# Journal of Economics, Finance and Management Studies

ISSN (print): 2644-0490, ISSN (online): 2644-0504

Volume 6 Issue 1 January 2023

Article DOI: 10.47191/jefms/v6-i1-53, Impact Factor: 6.274

Page No. 489-501

# Analysis of Financial Ratios to Measure Financial Performance in Internet and Telecommunication Infrastructure Provider Companies in 2019-2021



Elnissy Desiana Benu<sup>1</sup>, Anggraeni Purwatiningsih<sup>2</sup>, Adi Suprayitno<sup>3</sup>

<sup>1,2,3</sup>University of Merdeka Malang, Indonesia

ABSTRACT: This study aims to analyze the financial performance achievements of Internet and Telecommunication Infrastructure Providers in 2019-2021 using a financial ratio calculation tool listed on the Indonesia Stock Exchange. This research is a research design using a quantitative approach. The type of datausedis secondary data, while the data source is obtained through the website www.idx.co.id. In this study, purposive sampling was conducted as many as 5 Internet and Telecommunication Infrastructure Providers for the Year 2019-2021 listed on the Indonesia Stock Exchange. The data analysis technique used in this study is financial performance, while the independent variables in this study are the ratio of liquidity, activity, solvency and profitability. The results of the analysis show that viewed from 3 years and from the ratio of liquidity, activity, solvency and profitability consisting of (Current Ratio, Quick Ratio, Inventory Turn Over, Total Asset Turn Over, Debt To Asset Ratio, Debt To Equity Ratio, Net Profit Margin, Return On Assets and Return On Equity). In the liquidity ratio and the best company activity ratio is PT Indosat Tbk, while the best Solvency and Profitability ratio is PT. Gihon Telecommunications Tbk.

KEYWORDS: Financial performance, liquidity ratio, activity, solvency, profitability

# I. INTRODUCTION

A good company condition is a strength to be able to survive and develop in achieving company goals, companies must try to manage their resources efficiently and effectively so that companies can realize company goals in general companies established have the aim of maximizing profits and reducing losses that can threaten survival the survival of the company, the viability of the company can be seen from the company's financial condition, information about the company's financial condition can be seen from the financial statements prepared at the end of each period.

Financial reports for a company are only a test tool for the work of the accounting department, financial reports cannot determine or assess the financial position of the company concerned by conducting analysis, given the importance of financial reports and financial information related therein, it is necessary to carry out an analysis so that financial information can be included in the report. Financial statements are more meaningful and can support decision making.

Media that can be used to assess company performance are financial reports, financial reports are a description of the results or development of the company's business. These financial reports are used to assist managers in assessing company performance so that they can make the right decisions. The company periodically issues financial reports prepared by accounting department and given to interested parties such as company owners, management, creditors and the government. The financial statements consist of a statement of financial position, a statement of income, a statement of changes in equity, a statement of cash flows and a financial statement.

Interpretation and analysis of a company's financial statements, it is necessary to have a certain size or standard. The size that is often used in financial analysis is the ratio. Ratio analysis can describe the position, conditions and work results that have been achieved ratio analysis can be classified into various types including the liquidity ratio, activity ratio, solvency ratio and profitability ratio with the existence of these financial ratios can be known the level of liquidity, activity, solvency and profitability of a company and can provide a true picture of the company so that it can measure the company's financial performance.

Measuring the company's financial performance is done by using financial ratio analysis. Fahmi (2012: 109) states that by using financial ratios as an analytical tool, benefits can be obtained, namely "financial ratio analysis is very useful as a tool to assess

company performance and achievements." To find out a company's performance can be seen from financial aspects and non-financial aspects. From the non-financial aspect of performance, it can be identified by measuring the level of clarity in the division of functions and authority within the organizational structure, measuring the quality of its resources, measuring the welfare level of its employees and employees, measuring the quality of its production, measuring the level of public trust in the company and by measuring the level of concern the company's social environment, the evaluation of non-financial aspects is relatively more difficult because the assessment of one person is different from the results of other people's assessments so that in performance appraisal most companies use financial aspects.

Profits can only be obtained with good performance from the company itself. Therefore, an assessment of the company is very important and beneficial both for the company and for outsiders who have an interest in the company concerned. For a company, performance can be used as a measuring tool in assessing the success of its business. can also be used as a material consideration in making decisions and planning in the future, while for parties outside the company it can be used as a material consideration in making economic decisions about the company concerned.

Analyzing the financial statements can be seen from the company's ability to fulfill its financial obligations both in the short and long term and to operate funds in all activities and the company's ability to generate profits with the capital it has, along with the development of the era the human need for telecommunications is increasingly important so that the role of industry players engaged in the field of telecommunications are increasingly real. Apart from that, the object of this research is PT. Telekomunikasi Indonesia, Tbk is one of the companies engaged in the communications sector which is a State-Owned Enterprise (BUMN), a performance study that describes the efficiency and effectiveness of the company where the results of this study are used to make corrections to past mistakes.

This research was made with the aim of knowing how far the performance of Internet Provider and Telecommunications Infrastructure companies has developed when viewed from the financial ratios for the period 2019 – 2021.

#### II. LITERATURE REVIEW

# **Financial Statements**

According to Bambang (Riyanto, 2012: 327) financial statements are giving an endeavor regarding the financial condition of a company, where the balance sheet reflects the value of assets, debt and equity at a certain time and the income statement reflects the results achieved during a certain period usually covering a period of one year. Year. According to (Saraswati, 2013: 228) financial reports are a source of information that is needed as a tool to assess the success of management, it is also expected to be able to provide information about the progress and development of a company.

# **Financial Statement Analysis**

Analyzing financial statements means assessing the company's performance, both internally and in comparison with the industry. This is useful for the development of the company to find out how effectively the company works. There are several meanings according to experts. According to Mamdum Hanafi and Abdul Halim (2016: 5), the notion of financial statement analysis is an analysis of financial reports, namely an analysis of a company's financial statements basically because they want to know the level of profitability (profits) and the level of risk or level of soundness of a company.

According to (V. Wiranta Sujarweni, 2017: 6) financial statement analysis is a process in order to help analyze or evaluate the company's financial condition, past and future company operating results. From the above understanding, it is understood that financial statement analysis is used to assess the company's financial performance as well as a consideration in preparing the company's plans in the future which is carried out through financial statement analysis.

### **Financial Ratio Analysis**

One way to find out the condition of the company is to calculate the desired financial ratios. Financial ratio analysis is an analysis that is widely used, the items contained in the financial statements are compared so as to obtain a certain ratio. The definition of financial ratios according to Kasmir (2016: 104), the activity of comparing the figures in the financial reports, comparisons can be made between one component and components in one financial report or between components that exist between financial reports.

# **Company Financial Performance**

According to Triyowati (2016), the company's financial performance is the financial performance of the elements related to operating income as a whole, debt structure and investment returns. The company's financial performance is an illustration of the changing conditions which include the financial position and the results that have been achieved by the company which are reflected in the financial statements. Therefore, in order for financial reports to be able to provide the information desired by the

company, it is necessary to analyze and interpret the data contained in the financial report as a first step to fulfilling this information.

#### III. RESEARCH METHODS

#### **Operational Definition**

# 1. Financial Performance

Financial performance according to Fahmi (2012: 2) is a description of a company's success in the form of results that have been achieved thanks to various activities carried out, financial performance is an analysis to assess the extent to which a company has carried out activities according to the rules of financial implementation. This financial performance indicator is liquidity ratios, solvency ratios, profitability ratios, activity ratios.

#### 2. Ratio Finance

- a) Liquidity Ratio: The ratios used to determine the company's ability to finance and fulfill obligations when billed or due are the current ratio and guick ratio.
- **b) Solvency Ratio:** The ratios used to assess the level of management effectiveness and efficiency of a company are indicators of net profit margin, ROI and ROE.
- c) **Profitability Ratio**: The ratio used to measure a company's ability to pay all obligations, both short term and long term if the company is dissolved, is the debt-to-equity ratio and debt to assets ratio.
- **d) Activity Ratio:** The activity ratio is the ratio used to measure the effectiveness of the company's management in managing its assets, the indicators are receivable turnover and inventory turnover.

### 3. Technique Analysis Data

The analysis used in this research is quantitative descriptive analysis. Quantitative descriptive can be done using descriptive statistics in the form of tables, graphs and others according to the relevance of the phenomenon to be described.

In this study using data analysis, namely the analysis of financial ratios.

- i. Calculating the company's liquidity ratio from 2019 2021, namely:
- 1) Current Ratio

Formula:

$$\textit{Current Ratio} = \frac{\textit{Current Assets}}{\textit{Current Liabilities}} \ x \ 100\%$$

This ratio can be made in the form of several times or in the form of a percentage. Current assets describe the means of payment, and it is assumed that all current assets can actually be used to pay.

# 2) Very Current Ratio (Quick Ratio)

Formula:

$$Quick\ Ratio\ (QR) = \frac{Current\ Assets - Inventory}{Current\ Liabilities}\ x\ 100\%$$

This ratio describes the ability of the most liquid current assets to cover current liabilities.

- ii. Calculating the Company's Solvency Ratio from the 2019 2021 period, namely:
- 1) Debt to Equity Ratio (Debt To Equity)

Formula:

$$Debt \ To \ Equity = \frac{Total \ Liabilities}{Equity} \ x \ 100\%$$

This ratio shows the extent to which debt can be covered by assets or it can also be said that a large portion of debt is compared to assets.

# 2) Debt to Asset Ratio (Debt To Asset Ratio)

Formula:

$$Debt \ To \ Asset = \frac{Total \ Liabilities}{Total \ Assets} \ x \ 100\%$$

This ratio is a debt that can be covered by the assets owned by the company.

### iii. Count Company Profitability Ratios from 2019 - 2021, namely:

# 1) Profit Margin Ratio (Profit Margin Ratio)

Formula:

Profit Margin Ratio = 
$$\frac{Net\ Profit}{Sales} \times 100\%$$

The greater the ratio, the better because it is considered that the company's ability to earn profits is quite high.

### 2) Return On Investment (ROI)

Formula:

$$ROI = \frac{Net\ Profit}{Total\ Assets}\ x\ 100\%$$

The company's ability to generate profit from its assets, return on investment measures the level of return on investment that has been made by the company by using funds originating from the owner.

# 3) Return On Equity (ROE)

Formula:

$$ROE = \frac{Net\, Profit}{Equity} \; x \; 100\%$$

The ability of companies with their own capital to generate profits, this ratio illustrates the ability of capital to generate profits for shareholders.

# IV. DISCUSSION

The analysis of the ratio of telecommunications companies listed on the Indonesia Stock Exchange for 2019-2021 is as follows:

- 1. Liquidity Ratio
- a. Current Ratio

Table 1. Calculation results of the 2019-2021 Current Ratio (in %)

Na	Name	CURREN	AVEDACE		
No	Name	2019	2020	2021	AVERAGE
1	PT. XL Axiata TBK (EXCL)	34	40	3	37
2	PT Indosat Tbk (ISAT)	56	42	40	46
3	PT Smartfren Telecom TBK (FREN)	29	31	24	28
4	PT. Tower Bersama Infrastructure (TBIG)	53	23	36	3
5	PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	67	33	30	43
Indus	try Average Per Year	79	57	56	
Aver	age				64
High	est	56	42	40	46
Lowe	st	29	31	24	28

Source: IDX, Data processed in 2022.

From the calculation of the Current Ratio (CR), it is known that the Indosat Tbk company has fluctuated in each period where the Indosat Tbk company (ISAT) has the highest CR value from 2019-2021 compared to other companies. In 2019 it was 56%, 2020 was 42%, experiencing a significant decrease from the previous year of 13.89%, and in 2021 it was 40%, experiencing a decrease from the previous year of 2.22%.

While the company that has the lowest CR value in 2019-2021 is the company Smartfren Telecom Tbk. In 2019 it was 29%, 2020 it was 31% and experienced an increase from the previous year of 2.44%, in 2021 it again experienced a decrease of 24%.

When viewed from the industry average each year, in 2019 there are 3 companies that have good performance because they have a value close to the industry average of 79.37%. Namely, Gihon Telekomunikasi Tbk by 66.67%, Indosat Tbk by 56.24% and Tower Bersama Infrastucture Tbk by 52.66%. The Smartfren Telecom Tbk company and the XL Axiata company are far below the industry average of 29.00% and 33.56%. so it can be said that the performance is still less than optimal. In 2020 there were 2 companies that had good performance because they were close to the industry standard average of 56.85%, namely XL Axiata Tbk at 40.15%, PT Indosat Tbk at 42.35%. Meanwhile, Tower Bersama Infrastructure Tbk was 23.42%, Smartfren Tbk was 31.44%, and Gihon Telecommunications was 33. 18% is far below the industry average and it can be said that the performance is still not optimal. In 2021 the Indosat Tbk company has a good performance because it is close to the industry average of 55.79%.

Meanwhile, XL Axiata, Smartfren, Tower Bersama, and Gihon Telecommunications companies had less than optimal performance because they were below the industry average.

When viewed from the average of the last 3 years, the company that has the highest average CR value is the Indosat Tbk company of 46.24%, while the Smartfren Telekomunikasi Tbk company has the lowest average CR value of 28.21%. The company's overall average for the last 3 years was 64.00%.

Judging from the results of this study, it was concluded that the current ratio before Covid-19 and after Covid-19 experienced a significant change where in 2019 before Covid-19 had an average company value of 79.37 and during Covid-19 in 2020, namely 56,84. Entering 2021 it fell by 1.05 with an average value in 2021 of 55.79, meaning that the company's ability to make profits on its shares is said to be unstable.

#### b. Quick Ratio

Table 2. Comparison of the 2019-2021 Quick Ratio (in %)

No	Name	QUICK RA	A.,		
No		2019	2020	2021	Average
1	PT. XL Axiata TBK (EXCL)	33	39	36	36
2	PT Indosat Tbk (ISAT)	56	42	40	46
3	PT Smartfren Telecom TBK (FREN)	28	31	23	27
4	PT. Tower Bersama Infrastructure (TBIG)	52	23	33	36
5	PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	58	27	29	72
Indus	try Average Per Year	9	54	54	
Avera	ge				72
Highe	st	56	42	40	46
Lowe	st	28	31	23	27

Source: IDX, Data processed in 2022.

From the results of the Quick Ratio (QR) calculation, it is known that the Indosat Tbk company experienced fluctuations in each period where the Indosat Tbk company (ISAT) had the highest QR value from 2019-2021 compared to other companies. In 2019 it was 56%, 2020 it was 42%, a decrease from the previous year of 93%, and in 2021 it was 40%, a decrease from the previous year of 11%.

While the company that has the lowest QR value in 2019-2021 is the company Smartfren Telecom Tbk. In 2019 it was 28%, 2020 it was 31% and experienced an increase from the previous year of 74%, in 2021 it again experienced a decrease of 23%.

When viewed from the industry average each year, in 2019 there are 3 companies that have good performance because they have a value close to the industry average of 06%. Namely, Indosat Tbk by 10%, Tower Bersama Tbk by 26%, and Gihon Telekomunikasi Tbk by 58%. Meanwhile, the Smartfren Telecom Tbk company and the XL Axiata company are far below the industry average of 28% and 33%. so it can be said that the performance is still less than optimal. In 2020 the Indosat Tbk company has good performance because it is close to the industry standard average of 54%, which is 42%. Meanwhile, XL Axiata Tbk at 39%, Tower Bersama Infrastructure Tbk at 57%, Smartfren Tbk at 75%, and Gihon Telecommunications at 38% are far below the industry average and it can be said that their performance is still not optimal. In 2021 the Indosat Tbk company has a good performance because it is close to the industry average of 40%. Meanwhile, XL Axiata, Smartfren, Tower Bersama, and Gihon Telecommunications companies had less than optimal performance because they were below the industry average.

If we look at the average of the last 3 years, the company that has the highest average QR value is the Indosat Tbk company of 46%, while the Smartfren Telekomunikasi Tbk company has the lowest average CR value of 40%. The company's overall average over the last 3 years was 61%.

Judging from the results of this study, it was concluded that the Quick Ratio before Covid-19 and after Covid-19 experienced a significant change where in 2019 before Covid-19 it had an average company value of 75% and during Covid-19 in 2020 it was 54%. Entering 2021, it fell 11% with an average value of 53% in 2021, meaning that the company's ability to make profits on its shares is said to be unstable.

### 2. Activity Ratio

#### a. Inventory Turn Over

Table 3. Comparison of Inventory Turn Over for 2019-2021 (in times)

No	Name	Inventory	Inventory turnover			
	Name	2019	2020	2021	- Average	
1	PT. XL Axiata TBK (EXCL)	336.86	181.40	171.02	229.76	
2	PT Indosat Tbk (ISAT)	888.17	701.42	173,320	110,760	
3	PT Smartfren Telecom TBK (FREN)	115.95	163.57	143.16	140.89	
4	PT. Tower Bersama Infrastructure (TBIG)	265.35	45.03	27.29	112.56	
5	PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	16.64	21.95	56.73	31.78	
Indu	stry Average Per Year	540.99	371.13	710.47		
Aver	age			•	540.86	
High	est	888.17	701.42	173320	110,760	
Lowe	est	16.64	45.03	5673	31.78	

Source: IDX, Data processed in 2022.

From the results of the Inventory Turn Over calculation, it is known that the Indosat Tbk company has fluctuated in each period where the Indosat Tbk company (ISAT) has the highest ITO value from 2019-2021 compared to other companies. In 2019 it was 888.17%, 2020 it was 701.42%, a decrease from the previous year of 183.75%, and in 2021 it was 173.32%, a decrease from the previous year of 528.1%.

Meanwhile, the company that has the lowest ITO score in 2019-2021 is Gihon Telekomunikasi Tbk. In 2019 it was 16.64%, 2020 it was 44.03% and experienced an increase from the previous year of 28.39%, in 2021 it again experienced an increase of 56.73%.

When viewed from the industry average each year, in 2019 the Indosat Tbk company performed well because it had a value exceeding the industry average of 540.99%. Meanwhile, companies that are close to the industry average, namely, XL Axiata are 336.86%. Gihon Telekomunikasi Tbk company with 16.64%, Smartfren Telecom Tbk with 115.95, and Tower Bersama Infrastructure Tbk company with 265.35, far below the industry average, so it can be said that their performance is still not optimal. In 2020 the Indosat Tbk company had good performance because it exceeded the industry standard average of 371.13%. Meanwhile, XL Axiata Tbk was 181.40%, Tower Bersama Infrastructure Tbk was 45.03%, Smartfren Tbk was 163.57%, and Gihon Telecommunications was 21. 95% is far below the industry average and it can be said that the performance is still not optimal. In 2021 the companies Indosat, XL Axiata, Smartfren, Tower Bersama, and Gihon Telecommunications have less than optimal performance because they are below the industry average.

When viewed from the average of the last 3 years, the company that has the highest average ITO value is XL Axiata Tbk company of 229.76%, while Gihon Telekomunikasi Tbk company has the lowest average ITO value of 31.78%. The company's overall average for the last 3 years was 540.86%.

Judging from the results of this study, it was concluded that inventory Drop Over before Covid-19 and after Covid-19 experienced significant changes where in 2019 before Covid-19 had an average company value of 540.99 and during Covid-19 in 2020 that is 371.13. Entering 2021, it rose 339.34 with an average value in 2021 of 710.47, meaning that the company's ability to make profits on its shares is said to be unstable.

### b. Total Asset Turn Over

Table 4. Comparison of Total Asset Turn Over for 2019-2021 (in times)

No	Name -	Asset Tu	Asset Turnover			
		2019	2020	2021	Average	
1	PT. XL Axiata TBK (EXCL)	40.07	38.39	36.77	38.41	
2	PT Indosat Tbk (ISAT)	41.58	44.48	49.51	45.19	
3	PT Smartfren Telecom TBK (FREN)	25.27	24.32	24.12	24.57	
4	PT. Tower Bersama Infrastructure (TBIG)	15.22	14.59	14.76	14.86	
5	PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	15.66	17.29	16.15	16.36	
Indus	try Average Per Year	45.93	46.36	47.10		

Average				46.46
Highest	41.58	44.48	49.51	45.19
Lowest	15.22	14.59	14.76	14.86

Source: IDX, Data processed in 2022.

From the results of the Asset Turn Over (TATO) calculation, it is known that the Indosat Tbk company experienced fluctuations in each period where the Indosat Tbk company (ISAT) had the highest TATO value from 2019-2021 compared to other companies. In 2019 it was 41.58%, 2020 it was 44.48%, an increase from the previous year of 2.9%, and in 2021 it was 49.51%, an increase from the previous year of 5.03%.

Meanwhile, the company that has the lowest TATO score in 2019-2021 is the Tower Bersama Infrastructure Tbk company. In 2019 it was 15.22%, 2020 it was 14.59% and decreased from the previous year of 0.63%, in 2021 it again decreased by 14.76%.

When viewed from the industry average each year, in 2019 there were 2 companies that had good performance because they had a value close to the industry average of 45.93%. Namely, Indosat Tbk by 41.58%, and XL Axiata Tbk by 40.07%. Meanwhile, the companies Smartfren Telecom Tbk, Tower Bersama Infrastructure and Gihon Telekomunikasi Tbk are far below the industry average, so it can be said that their performance is still not optimal. In 2020 the Indosat Tbk company has good performance because it is close to the industry standard average of 46.36%, which is 44.48%. Meanwhile, XL Axiata Tbk was 38.39%, Tower Bersama Infrastructure Tbk was 14.59%, Smartfren Tbk was 24.32%, and Gihon Telecommunications was 17.29%, far below the industry average and it can be said that their performance is still not optimal. In 2021 the Indosat Tbk company has a good performance because it exceeds the industry average of 47.10%, which is 49.51%. Meanwhile, XL Axiata, Smartfren, Tower Bersama, and Gihon Telecommunications companies had less than optimal performance because they were below the industry average.

When viewed from the average of the last 3 years, the company that has the highest average TATO value is the Indosat Tbk company of 45.19%, while the Tower Bersama Infrastructure Tbk company has the lowest average TATO value of 14.86%. The company's overall average for the last 3 years was 46.46%.

Judging from the results of this study, it was concluded that Total Asset Turn Over before Covid-19 and during Covid-19 experienced significant changes where in 2019 before Covid-19 had an average company value of 45.93 and during Covid-19 in 2020, namely 46.36 Entering 2021, it rose 5.03 with an average value in 2021 of 47.10, meaning that the company's ability to make profits on its shares is said to be stable.

# 3. Solvability Ratio

#### a. Debt To Asset Ratio

Table 5. Comparison of Debt To Asset Ratio for 2019-2021 (in %)

No	Name	DAR			Аманада
No	ivaliic	2019	2020	2021	Average
1	PT. XL Axiata TBK (EXCL)	35.57	43.92	43.59	41.02
2	PT Indosat Tbk (ISAT)	78.18	79.43	83.75	80.45
3	PT Smartfren Telecom TBK (FREN)	53.94	68.03	70.82	64.26
4	PT. Tower Bersama Infrastructure (TBIG)	82.11	74.52	76.62	77.75
5	PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	18.79	19.06	29.61	22.49
Indu	stry Average Per Year	89.53	94.99	101.46	
Aver	age				95.33
High	est	78.18	80.45	83.75	80.45
Lowe	est	18.79	22.49	29.61	22.49

Source: IDX, Data processed in 2022

From the calculation results *Debt To Asset Ratio* (DAR) it is known that the Indosat Tbk company experienced fluctuations in each period where the Indosat Tbk company (ISAT) had the highest DAR value from 2019-2021 compared to other companies. In 2019 it was 78.18%, 2020 it was 79.43%, an increase from the previous year of 1.25%, and in 2021 it was 83.75%, an increase from the previous year of 4.32%.

While the company that has the lowest DAR value in 2019-2021 is the company Gihon Telekomunikasi Tbk. In 2019 it was 18.79%, 2020 it was 19.06% and experienced an increase from the previous year of 0.27%, in 2021 it again experienced an increase of 29.61%.

When viewed from the industry average each year, in 2019 the companies that are close to the industry average are Indosat Tbk at 78.18%, and Tower Bersama Infrastructure Tbk at 82.11%. Meanwhile, XL Axiata Tbk was 35.57%, Smartfren Telecom Tbk was 53.94% and Gihon Telekomunikasi Tbk was 18.79%, far below the industry average, so it can be said that their performance is still not optimal. In 2020 the companies Indosat Tbk and Tower Bersama Infrastructure had good performance because they were close to the industry standard average of 79.43% and 74.52. Meanwhile, XL Axiata Tbk was 43.92%, Smartfren Tbk was 68.03%, and Gihon Telecommunications was 19.06%, far below the industry average and it can be said that their performance is still not optimal. In 2021 Indosat companies, XL Axiata, Smartfren,

When viewed from the average of the last 3 years, the company that has the highest average DAR value is Indosat Tbk company of 80.45%, while Gihon Telekomunikasi Tbk company has the lowest average DAR value of 22.49%. The company's overall average for the last 3 years was 95.33%.

Judging from the results of this study, it was concluded that *Debt To Asset Ratio* before covid-19 and during covid-19 experienced significant changes where in 2019 before covid-19 the company had an average value of 89.53 and during covid-19 in 2020 it was 94.99 Entering 2021 it went up 6.47 with an average value in 2021 of 101.46, this means that the company's ability to earn profits on its shares is said to be stable.

# b. Debt To Equity Ratio

Table 6. Comparison of the 2019-2021 Debt To Equity Ratio (in %)

No	Name -	DTE	DTE			
No		2019	2020	2021	- Average	
1	PT. XL Axiata TBK (EXCL)	116.68	155.46	157.85	143.33	
2	PT Indosat Tbk (ISAT)	358.25	386.15	515.34	419.91	
3	PT Smartfren Telecom TBK (FREN)	117.11	212.83	242.66	190.87	
4	PT. Tower Bersama Infrastructure (TBIG)	458.94	292.54	327.72	359.73	
5	PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	23.14	23.55	42.07	29.59	
Indus	try Average Per Year	358.04	356.84	428.54		
Avera	ge				381.14	
Highe	st	358.25	386.15	515.34	419.91	
Lowe	st	23.14	23.55	42.07	29.59	

Source: IDX, Data processed in 2022.

From the calculation results *Debt To Equity Ratio* it is known that the Indosat Tbk company experienced fluctuations in each period where the Indosat Tbk company (ISAT) had the highest DER value from 2019-2021 compared to other companies. In 2019 it was 358.25%, 2020 it was 386.15%, an increase from the previous year of 27.9%, and in 2021 it was 515.34%, an increase from the previous year of 129.19%.

While the company that has the lowest DER value in 2019-2021 is the company Gihon Telekomunikasi Tbk. In 2019 it was 23.14%, 2020 it was 23.55% and experienced an increase from the previous year of 0.41%, in 2021 it again experienced an increase of 42.07%.

When viewed from the industry average each year, in 2019 the companies Indosat Tbk and Tower Bersama Infrastructure had good performance because they had a value exceeding the industry average of 358.04%. Gihon Telekomunikasi Tbk company by 23.14%, Smartfren Telecom Tbk by 117.11%, and XL Axiata Tbk company by 116.68%, which are far below the industry average, so it can be said that their performance is still not optimal. In 2020 the Indosat Tbk company had good performance because it exceeded the industry standard average of 386.15%. Meanwhile, XL Axiata Tbk was 155.46%, Tower Bersama Infrastructure Tbk was 292.54%, Smartfren Tbk was 212.83%, and Gihon Telecommunications was 23.55%, far below the industry average and it can be said that their performance is still not optimal. In 2021 the Indosat Tbk company has a value above the average of 515.34%. while XL Axiata, Smartfren, Tower Bersama, and Gihon Telecommunications had less than optimal performance because they were below the industry average.

When viewed from the average of the last 3 years, the company that has the highest average DER value is Indosat Tbk company of 419.91%, while Gihon Telekomunikasi Tbk company has the lowest average DER value of 29.59%. The company's overall average for the last 3 years was 381.14%.

Judging from the results of this study, it was concluded that the Debt To Equity Ratio before Covid-19 and during Covid-19 experienced significant changes where in 2019 before Covid-19 the company had an average value of 358.04 and during Covid-19 in 2020 is 356.84. Entering 2021, it rose 71.7 with an average value in 2021 of 428.54, meaning that the company's ability to make profits on its shares is said to be stable.

# 4. Profitability Ratio

### a. Net Profit Margins

Table 7. Comparison of Net Profit Margins for 2019-2021 (in %)

NI-	News	NPM			
No	Name	2019	2020	2021	- Average
1	PT. XL Axiata TBK (EXCL)	2.84	1.43	4.81	3.03
2	PT Indosat Tbk (ISAT)	6.24	-2.26	21.86	8.61
3	PT Smartfren Telecom TBK (FREN)	-31.31	-16.19	-4.16	-17.22
4	PT. Tower Bersama Infrastructure (TBIG)	18.43	20.02	25.91	21.46
5	PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	54.78	54.35	54.48	54.54
Indus	try Average Per Year	16.99	19.12	34.30	
Avera	age				23.47
Highe	est	54.78	54.35	54.48	54.54
Lowe	st	-31.31	-16.19	-4.16	-17.22

Source: IDX, Data processed in 2022.

From the results of the Net Profit Margin calculation, it is known that the Gihon Telekomunikasi Tbk company has fluctuated in each period where the Gihon Telekomunikasi Tbk company has the highest NPM value from 2019-2021 compared to other companies. In 2019 it was 54.78%, 2020 it was 54.32%, a decrease from the previous year of 0.43%, and in 2021 it was 54.48%, an increase from the previous year of 0.13%.

While the company that has the lowest NPM value in 2019-2021 is the company Smartfren Telekomuniksi Tbk. In 2019 it was -31.31%, in 2020 it was -16.19% and in 2021 it again experienced an increase of -17.22%.

When viewed from the industry average each year, in 2019 the companies Tower Bersama Infrastructure Tbk and Gihon Telekomunikasi had good performance because they had a value exceeding the industry average of 16.99%. Indosat Tbk company at 6.24%, Smartfren Telecom Tbk at -31.31%, and XL Axiata Tbk company at 1.84%, are far below the industry average, so it can be said that their performance is still not optimal. In 2020 the companies Tower Bersama Infrastructure Tbk and Gihon Telekomunikasi had good performance because they exceeded the industry standard average of 19.12%. Meanwhile, Indosat Tbk was -2.26%, Smartfren Telecom Tbk was -16.19%, and XL Axiata Tbk was 1.43%, far below the industry average and it can be said that their performance is still not optimal. In 2021 the Gihon Telecommunications company has a value above the average of 34.30%. while XL Axiata, Smartfren, Tower Bersama, and Indosat had less than optimal performance because they were below the industry average.

If we look at the average of the last 3 years, the company that has the highest average NPM is Gihon Telekomunikasi Tbk at 54.54%, while Smartfren Telekomunikasi Tbk has the lowest average NPM at -17.22%. The company's overall average for the last 3 years was 23.47%.

Judging from the results of this study, it was concluded that the Net Profit Margin before Covid-19 and during Covid-19 experienced significant changes where in 2019 before Covid-19 the company had an average value of 16.99 and during Covid-19 in 2020 namely 19.12 Entering 2021, it will increase by 15.18 with an average value in 2021 of 34.30, meaning that the company's ability to make profits on its shares is said to be stable.

#### b. Return On Investment

Table 8. Comparison of Return on Investment for 2019-2021 (in %)

No	Name	ROI	Avorage		
NO	Name	2019	2020	2021	Average
1	PT. XL Axiata TBK (EXCL)	1.14	0.55	1.77	1.15
2	PT Indosat Tbk (ISAT)	2.60	-1.00	10.82	4.14
3	PT Smartfren Telecom TBK (FREN)	-7.91	-3.94	-1.00	-4.28
4	PT. Tower Bersama Infrastructure (TBIG)	2.81	2.92	3.82	3.18
5	PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	8.58	9.39	8.80	8.92
Indus	try Average Per Year	2.40	2.64	8.07	
Avera	ge				4.37
Highe	st	8.58	9.39	8.80	8.92
Lowe	st	-7.91	-3.94	-1.00	-4.28

Source: IDX, Data processed in 2022.

From the results of the Return on Investment calculation, it is known that the Gihon Telekomunikasi Tbk company has fluctuated in each period where the Gihon Telekomunikasi Tbk company has the highest ROI value from 2019-2021 compared to other companies. In 2019 it was 8.58%, 2020 was 9.39%, an increase from the previous year of 0.81%, and in 2021 it was 8.80%, a decrease from the previous year of 0.59%.

Meanwhile, the company that has the lowest ROI value in 2019-2021 is the company Smartfren Telekomuniksi Tbk. In 2019 it was -7.91%, in 2020 it was -3.94% and in 2021 it again experienced a decrease of -1.00%.

When viewed from the industry average each year, in 2019 the companies Tower Bersama Infrastructure, Indosat Tbk and Gihon Telekomunikasi Tbk had good performance because they had a value exceeding the industry average of 2.40%. Smartfren Telecom Tbk company at -7.91%, and XL Axiata Tbk company at 1.14%, are far below the industry average, so it can be said that their performance is still not optimal. In 2020 the companies Tower Bersama Infrastructure Tbk and Gihon Telekomunikasi had good performance because they exceeded the industry standard average of 2.64%. Meanwhile, Indosat Tbk was -1.00%, Smartfren Telecom Tbk was -3.94%, and XL Axiata Tbk was 0.55%, far below the industry average and it can be said that their performance is still not optimal. In 2021 the companies Gihon Telekomunikasi and Indosat Tbk have a value above the average of 8.07%. while XL Axiata, Smartfren, and Tower Bersama, had less than optimal performance because they were below the industry average.

When viewed from the average of the last 3 years, the company that has the highest average ROI value is Gihon Telekomunikasi Tbk company of 8.92%, while Smartfren Telekomunikasi Tbk company has the lowest average NPM value of 4.28%. The company's overall average for the last 3 years was 4.37%.

Judging from the results of this study, it was concluded that Return On Investment before Covid-19 and during Covid-19 experienced significant changes where in 2019 before Covid-19 had an average company value of 2.40 and during Covid-19 in 2020 namely 2.64 Entering 2021, it rose 5.43 with an average value in 2021 of 8.07, meaning that the company's ability to make profits on its shares is said to be stable.

# c. Return On Equity

Table 9. Comparison of Return On Equity for 2019-2021 (in %)

Name	ROE	ROE			
Name	2019	2020	2021	- Average	
PT. XL Axiata TBK (EXCL)	3.73	1.94	6.41	4.03	
PT Indosat Tbk (ISAT)	11.89	-4.88	66.59	24.53	
PT Smartfren Telecom TBK (FREN)	-17.18	-12.32	-3.44	-10.98	
PT. Tower Bersama Infrastructure (TBIG)	15.68	11.46	16.36	14.50	
PT. Gihon Telekomunikasi Indonesia Tbk (GHON)	10.56	11.61	12.50	11.56	
stry Average Per Year	8.23	2.60	32.80		
age				14.55	
est	11.89	-4.88	66.59	24.53	
est	-17.18	-12.32	-3.44	-10.98	
	PT Indosat Tbk (ISAT)  PT Smartfren Telecom TBK (FREN)  PT. Tower Bersama Infrastructure (TBIG)  PT. Gihon Telekomunikasi Indonesia Tbk (GHON)  Stry Average Per Year  age	PT. XL Axiata TBK (EXCL)  PT Indosat Tbk (ISAT)  PT Smartfren Telecom TBK (FREN)  PT. Tower Bersama Infrastructure (TBIG)  PT. Gihon Telekomunikasi Indonesia Tbk (GHON)  Stry Average Per Year  8.23  age  est  11.89	Name         2019         2020           PT. XL Axiata TBK (EXCL)         3.73         1.94           PT Indosat Tbk (ISAT)         11.89         -4.88           PT Smartfren Telecom TBK (FREN)         -17.18         -12.32           PT. Tower Bersama Infrastructure (TBIG)         15.68         11.46           PT. Gihon Telekomunikasi Indonesia Tbk (GHON)         10.56         11.61           Stry Average Per Year         8.23         2.60           age         11.89         -4.88	Name         2019       2020       2021         PT. XL Axiata TBK (EXCL)       3.73       1.94       6.41         PT Indosat Tbk (ISAT)       11.89       -4.88       66.59         PT Smartfren Telecom TBK (FREN)       -17.18       -12.32       -3.44         PT. Tower Bersama Infrastructure (TBIG)       15.68       11.46       16.36         PT. Gihon Telekomunikasi Indonesia Tbk (GHON)       10.56       11.61       12.50         Stry Average Per Year       8.23       2.60       32.80         age         est       11.89       -4.88       66.59	

From the results of the Return On Equity calculation, it is known that the Indosat Tbk company has fluctuated in each period where the Indosat Tbk company has the highest ROE value from 2019-2021 compared to other companies. In 2019 it was 11.89%, in 2020 it was -4.88% and in 2021 it was 66.59%, an increase from the previous year of.

Meanwhile, the company that has the lowest ROI value in 2019-2021 is the company Smartfren Telekomuniksi Tbk. In 2019 it was -17.18%, in 2020 it was -12.32% and in 2021 it again experienced an increase of -10.98%.

When viewed from the industry average each year, in 2019 the companies Tower Bersama Infrastructure, Indosat Tbk and Gihon Telekomunikasi Tbk had good performance because they had a value exceeding the industry average of 8.23%. The Smartfren Telecom Tbk company was -17.18%, and the XL Axiata Tbk company was 3.73%, far below the industry average, so it can be said that their performance is still not optimal. In 2020 the companies Tower Bersama Infrastructure Tbk and Gihon Telekomunikasi had good performance because they exceeded the industry standard average of 2.60%. Meanwhile, Indosat Tbk was -4.88%, Smartfren Telecom Tbk was -12.32%, and XL Axiata Tbk was 1.94%, far below the industry average and it can be said that their performance is still not optimal. In 2021 the Indosat Tbk company has a value above the average of 66.59%. while XL Axiata, Smartfren, Gihon Telecommunications, and Tower Bersama Infrastructure, had less than optimal performance because they were below the industry average.

When viewed from the average of the last 3 years, the company that has the highest average ROE value is Indosat Tbk company of 24.53%, while Smartfren Telekomunikasi Tbk company has the lowest average ROE value of -10.98%. The company's overall average for the last 3 years was 14.55%.

Judging from the results of this study, it was concluded that Return On Equity before Covid-19 and during Covid-19 experienced significant changes where in 2019 before Covid-19 the company had an average value of 8.23 and during Covid-19 in 2020 that is 2.60. Entering 2021, it rose 30.20 with an average value in 2021 of 32.80, meaning that the company's ability to make profits on its shares is said to be stable.

# 5. Assessment of Financial Performance through Financial Ratios

Based on the results of the analysis of financial ratios, it can be concluded that the conditions and performance of managers in managing finances at telecommunications companies on the Indonesia Stock Exchange during 2019-2021.

# a. Liquidity Aspect

Liquidity is related to the company's ability to pay short-term obligations. The indicators used in the liquidity aspect include the current ratio and *quick* ratio. Based on the results of research using the liquidity ratio shows that the five companies have different levels of liquidity, meaning the company's ability to meet short-term obligations. The highest level of liquidity is at PT Indocement Tunggal Prakarsa Tbk. The high level of the company's liquidity shows that PT Indocement Tunggal Prakarsa Tbk has a better ability to meet its short-term obligations through current assets including cash, receivables and inventories.

# b. Activity Aspect

The activity aspect relates to how effective the company is in utilizing all available funding sources by involving a comparison between the level of sales and investment in various types of assets. The indicators used in the activity aspect include inventory turnover and total asset turnover. Based on the analysis using activity ratios, it shows that the five telecommunications companies have different levels of activity. A good level of activity is PT Indosat Tbk. This shows that PT Indosat Tbk is the best at operating company funds by generating sales using its assets.

### c. Solvency Aspect

The solvency aspect relates to the company's ability to fulfill all obligations, both short-term debt and long-term debt, by using all the assets owned by the company. The indicators used in the solvency aspect include the debt to asset ratio and the debt to equity ratio. Based on the analysis using the solvency ratio shows that the five telecommunications companies have different levels of solvency. The best level of solvency among the five companies is PT Gihon Telekomunikasi Tbk. This is because PT Gihon Telekomunikasi Tbk has a lower debt ratio so that the company has a better ability to fulfill all of its debts, both long term and short term.

# d. Profitability Aspect

The profitability aspect relates to a company's ability to generate profits during a certain period at a certain level of sales, assets and share capital. The indicators used in the aspect of profitability include net profit margin, return on assets and return on equity. Based on the analysis using profitability ratios, it shows that the five telecommunication companies have different levels of profitability. The highest and best level of profitability is PT Gihon Telekomunikasi Tbk. The high level of profitability of PT Gihon

Telekomunikasi Tbk illustrates that PT Gihon Telekomunikasi Tbk has a better ability because it is able to generate profits efficiently by using the resources it has.

#### V. CONCLUSIONS AND RECOMMENDATIONS

#### Conclusion

The results of calculating financial ratio analysis carried out by researchers to find out how good and bad the condition of a company are as follows:

- 1. In terms of the company's liquidity ratio, PT Indosat Tbk is better than PT XL Axiata, PT Smartfren, PT Gihon Telekomunikasi, and PT Tower Bersama Infrastructur, because the company PT Indosat Tbk has a better ability to pay short-term debt obligations properly.
- 2. In terms of activity ratio, PT Indosat Tbk is better than PT XL Axiata, PT Smartfren, PT Gihon Telekomunikasi, and PT Tower Bersama Infrastructur, because PT Indosat Tbk has a better ability to operate company funds by generating sales using its assets.
- 3. In the Solvability ratio of the company PT Gihon Telekomunikasi Tbk, it is better than PT XL Axiata, PT Smartfren, PT Indosat Tbk, and PT Tower Bersama Infrastructur, because the company PT Gihon Telekomunikasi Tbk has a lower debt ratio so that the company has a better ability to meet all debts both long term and short term.
- 4. In terms of profitability ratios, the company PT Gihon Telekomunikasi Tbk is better than PT PT XL Axiata, PT Smartfren, PT Indosat Tbk, and PT Tower Bersama Infrastructur, because the company PT Gihon Telekomunikasi Tbk has the ability to get high profits for the company.

#### **SUGGESTION**

#### 1. For Companies

For the company, based on the performance analysis carried out in this study, the researcher would like to provide advice that it is better for telecommunication companies that are experiencing a decline in financial performance to maximize company management in managing every component of the company that has the potential to improve company performance.

# 2. For investors

For investors, before making an investment, investors must be able to be more selective in choosing a company to invest in. In making an investment, investors should first look at the level of performance of a company. One of the considerations that can be taken from this research is that investors can see companies that have a good level of corporate performance, which can manage their companies.

# 3. For Further Researchers

Future researchers are expected to be able to add years of research and add several variables so as to provide more accurate calculations and analysis results and conduct research on different corporate sectors.

# **LIMITATIONS STUDY**

- 1. The number of variables used in this study only uses nine variables, namely Current Ratio, *quickRatio, Inventory Turn Over, Total Asset Turn Over, Debt To Asset Ratio, Debt To Equity Ratio, Net Profit Margin, Return On Assets and Return On Equity.*
- 2. This research was only conducted on telecommunications companies, also their financial statements use the rupiah currency.

### **REFEFENCES**

- 1) Agus D., Harjito and Martono. 2013. Manajemen Keuangan, Edisi kedua. Yogyakarta: EKONISA.
- 2) Bambang Riyanto. 2012. Dasar-Dasar Pembelajaran Edisi 4. Yogyakarta: BPFE.
- 3) Harahap, Sofyan Syafri. 2015. Analisis Krisis atas Laporan Keuangan. Edisi Pertama. Jakarta: PT Raja Grafindo Persada.
- 4) Hanafi, Mamduh M, and Abdul Halim. 2012. Analisis Laporan Keuangan, Edisi Keempat. Yogyakarta: UPP STIM YKPN.
- 5) Irham Fahmi. 2012. Analisis Laporan Keuangan. Jakarta: rajawali Pres.
- 6) Kasmir. 2013. Analisis Laporan Keuangan, Jakarta: PT. Raja Grafindo Persada.
- 7) Kasmir. 2015. Analisis Laporan Keuangan, Edisi kesatu, cetakan kedelapan. Jakarta: PT. Raja Grafindo Persada.
- 8) Prastowo D, Dwi. (2015). Analisis Laporan Keuangan: Konsep dan Aplikasi. Edisi Ketiga. Yoyakarta: Unit Penerbit Dan Percetakan Sekolah Tinggi Ilmu Manajemen YKPN.

- 9) Saraswati, D., Suhadak, Handayani, S. R. 2013. Analisis Laporan Keuangan sebagai alat Penilaian Kinerja Keuangan pada Koperasi: Studi pada Koperasi Universitas Brawijaya Malang Periode 2009-2012. Jurnal Administrasi Bisnis (JAB), Vol. 6 No. 2
- 10) Sugiyono, 2017. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabeta.
- 11) Triyonowati and Agustin, D. (2016). Analisisi kinerja keuangan perusahaan sebelum dan sesudah Merger pada PT Bentoel Internasional Investama Tbk. Jurnal Ilmu dan Riset Manajemen Vol. 3 No. 7.
- 12) Wiratna Sujarweni. 2017. Analisis Laporan Keuangan. Teori. Aplikasi dan Hasil Penelitian. Yogyakarta: Pustaka Baru Press.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0)

(https://creativecommons.org/licenses/by-nc/4.0/), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.