4.978.986.000.000	1.569.071.000.000	3,17	Likuiditas
	2018	6.624.774.000.000	1.735.854.000.000	3,82	Likuiditas
	2019	8.385.122.000.000	1.819.321.000.000	5,00	Likuiditas
	2020	7.726.945.000.000	1.811.979.000.000	4,26	Likuiditas
	2021	8.136.563.000.000	1.811.519.000.000	5,00	Likuiditas
RUIS	2017	1.125.128.522.648	406.237.951.632	2,77	Likuiditas
	2018	1.298.117.469.650	373.050.828.416	3,48	Likuiditas
	2019	1.596.396.576.716	486.467.763.038	3,28	Likuiditas
	2020	1.616.390.151.557	528.526.950.080	3,06	Likuiditas
	2021	1.645.636.804.155	438.094.275.471	3,76	Likuiditas

Source : data Processed

**c. Profitability Ratio Calculation**

**Table 7. Net Profit Margin calculation results Oil and gas industry for the period 2017-2021 (in rupiah)**

Company Name	Year	Net profit	sales	Net profit margin	Description
(1)	(2)	(3)	(4)	(3):(4)	(5)
BIPI	2017	877.743.636.928	43.700.962.762	<b>200,85%</b>	Profitabilitas
	2018	310.110.161.592	384.804.537.656	<b>80,59%</b>	Profitabilitas
	2019	387.843.296.976	1.002.072.414.600	<b>38,70%</b>	Profitabilitas

	2020	393.079.820.224	1.141.091.940.066	<b>34,45%</b>	Profitabilitas
	2021	313.241.137.916	938.407.950.536	<b>33,38%</b>	Profitabilitas
	2017	250.754.000.000	4.978.986.000.000	<b>5,04%</b>	No profitability
	2018	276.316.000.000	6.624.774.000.000	<b>4,17%</b>	No profitability
ELSA	2019	356.477.000.000	8.385.122.000.000	<b>4,25%</b>	No profitability
	2020	249.085.000.000	7.726.945.000.000	<b>3,22%</b>	No profitability
	2021	108.852.000.000	8.136.563.000.000	<b>1,34%</b>	No profitability
	2017	20.922.363.433	1.125.128.522.648	<b>1,86%</b>	No profitability
	2018	27.055.086.453	1.298.117.469.650	<b>2,08%</b>	No profitability
RUIS	2019	33.086.271.543	1.596.396.576.716	<b>2,07%</b>	No profitability
	2020	27.542.197.663	1.616.390.151.557	<b>1,70%</b>	No profitability
	2021	18.335.466.460	1.645.636.804.155	<b>1,11%</b>	No profitability

Source : data processed

**Table 8 . Return Of Equity calculation results Oil and gas industry for the period 2017-2021 (in rupiah)**

Company Name	Year	Net profit	total ekuitas	total equity	Description
(1)	(2)	(3)	(4)	(3):(4)	(5)
	2017	877.743.636.928	2.943.845.020.490	<b>30%</b>	Profitabilitas
	2018	310.110.161.592	5.409.894.172.760	<b>5,73%</b>	Profitabilitas
BIPI	2019	387.843.296.976	5.138.033.138.136	<b>7,55%</b>	Profitabilitas
	2020	393.079.820.224	5.603.835.632.356	<b>7,01%</b>	Profitabilitas
	2021	313.241.137.916	5.803.005.588.520	<b>5,40%</b>	Profitabilitas
	2017	250.754.000.000	3.051.920.000.000	<b>8,22%</b>	Profitabilitas
	2018	276.316.000.000	3.300.200.000.000	<b>8,37%</b>	Profitabilitas
ELSA	2019	356.477.000.000	3.576.698.000.000	<b>9,97%</b>	Profitabilitas
	2020	249.085.000.000	3.740.946.000.000	<b>6,66%</b>	Profitabilitas
	2021	108.852.000.000	3.778.134.000.000	<b>2,88%</b>	No profitability
	2017	20.922.363.433	380.288.865.591	<b>5,50%</b>	Profitabilitas
	2018	27.055.086.453	405.956.960.152	<b>6,66%</b>	Profitabilitas
RUIS	2019	33.086.271.543	433.002.009.239	<b>7,64%</b>	Profitabilitas
	2020	27.542.197.663	456.448.592.739	<b>6,03%</b>	Profitabilitas
	2021	18.335.466.460	484.312.312.632	<b>3,79%</b>	No profitability

Source : data processed

**Table 9 . Gross profit margin calculation results Oil and gas industry for the period 2017-2021 (in rupiah)**

Company Name	year	Gross profit	sales	Gross profit margin	Description
(1)	(2)	(3)	(4)	(3):(4)	(5)
	2017	208.368.022.272	43.700.962.762	476,80%	Profitabilitas
	2018	310.839.856.096	384.804.537.656	80,78%	Profitabilitas
BIPI	2019	821.767.946.640	1.002.072.414.600	82,01%	Profitabilitas
	2020	947.478.610.728	1.141.091.940.066	83,03%	Profitabilitas
	2021	689.765.543.964	938.407.950.536	73,50%	Profitabilitas
	2017	578.502.000.000	4.978.986.000.000	11,62%	No profitability
	2018	652.094.000.000	6.624.774.000.000	9,84%	No profitability
ELSA	2019	871.082.000.000	8.385.122.000.000	10,39%	No profitability
	2020	742.473.000.000	7.726.945.000.000	9,61%	No profitability
	2021	645.494.000.000	8.136.563.000.000	7,93%	No profitability
	2017	196.131.898.998	1.125.128.522.648	17,43%	Profitabilitas
	2018	212.627.230.858	1.298.117.469.650	16,38%	Profitabilitas
RUIS	2019	235.461.124.802	1.596.396.576.716	14,75%	Profitabilitas
	2020	237.294.835.447	1.616.390.151.557	14,68%	Profitabilitas
	2021	217.054.302.671	1.645.636.804.155	13,19%	Profitabilitas

Source : data processed

**Table 10. Return of assets (ROA) calculation results for the oil and gas industry for the period 2017-2021 (in rupiah)**

Company name	Year	Net Profit	Total assets	Return on assets	Description
(1)	(2)	(3)	(4)	(3):(4)	(5)
BIPI	2017	877.743.636.928	17.973.005.031.586	4,88%	No profitability
	2018	310.110.161.592	17.468.585.412.432	1,78%	No profitability
	2019	387.843.296.976	17.720.202.689.352	2,19%	No profitability
	2020	393.079.820.224	19.529.124.795.388	2,01%	No profitability
	2021	313.241.137.916	13.642.974.819.460	2,30%	No profitability
ELSA	2017	250.754.000.000	4.855.369.000.000	5,16%	No profitability
	2018	276.316.000.000	5.657.327.000.000	4,88%	No profitability
	2019	356.477.000.000	6.805.037.000.000	5,24%	No profitability
	2020	249.085.000.000	7.562.822.000.000	3,29%	No profitability
	2021	108.852.000.000	7.234.857.000.000	1,50%	No profitability
RUIS	2017	20.922.363.433	959.347.737.750	2,18%	No profitability
	2018	27.055.086.453	990.372.318.692	2,73%	No profitability
	2019	33.086.271.543	1.251.357.407.016	2,64%	No profitability
	2020	27.542.197.663	1.347.091.507.257	2,04%	No profitability
	2021	18.335.466.460	1.297.577.363.103	1,41%	No profitability

Source : data processed

**a. Discussion of the results of the liquidity ratio calculation analysis**

**Table 11. Analysis of the liquidity ratio analysis of the oil and gas industry for the period 2017-2021**

Rasio Likuiditas	Year	BIPI	ELSA	RUIS	Average Industry
Current Ratio	2017	20,94%	135,37%	100,45%	154%
	2018	58,44%	149,20%	110,76%	
	2019	116,70%	147,68%	103,44%	
	2020	38,02%	163,88%	107,31%	
	2021	48,37%	173,62%	114,73%	
Rata-rata		56,50%	154%	107,34%	
Cash Ratio	2017	1,62	51,35	14,84	7 times
	2018	1,79	33,99	16,50	
	2019	0,85	34,19	10,87	
	2020	0,79	47,87	13,39	
	2021	1,79	44,70	14,14	
Rata-rata		1,37	42,42	13,95	

Source : data processed

Based on the overall calculation of PT Elnusa produces the highest current ratio PT Elnusa Tbk (ELSA) has the highest average current ratio level compared to the other 2 companies but the ratio results also do not meet the applicable industry standards but are considered liquidity the resulting ratio number is 154% = 154% which is in accordance with the industry average of the current ratio which indicates that the management of current assets efficiently with a total amount that is good enough to guarantee its current debt, According to Harahap (2015, p. 301) a good Current Ratio must be above 100% and based on the calculation of the current ratio above in theory it can be said that the company is in good condition every year because it is above 100% basically the average company produces a fairly good ratio level. 301) A good Current Ratio must be above 100% and based on the calculation of the current ratio above, in theory it can be said that the company is in good condition every year because it is above 100%, basically the average company produces a fairly good ratio level. Reviewing the overall calculation of PT Elnusa Tbk (ELSA) produces the highest level of cash ratio compared to the other 2 companies at 42.24 times <7 times, which is the industry average of the specified cash ratio, this shows that the level of cash ratio is very high overall companies in the oil and gas industry meet the average standards of cash ratios it can be concluded that for 5 years some companies such as PT Radiant Utama Interinsco Tbk (RUIS) produce very good cash ratio.

**a. The results of the discussion of the Solvency Ratio calculation analysis**

**Table 12. Analysis of the solvency ratio analysis of the oil and gas industry for the period 2017-2021**

Rasio Solvabilitas	Year	BIPI	ELSA	RUIS	Average Industry
<i>Debt To Assets Rasio</i>	2017	83,62%	37,14%	60,36%	70%
	2018	69,03%	41,67%	59,01%	
	2019	71,00%	47,44%	65,40%	
	2020	71,31%	50,54%	65,97%	
	2021	57,47%	47,78%	62,68%	
rata-rata		70,49%	44,91%	62,68%	
<i>Debt To Equity Rasio</i>	2017	510,53%	59,09%	152,27%	225%
	2018	222,90%	71,42%	143,96%	
	2019	244,88%	90,26%	189,00%	
	2020	248,50%	102,16%	194,70%	
	2021	135,10%	91,49%	167,92%	
rata-rata		272,38%	82,89%	169,57%	

Source : data processed

Based on the overall calculation, it shows that all companies have a very low level of debt to asset ratio compared to the industry average, namely PT. Astrindo Nusantara Infrastruktur Tbk (BIPI) has the highest level of debt to asset ratio compared to the other 2 companies PT. Astrindo Nusantara Infrastruktur Tbk (BIPI) amounting to 70.94% > 70% which is the company's industry average standard for debt to assets ratio. ratios with an acquisition rate below 70% are considered good while those that are greater can be said to be in good condition because according to the industry average debt to assets ratio of 70%, the company's financial condition in 2017-2021 can be said that the company is able to fulfill its total debt using its total assets. this condition can make it easier for the company if it wants to make loans or increase debt because the creditor considers the company capable of financing its loans and is considered solvable. . Based on the results of the above calculations, it can be concluded that a total of 3 companies, 2 of which, namely PT Astrindo Nusantara Infrastruktur Tbk, produce an average debt to equity ratio above the industry average. it indicates that 1 company, namely BIPI, is unable to manage its financial condition efficiently due to the amount of loans or liabilities it has. According to Harahap (2015) the smaller the debt to equity ratio the better for the creditors, the best ratio results if the total equity owned is greater than the amount of the obligation is said to be the smaller this ratio the better because the smaller the total debt the company has. The results of the debt to equity ratio above the industry average illustrate that the company is not solvable and unable to fulfill its total obligations and this affects the lender the company will have difficulty making further loans or additions because the company is considered unable to guarantee or finance its loans.

**The results of the discussion of the analysis of the calculation of the Activity Ratio**

**Table 13. Analysis of the activity ratio analysis of the oil and gas industry for the period 2017-2021**

Rasio Aktivitas	Year	BIPI	ELSA	RUIS	Average Industry
<i>Total Assets turnover</i>	2017	1,00	1,03	1,17	1 kali
	2018	1,00	1,17	1,31	
	2019	1,00	1,23	1,28	
	2020	1,00	1,02	1,20	
	2021	1,00	1,12	1,27	
Rata-rata		1,00	1,11	1,25	
<i>Fixed assets turnover</i>	2017	1,00	3,17	2,77	2 kali
	2018	1,00	3,82	3,48	
	2019	1,00	4,61	3,28	
	2020	1,00	4,26	3,06	
	2021	1,00	4,49	3,76	
Rata-rata		1,00	4,07	3,27	

Source : data processed

Based on the overall calculation, it shows that all companies have the same level of total asset turnover, but in the results of the highest calculation, namely PT Radiant Utama Interinsco Tbk (RUIS) with the acquisition of 1.15 times even though the overall calculation of the other 2 companies also produces 1 time turnover. This shows that the entire company is considered good at managing its assets because the average result of obtaining the ratio for 5 years is 1 time = 1 time which is the industry average, this shows that the company is efficient and makes maximum use of its assets to create sales or is said to be liquid. Based on the overall calculation, it shows that all companies have a level of fixed assets turnover at different levels in the results of the calculation of the highest fixed assets turnover ratio, namely PT. Elnusa Tbk (ELSA) with the acquisition of 4.07 times is equivalent to 4 times the turnover because the average result of the acquisition of the ratio for 5 years is 4 times > 2 times even though the overall calculation of 1 other company also produces a ratio that is not maximized. PT Elnusa is considered good enough to manage its fixed assets. With this shows PT. Elnusa Tbk and PT. Astrindo Nusantara Infrastruktur Tbk the whole company is considered successful in managing its assets because the average results of the acquisition of ratios for 5 years are above industry standards this shows that the company is efficient and makes maximum use of fixed assets to create sales.

**a. The results of the discussion of the analysis of the calculation of the Profitability Ratio**

**Table 14. Analysis of the profitability ratio analysis of the oil and gas industry for the period 2017-.2021**

Rasio Profitabilitas	Year	BIPI	ELSA	RUIS	Average Industry
<i>Net profit margin</i>	2017	200,85%	5,04%	1,86%	11%
	2018	80,59%	4,17%	2,08%	
	2019	38,70%	4,25%	2,07%	
	2020	34,45%	3,22%	1,70%	
	2021	33,38%	1,34%	1,11%	
Rata-rata		439,13%	3,60%	1,77%	
<i>Return on equity</i>	2017	29,82%	8,22%	5,50%	4%
	2018	5,73%	8,37%	6,66%	
	2019	7,55%	9,97%	7,64%	
	2020	7,01%	6,66%	6,03%	
	2021	5,40%	2,88%	3,79%	
Rata-rata		11,10%	7,22%	5,93%	
<i>Gross profit margin</i>	2017	476,80%	11,62%	17,43%	13%
	2018	80,78%	9,84%	16,38%	
	2019	82,01%	10,39%	14,75%	
	2020	83,03%	9,61%	14,68%	
	2021	73,50%	7,93%	13,19%	
Rata-rata		159,23%	9,88%	15,29%	
<i>Return on assets</i>	2017	4,88%	5,16%	2,18%	8%
	2018	1,78%	4,88%	2,73%	
	2019	2,19%	5,24%	2,64%	
	2020	2,01%	3,29%	2,04%	
	2021	2,30%	1,50%	1,41%	
Rata-rata		2,63%	4,02%	2,20%	

Source : data processed

Based on the calculation of the ratio above, of the 3 companies conducted research, there is only 1 company that meets the industry average standard and even exceeds the specified standard, namely PT. Astrindo nusantara infrastruktur (BIPI) the net profit margin results obtained are 439.13% > 11% which is the industry average standard for net profit margin, this shows that PT. Astrindo nusantara infrastruktur has a high level of net profit or net profit derived from sales and is able to cover or finance its business expenses. Based on the calculation of the average return of equity above, it shows that all companies included in the study have good ratio results as evidenced by all average results above the industry average of PT. Astrindo Nusantara Infrastruktur Tbk (BIPI) with a result of 11.10%, PT. Elnusa Tbk (ELSA) with a result of 7.22% and PT. Radiant Utama Interinsco Tbk (RUIS) obtained 5.93% ratio results greater than the industry average ratio of 4% which explains that the ratio value each year is low and can be said to be ineffective in managing its equity. Based on the calculation of the ratio above, of the 3 companies conducted research, there is only 1 company that meets the industry average

standard and even exceeds the specified standard, namely PT. Astrindo nusantara infrastruktur (BIPI) the net profit margin results obtained are  $159.23\% > 13\%$  which is the industry average standard for gross profit margin, this indicates that PT. Astrindo nusantara infrastruktur Tbk (BIPI) generates very good revenue and sales, so that the percentage of gross profit generated is also very high, this indicates that the company is at a good level of profitability. Then PT Radiant utama interinsco  $15.29\% > 13\%$  which is the industry average standard for gross profit margin, this indicates that PT Radiant utama interinsco Tbk is at a profit level. Based on the calculation of the average return of equity above, it shows that PT Astrindo Nusantara Infrastruktur Tbk, PT Elnusa Tbk and PT Radiant Utama Interinsco Tbk have low ratio results as evidenced by all the average results below the industry average. Namely  $2.63\%$ ,  $4.02\%$  and  $2.20\% < 8\%$  which is the industry standard return on assets. indicates that the company is ineffective in managing its wealth and contributing to its net profit or to generate profits which illustrates the condition of the company's financial performance in 2017-2021 is said to be not profitable.

## Conclusions

Based on the results of research that has been conducted related to the analysis of financial ratios to measure financial performance using ratio analysis including; Liquidity ratio, solvency ratio, activity ratio, and profitability ratio in the oil and gas industry listed on the Indonesia Stock Exchange for the 2017-2021 period. 1. This shows that the company's financial performance and health is good with the level of current ratio and cash ratio because it can guarantee its current obligations with cash or cash equivalents owned. 2. Based on the level of solvency ratio consisting of the calculation of debt to assets ratio and debt to equity ratio, it can be seen that the calculation results of the ratio of PT Radiant Utama Interinsco Tbk and PT Elnusa Tbk are below the industry average. This shows that the company's financial performance and health are good or solvable and the company is considered to have a financial risk that is not high. 3. Based on the level of the Activity Ratio consisting of the calculation of total assets turn over and fixed assets turn over, it can be seen that the results of the calculation of the ratio of PT Elnusa Tbk, and PT Radiant Utama Interinsco Tbk are in accordance with industry standards and reflect good financial performance because the ratio results are in accordance with the industry average. This shows that the financial performance and health of the company is good or liquid with a low level of activity ratio because it is considered that the company is able to manage wealth effectively and efficiently both current assets and fixed assets. 4. Based on the level of Profitability Ratio consisting of the calculation of net profit margin, return on equity, gross profit margin and return on assets, it can be seen that the results of the calculation of the ratio of PT Astrindo Nusantara Infrastruktur are above industry standards and reflect excellent financial performance because the ratio results are above industry standards. This shows that the company produces a fairly good profitability ratio based on the level of profitability ratios generated by the company's financial performance and health is good or profit with a fluctuating level of profitability ratios. 5. Based on the overall financial ratios used with the level of liquidity ratios, solvency ratios, activity ratios, and profitability ratios, the company indicates that it produces quite good financial performance and reflects good company health as well.

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