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Analysis of Financial Performance for Public listed Pharmaceutical Company, Before and During Covid 19 Pandemic in Indonesia and the effect of some Financial Ratios to Stock Prices (in the period of Q4 2018- Q1 2021)

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ABSTRACT: *The COVID-19 pandemic that emerged in March 2020 in Indonesia has opened insight to thepublic about the importance of the role of health such as drugs, health workers, and medical devices because inthis pandemic era, dependence on raw materials and medical devices in Indonesia is more than 90% importedfrom other countries. Currently, pharmaceutical companies are flocking to innovate to create raw materials fordomestic drugs, covid drugs, and multivitamins with the aim of being able to help the government to overcomethe surge in COVID-19 cases in Indonesia. With the policy of restricting the mobility of the population, goods,and services, the supply of imported medicinal raw materials will be disrupted, which will hamper the drugproduction process. This is a challenge for the pharmaceutical industry to be able to produce products relatedto COVID-19 because of the high demand for drugs and multivitamins as preventive measures.*

This study aims to evaluate and analyze significant differences in financial performance and stock prices ofpublic companies in the pharmaceutical industry in the period before and after covid 19 appeared in Indonesiawhere the demand for drugs related to Covid 19 increased. In addition, this study also analyzes how the effect of several ratios partially and simultaneously on the stock price listed on the Indonesian stock exchange. Theresearch methodology used is financial ratio analysis to measure financial performance, Paired T-test usingSPSS, and multiple linear regression (panel data). In this study, secondary data is used in the form ofpharmaceutical company financial reports published on IDX from the period Q4 2018 to Q1 2021.

The result is that only the NPM ratio has a significant difference in the period before and after covid-19 whichhas a positive effect. On multiple regression panel data, simultaneously Current Ratio, Cash Ratio, Total AssetsInventory, Inventory Turnover, Debt to Assets Ratio, Return on Equity have an effect on Stock Price. ForCurrent Ratio partially has a negative effect on stock prices, Inventory Turnover partially has a negative effecton stock prices, and Return on Equity partially has a positive effect on stock prices.

Keyword: *Pharmaceutical Industry, Financial Ratio, Stock Price, Financial Performance, Covid-19.*

I. INTRODUCTION

The Covid-19 outbreak in the world has resulted in an increase in the number of requests for drugs to prevent the virus from infecting the human body so that many companies in the pharmaceutical industry are competing to create new products or develop products related to Covid-19 such as vitamins, supplements, and immune-enhancing drugs.Therefore, the company's management continues to strive to ensure that raw materials and production capacity can meet the needs of consumers throughout Indonesia [1].

Based on information from the Chancellor of Gajah Mada University (UGM), PanutMulyono in[2] said around 95% of the raw materials for the national drug industry are still imported from abroad such as China, India, Italy, Spain, Korea and Malaysia. Therefore, in the current situation, many exporters of raw materials for medicines and medical devices are restricting or reducing their export activities to ensure that their country's needs are met before exporting to Indonesia. The limitation of raw materials and medical devices is also due to the many closures of pharmaceutical factories because the government enforces rules on social restrictions so that the supply chain of pharmaceutical raw materials is disrupted, besides that the logistics process is also hampered due to road access. restrictions.

At the time of the occurrence of covid 19 in Indonesia, people flocked to buy drugs, supplements, and vitamins at pharmacies or other drug outlets. Based on research from [3] which states that there are 3 factors that influence the behavior of buying drugs, health supplements, and immune-boosting vitamins during a pandemic, namely fear, worry, and sadness. The fear and worry experienced by the community is caused by online media/TV news which continues to provide information about the large number of COVID-19 cases exposed, the presence of friends or family who have also been infected with COVID-19, and even deaths that can occur

due to COVID-19. In addition, they are afraid of their family's economy if they must self-isolate because they are exposed to the virus, so they prefer to take as much prevention as possible in order to avoid Covid-19

The following table 1.1 is a list of pharmaceutical companies used by the author for this research.

Table 1.1 Public listed pharmaceutical companies in Indonesia

No	Company Name
1	PT. Darya-Varia LaboratoriaTbk (DVLA)
2	PT. Kimia Farma (KAEF)
3	PT. Kalbe Farma (KLBF)
4	PT. Merck Tbk (MERK)
5	PT. PyridamFarmaTbk (PYFA)
6	PT. SidomunculTbk (SIDO)

Previous researches about financial performance

Research from [4] on Stock Valuation and Business Performance of Indonesia Pharmaceutical Company Amidst Covid-19 Pandemic (Case Study of PT.KalbeFarmaTbk) in the 2016-2020 period. The result is that the financial performance is good, with ROA and ROE which consistently increase every year. For its health level, Kalbe Farma's score is higher than its industry peers. The share price offered by KLBF is overvalued at around 4.02% to its market price based on an absolute valuation method. In addition, based on calculations using relative valuation, Price earning average and EV to EBITDA shows that KLBF is also overvalued by around 15.2% and 8.6%.

There is also any research from [5] about the performance of companies in the pharmaceutical industry. In this study, all publicly listed companies in the pharmaceutical industry in the 2015-2019 period were used. The results obtained from this study indicate that the size of a company has a significant negative effect on company performance, the leverage of the company has a positive effect on company performance, and the growth of the company has a significant positive effect on company performance.

In [6] research, FRA testing on the health level of financial statements at PT. Supra Boga Lestari, PT. Midi Utama Indonesia, and PT. SumberAlfariaTrijaya according to the Decree of the Minister of State-Owned Enterprises Number KEP-100/MBU/2002. Then analyze whether there is a significant effect of several financial ratios on stock prices in the stock market. The ratios used by researchers to be tested against stock prices are ROE, ROI, Cash Ratio, Current Ratio, Collection Period, Inventory Turnover, Total Assets Turnover, and Equity to Asset Ratio. After analyzing and calculating using the multiple linear regression method, it was found that these ratios simultaneously have a significant effect on Stock Price with a figure of 86.77%. Then partially, the ratio that has an influence on Stock Price is ROE and Inventory Turnover.

II. RESEARCH METHOD

This study uses descriptive financial ratio analysis to examine the financial performance of public companies in the pharmaceutical industry in Indonesia for the period 2018 to 2021. In addition, using comparative analysis to find out whether there are significant differences in the financial performance of pharmaceutical companies, before Covid-19 in 2018-Q4 to 2019-Q4 and after Covid-19 in 2020-Q1 to 2021-Q1. Financial Ratio Analysis is carried out based on 4 categories including liquidity ratio, activity ratio, solvency ratio, and profitability ratio. Paired sample t-test was applied to test the hypothesis based on the 6 variables to compare two populations of mean which observation in one sample can be paired with observation in the other sample because in this study it is time series data. The data analysis for stock price will be carried out using multiple linear regression analysis which aims to determine the effect of Current ratio, Cash ratio, Total Assets turnover, Total Inventory turnover, Debt to Assets ratio, and Return on Equity on stock prices in 6 publicly listed pharmaceutical companies on the IDX.

1. Financial Ratio Analysis (FRA)

This research methodology is referred to as a quantitative descriptive approach method in the financial report of 6 public listed company in the pharmaceutical industry in Q4 2018, Q1-Q4 2019, Q1-Q4 2020, and Q1-Q4 2021. To analyze financial performance using the company`s financial ratio analysis (FRA) such as Liquidity ratio, Activity ratio, Solvency ratio, and Profitability ratio was used as an assessment tool to describe the condition of the company. There are eight indicators to be measured, which is Current ratio, Cash ratio, Total Assets turnover, Inventory turnover, Debt to Assets ratio, Debt to Equity ratio, Return on Equity, and Net Profit Margin. All these indicators will be calculated and the total weight will be assessed to see whether the company's financial performance has significant differences or not in the period before and after covid 19 appeared in Indonesia.

2. Paired T-Test

Paired t-test is commonly used for the purpose of comparing and evaluating two population means where observations in one sample can be paired with observations in the other sample. The use of Paired t-test is intended to test whether the average of several ratios in this study has a significant difference with the COVID-

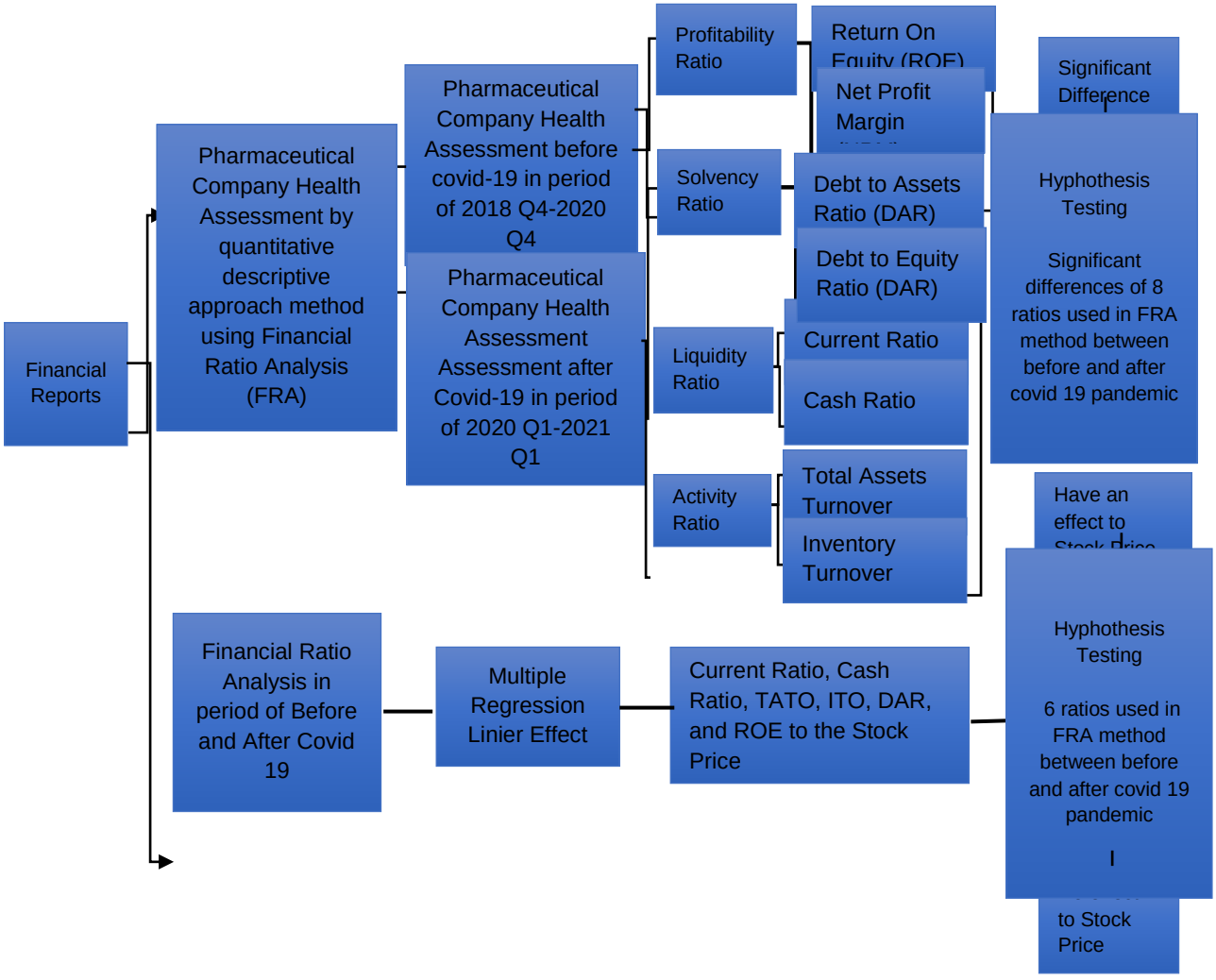
19 phenomenon that appears in Indonesia [7]. The sample used is data before covid 19 in the period 2018 Q4-2019 Q4 and data after covid 19 in the period 2020 Q1-2021 Q1. In this study, the paired t-test was used for all companies simultaneously and was also investigated for each company regarding differences in the ratio value in the 2018 Q4-2021 Q1 period.

3. Multiple linear regression analysis

The data analysis for stock price will be carried out using multiple linear regression analysis which aims to determine the effect of Current Ratio, Cash Ratio, Total Assets Turnover, Inventory Turnover, Debt to Assets Ratio, and Return on Equity on Stock Price in 6 pharmaceutical company on the IDX.Multiple linear regression is a regression model that uses more than one independent variable which aims to investigate the effect of the independent variables on the dependent variable. In some linear regression model, the variable to be predicted has a linear relationship with independent variable[8].In addition, this study will also use classical assumptions that have been tested previously. The classical assumption test used are normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

Research Model

Figure 2.1 Research Model



This research model was adopted from a study conducted by [9] who tested financial performance in the banking industry before and after the covid pandemic emerged in Indonesia. Although there are industry differences and differences in the ratio variables used, this research model is still suitable for use in various industries including the pharmaceutical industry because of the current situation, the financial performance of companies in each industry is affected by the emergence of covid 19 in the world.

The Variables

Table 2.1: Ratio`s formula

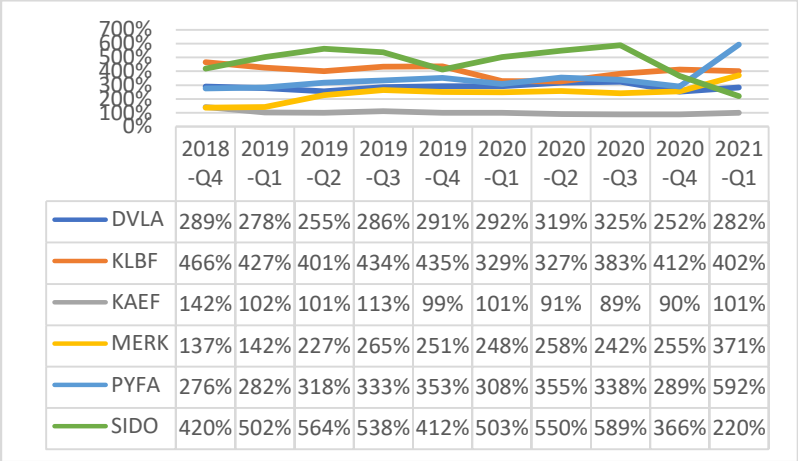
Liquidity Ratio	
a. Current Ratio	(Current Assets/Current Liabilities) X 100%
b. Cash Ratio	(Cash and Cash Equivalent/Current Liabilities) X 100%
Activity Ratio	
c. Total Assets Turnover	(Net Sales/Total Assets) X 100%
d. Inventory Turnover	(Net Sales/Inventories) X 100%
Solvability Ratio	
e. Debt to Assets Ratio	(Total Liabilities/Total Assets) X 100%
f. Debt to Equity Ratio	(Total Liabilities/Total Equity) X 100%
Profitability Ratio	
g. Return on Equity	(Net Income/Shareholder`s Equity) X 100%
h. Net Profit Margin	(Net Profit/Total Sales) X 100%

III. RESULTS AND DISCUSSIONS

The financial performance analysis for 6 public listed pharmaceutical companies shown below:

Liquidity Ratio Analysis

Current Ratio

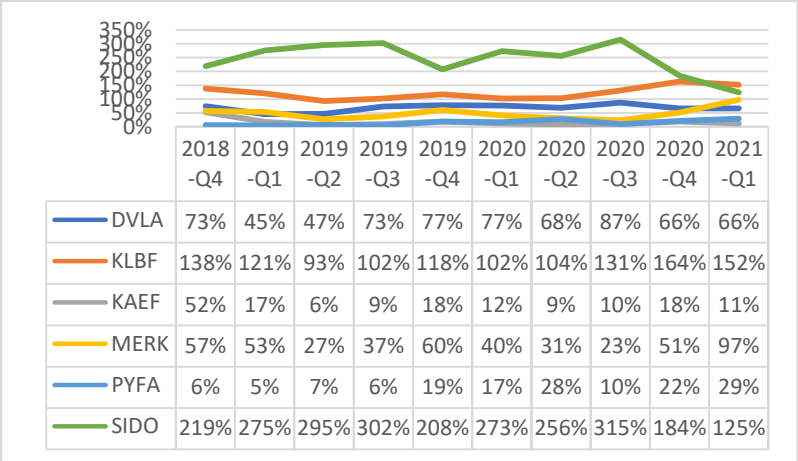


	2018 -Q4	2019 -Q1	2019 -Q2	2019 -Q3	2019 -Q4	2020 -Q1	2020 -Q2	2020 -Q3	2020 -Q4	2021 -Q1
DVLA	289%	278%	255%	286%	291%	292%	319%	325%	252%	282%
KLBF	466%	427%	401%	434%	435%	329%	327%	383%	412%	402%
KAEF	142%	102%	101%	113%	99%	101%	91%	89%	90%	101%
MERK	137%	142%	227%	265%	251%	248%	258%	242%	255%	371%
PYFA	276%	282%	318%	333%	353%	308%	355%	338%	289%	592%
SIDO	420%	502%	564%	538%	412%	503%	550%	589%	366%	220%

Figure 3.1

In the current ratio graph, pharmaceutical companies such as KAEF did not experience significant changes and had the lowest percentage level of current ratio among other pharmaceutical companies. In DVLA, the graph shows that there is no difference in the period before covid-19, but in the period after the emergence of covid-19 DVLA experienced an increase in the Current ratio to 325% in the 2020-Q3 period. For MERK companies, the current ratio shows that every quarter there is an increase, even in the period after covid-19, MERK managed to reach a current ratio value of 371% in 2021. At the pharmaceutical company PYFA, the current ratio increased significantly in the period 2020 Q4 to 2021 Q1 which shows that in the post-covid-19 period, PYFA reached the highest current ratio among other companies with a figure of 592%. For SIDO companies, their current ratio value is quite high even though in the post-covid-19 period, especially in 2021 Q1, the ratio decreased significantly with a ratio value of 220%.

Cash Ratio



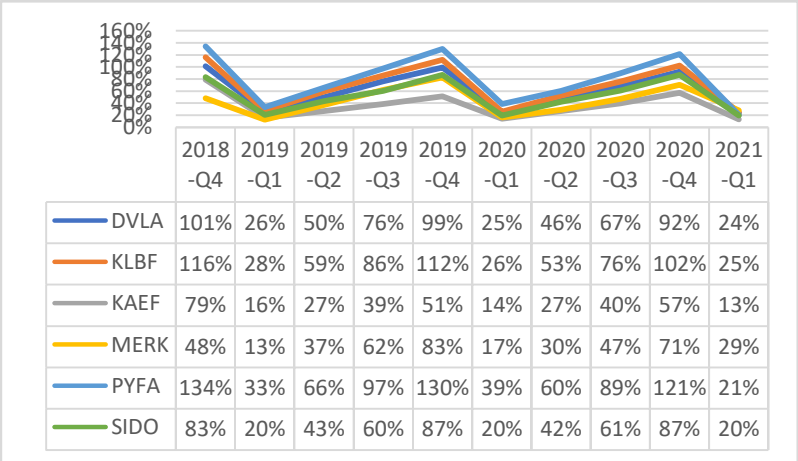
	2018 -Q4	2019 -Q1	2019 -Q2	2019 -Q3	2019 -Q4	2020 -Q1	2020 -Q2	2020 -Q3	2020 -Q4	2021 -Q1
DVLA	73%	45%	47%	73%	77%	77%	68%	87%	66%	66%
KLBF	138%	121%	93%	102%	118%	102%	104%	131%	164%	152%
KAEF	52%	17%	6%	9%	18%	12%	9%	10%	18%	11%
MERK	57%	53%	27%	37%	60%	40%	31%	23%	51%	97%
PYFA	6%	5%	7%	6%	19%	17%	28%	10%	22%	29%
SIDO	219%	275%	295%	302%	208%	273%	256%	315%	184%	125%

Figure 3.2

In the Cash ratio, the company with the lowest ratio value is the PYFA company. In the pre-covid-19 period, PYFA had an average cash ratio value of 27.8%. Even so, the PYFA cash ratio value in the post-covid-19 period has increased even in 2020 Q1 and 2021 Q1 reaching 28-29%. For companies like KLBF, the increase in the value of the ratio occurred in the period after Covid-19 appeared. Even so, the increase in the value of their cash ratio is not too significant. In the KAEF company, in 2018 with a cash ratio of 52%, it decreased in every quarter before covid-19 and tends to be stable in the quarter after covid-19. SIDO has the highest cash ratio value among other pharmaceutical companies, however, fluctuations in this ratio still occur. In the pre-covid-19 period, the decline occurred in 2019-Q4 and increased again in the post-covid-19 period in 2020 Q3. Even so, SIDO in the 2020 Q4 and 2021 Q1 periods experienced a decrease in the value of the cash ratio to 125%.

Activity Ratio Analysis

Total Assets Turnover



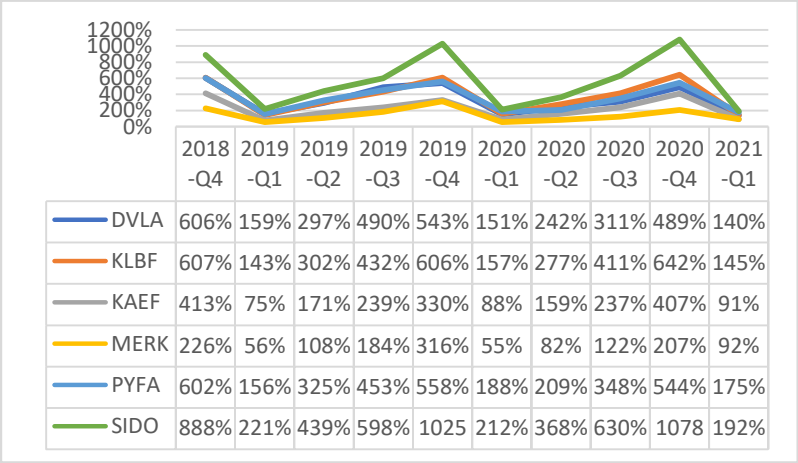
	2018 -Q4	2019 -Q1	2019 -Q2	2019 -Q3	2019 -Q4	2020 -Q1	2020 -Q2	2020 -Q3	2020 -Q4	2021 -Q1
DVLA	101%	26%	50%	76%	99%	25%	46%	67%	92%	24%
KLBF	116%	28%	59%	86%	112%	26%	53%	76%	102%	25%
KAEF	79%	16%	27%	39%	51%	14%	27%	40%	57%	13%
MERK	48%	13%	37%	62%	83%	17%	30%	47%	71%	29%
PYFA	134%	33%	66%	97%	130%	39%	60%	89%	121%	21%
SIDO	83%	20%	43%	60%	87%	20%	42%	61%	87%	20%

Figure 3.3

In the DVLA, which started in 2018 Q4 with 101% TATO, it fell to 26% in 2019 Q1, then increased gradually until the end of the pre-covid 19 period, namely 2019 Q4 with 99%, meaning there was a decrease in the year-end ratio. DVLA again experienced a decline at the end of 2020 with a TATO ratio of 92%. KLBF in the 2018 Q4 period had a TATO ratio of 116% which then decreased by 88% in the 2019 Q1 period, then at the end of 2019 it reached 112% which means it decreased by 4% compared to 2018 Q4 and fell again at the end of 2020 Q4 by 10%, meaning that at the end of each year, although not significantly. At KAEF at the end of 2018 with a figure of 79%, it decreased at the end of 2019 by 28% with a ratio value of 51%, then at the end of 2020 Q4 or the period after the emergence of covid 19, it increased slightly to 57%. For MERK companies, in the period before covid, there was an increase as seen from the 2018 Q4 to 2019 Q4 period by 35%, while in the period after covid 19 appeared 2019 Q4 to 2020 Q4 it decreased by 12%. In PYFA in the period before covid 19 it had a ratio value of 134% in 2018 Q4 which then decreased slightly in 2019 Q4 with a ratio value of 130%, after that In the period after covid 19 the ratio value at the end of 2020 again decreased by 9% with a value of 9%. The ratio in 2020 Q4 was 121%. Lastly, the TATO ratio from the SIDO company in the period before covid 19,

2018 Q4 had a ratio value of 83% which then experienced a slight increase at the end of 2019 by 4% or with a ratio value in 2019 Q4 of 87%. Then after covid 19 appeared, we can see that at the end of 2020 the TATO ratio owned by SIDO remained stable at 87% which means that there is no difference in the value of the TATO ratio in the period before and after covid 19 appeared in Indonesia.

Inventory Turnover



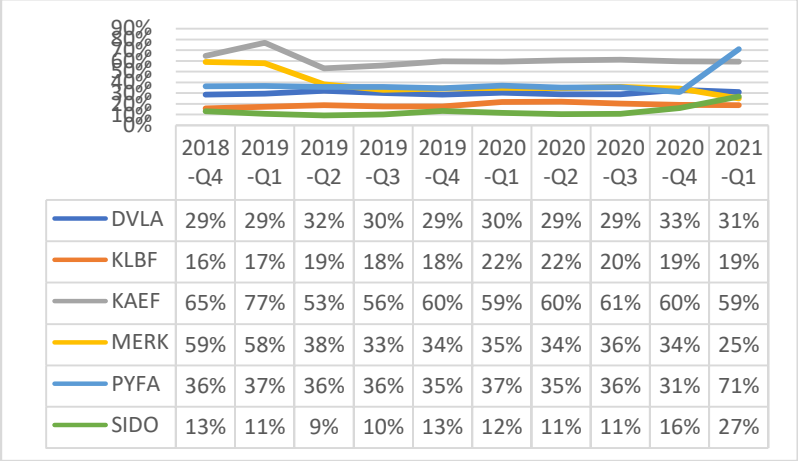
	2018 -Q4	2019 -Q1	2019 -Q2	2019 -Q3	2019 -Q4	2020 -Q1	2020 -Q2	2020 -Q3	2020 -Q4	2021 -Q1
DVLA	606%	159%	297%	490%	543%	151%	242%	311%	489%	140%
KLBF	607%	143%	302%	432%	606%	157%	277%	411%	642%	145%
KAEF	413%	75%	171%	239%	330%	88%	159%	237%	407%	91%
MERK	226%	56%	108%	184%	316%	55%	82%	122%	207%	92%
PYFA	602%	156%	325%	453%	558%	188%	209%	348%	544%	175%
SIDO	888%	221%	439%	598%	1025	212%	368%	630%	1078	192%

Figure 3.4

In the Inventory Turnover ratio, the highest ratio is in the SIDO company among other pharmaceutical companies. If we look at the graph above, the SIDO ratio value was 888% in the 2018 Q4 period which then rose again at the end of the pre-covid 19 period to 1025% in 2019 Q4. In the period after covid 19 appeared, SIDO continued to experience an increase in the ratio of 53% or the ratio value of 1078% in 2020 Q4. This shows that the SIDO company's inventory turnover continues to increase, both before covid 19 and after covid 19 appeared in Indonesia. The DVLA company in 2018 Q4 with a ratio value of 606% decreased at the end of '019 with a ratio value of 543%. After that, in the period after covid 19, the ratio value at the end of 2020 DVLA decreased again with a ratio value of 489%. The KLBF Inventory ratio had a value of 606% in 2018 Q4 which then decreased in 2019 Q4 with a ratio value of 543%. In the period after covid, KLBF experienced an increase in the ratio value seen in 2020 Q4 with a ratio value of 642%, this shows that the KLBF ratio value before covid 19 has decreased and after covid 19 has increased. At the KAEF company, the inventory turnover ratio in 2018 Q4 was 413%, decreased until the 2019 Q4 period with a ratio value of 330%, but in the period after covid 19 appeared, the KAEF ratio increased in 2020 Q4 by 407%. For MERK companies, the inventory ratio in 2018 Q4 was 226%, an increase at the end of 2019 Q4 with a ratio value of 316%, but after entering the after covid 19 period, it decreased in 2020 Q4 with a ratio value of 207%. The PYFA company in 2018 Q4 had an inventory turnover ratio of 602% which then decreased in the 2019 Q4 period with a ratio value of 558%. In the period after covid 19 appeared, the PYFA ratio value decreased again in the 2020 Q4 period with a ratio value of 544%.

Solvency Ratio Analysis

Debt to Assets Ratio (DAR)



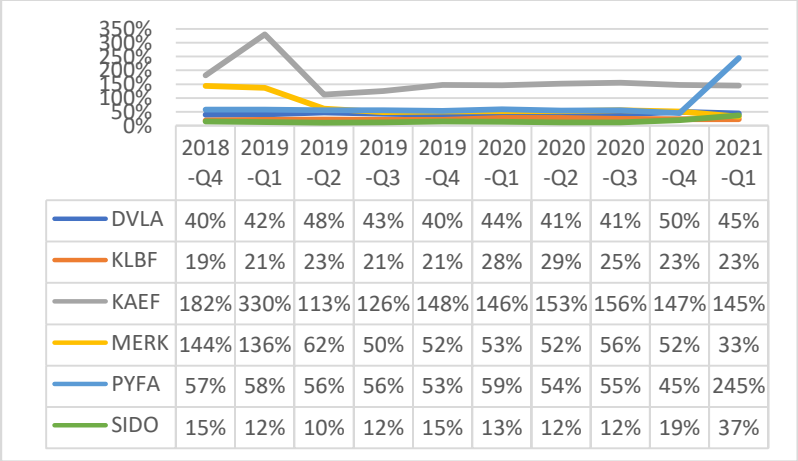
	2018 -Q4	2019 -Q1	2019 -Q2	2019 -Q3	2019 -Q4	2020 -Q1	2020 -Q2	2020 -Q3	2020 -Q4	2021 -Q1
DVLA	29%	29%	32%	30%	29%	30%	29%	29%	33%	31%
KLBF	16%	17%	19%	18%	18%	22%	22%	20%	19%	19%
KAEF	65%	77%	53%	56%	60%	59%	60%	61%	60%	59%
MERK	59%	58%	38%	33%	34%	35%	34%	36%	34%	25%
PYFA	36%	37%	36%	36%	35%	37%	35%	36%	31%	71%
SIDO	13%	11%	9%	10%	13%	12%	11%	11%	16%	27%

Figure 3.5

The graph above is the DAR ratio for public companies in the Indonesian pharmaceutical industry. In this ratio, SIDO has the lowest debt ratio value among other companies, but in the Q1 2021 quarter, SIDO experienced an

increase in the DAR ratio by 27%. The DVLA and KLBF companies have a DAR ratio value of less than 50% and have graphs that tend to be stable or have no difference in the DAR ratio value in the period before covid or after covid 19 appeared in Indonesia. For MERK companies, the DAR ratio in the 2018 Q4 period with a figure of 59% decreased slightly in 2019 Q1 with a ratio value of 58% and continued to experience a decline in the ratio until the after covid 19 period in 2021 Q1, the ratio value decreased by 25%. In the PYFA company, in the period before covid 19 it had a ratio of 36% in 2018 Q4 and tended to be stable until 2019 Q4. However, in the period after covid 19 appeared, the DAR ratio in 2020 Q4 with a ratio value of 31% to 2021 Q1 experienced a significant increase with a ratio value of 71%. The pharmaceutical company KAEF has the highest ratio among other companies. In 2018 Q4 to 2019 Q1 there was an increase with a ratio value of 77%. Then it decreased in 2019 Q2 to 53%. After that in the after covid period, KAEF still has a DAR ratio value which tends to be stable with an average ratio value of 60%.

Debt to Equity Ratio (DER)



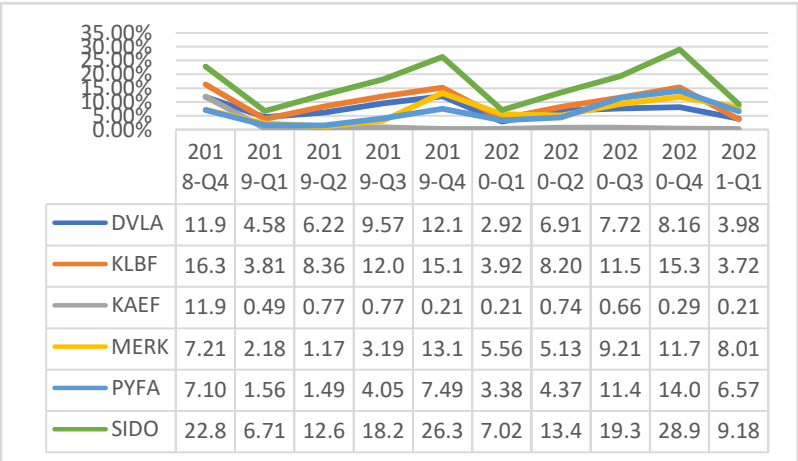
	2018-Q4	2019-Q1	2019-Q2	2019-Q3	2019-Q4	2020-Q1	2020-Q2	2020-Q3	2020-Q4	2021-Q1
DVLA	40%	42%	48%	43%	40%	44%	41%	41%	50%	45%
KLBF	19%	21%	23%	21%	21%	28%	29%	25%	23%	23%
KAEF	182%	330%	113%	126%	148%	146%	153%	156%	147%	145%
MERK	144%	136%	62%	50%	52%	53%	52%	56%	52%	33%
PYFA	57%	58%	56%	56%	53%	59%	54%	55%	45%	245%
SIDO	15%	12%	10%	12%	15%	13%	12%	12%	19%	37%

Figure 3.6

The graph above describes the percentage value of the debt to equity ratio in public companies in the Indonesian pharmaceutical industry. Companies such as DVLA, KLBF, and SIDO have a ratio value of <50% and have a ratio value that tends to be stable in the period before covid 19 and in the period after covid 19 appeared in Indonesia. Meanwhile for the KAEF company, the DER ratio value before covid 19 in 2018 Q4 to 2019 Q1 experienced a significant increase from 182% to 330% which then experienced a significant decline in 2019 Q2 by 113%, followed by a slight increase in the DER ratio value until the end of 2019 in the period after covid 19 appeared, the DER ratio value for KAEF companies tended to be stable with an average ratio value of 149%. For MERK companies, the DER ratio value in the period before covid 19 was 144% in 2018 Q4 which then experienced a continuous decline until 2019 Q4 with a ratio value of 52%. Then in the period after covid 19 appeared, the DER ratio on MERK tends to be stable with an average ratio value of 49%. The DER ratio value for the PYFA company has a stable ratio from 2018 Q4 to 2020 Q4 with an average value of 55%. However, a significant increase occurred in the post-covid period, to be precise in 2021 Q1 with a DER ratio value of 245%.

Profitability Ratio Analysis

Return on Equity (ROE)

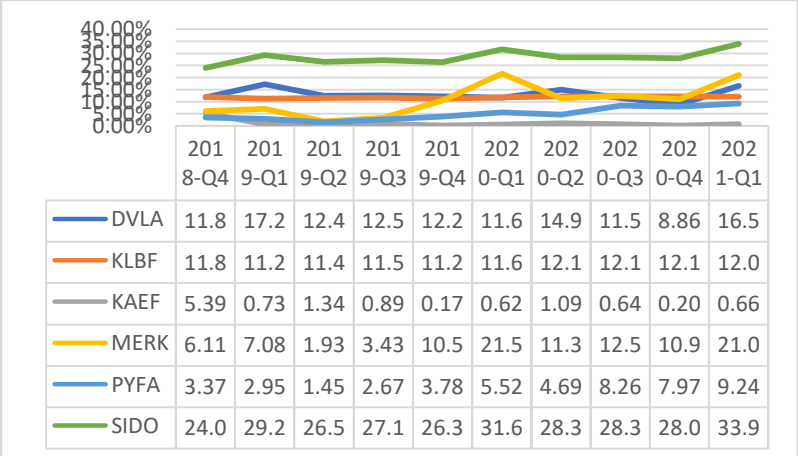


	2018-Q4	2019-Q1	2019-Q2	2019-Q3	2019-Q4	2020-Q1	2020-Q2	2020-Q3	2020-Q4	2021-Q1
DVLA	11.9	4.58	6.22	9.57	12.1	2.92	6.91	7.72	8.16	3.98
KLBF	16.3	3.81	8.36	12.0	15.1	3.92	8.20	11.5	15.3	3.72
KAEF	11.9	0.49	0.77	0.77	0.21	0.21	0.74	0.66	0.29	0.21
MERK	7.21	2.18	1.17	3.19	13.1	5.56	5.13	9.21	11.7	8.01
PYFA	7.10	1.56	1.49	4.05	7.49	3.38	4.37	11.4	14.0	6.57
SIDO	22.8	6.71	12.6	18.2	26.3	7.02	13.4	19.3	28.9	9.18

Figure 3.7

In the Return on Equity ratios of public companies, the pharmaceutical industry has a ratio value below 50%. In DVLA in 2018 Q4 the ROE ratio value was 11.92% which then dropped to 4.58% in 2019 Q1. The increase began to occur in 2019 Q2 until the end of the period before covid 19 in 2019 Q4 with a numerical value of 12.12%. In the period after covid 19 appeared in Indonesia their ratio value tends to decrease, this can be seen in 2020 Q1 with a ratio value of 2.92% and at the end of 2020 Q4 of 8.16%. In KLBF in 2018 Q4 the ROE ratio value was 16.33% which then dropped to 3.81% in 2019 Q1. The increase began to occur in 2019 Q2 to 2019 Q4 with an ROE ratio value of 15.19% in the period before covid 19. In the period after covid 2020 Q1, KLBF decreased with a ratio value of 3.92%. However, in 2020 Q4 when compared to the end of 2018 and 2019, the ROE ratio value at KLBF did not change significantly with a ratio value of 15.32%. At KAEF in 2018 Q4, the ROE ratio value was 11.97% which then decreased significantly in 2019 Q1 with a ratio value of 0.49%. The ROE ratio at this KLBF company has stagnated from 2019 Q1 to 2021 Q1 with a ratio value below 1% which indicates that the ROE ratio at KLBF is the lowest ratio value compared to other companies. The ROE ratio of MERK companies in 2018 Q4 was 7.21% which then decreased in 2019 Q1 with a ratio value of 2.18% and again decreased in 2019 Q2 with a ratio value of 1.17%. however, an increase in the ratio began to occur in 2019 Q3 and 2019 Q4 with a ratio value of 3.19% and 13.17%. in the period after covid 19 appeared, the MERK ratio value in 2020 Q1 decreased with a ratio value of 5.56% and fell again in 2020 Q2 with a ratio value of 5.13%. an increase in the ratio value began to occur in 2020 Q3 and 2020 Q4 with a ratio value of 9.21% and 11.74%, respectively. If the ROE ratio value in 2020 Q4 which is the end of the year when covid 19 appears compared to the period before covid 19 in 2019 Q4 which has an ROE ratio value of 13.17%, the ratio value can be said to have decreased. In the PYFA company, the ROE ratio value in 2018 Q4 was 7.10% which then decreased in 2019 Q1 and 2019 Q2 with a ratio value of 1.56% and 1.49%, respectively. In 2019 Q3, their ROE began to increase with a ratio value of 4.05% and at the end of the period before covid 19 the ratio value was 7.49%. in the period after covid appeared, the ROE ratio of the PYFA company in 2020 Q1 decreased by a numerical value of 3.38%. but in the following period there was a significant increase with a ratio value of 14.02% in 2020 Q4. And when compared to the end of 2018 and 2019, the ROE ratio at the end of 2020 for PYFA companies tends to increase. In SIDO companies, the value of their ROE ratio tends to increase. This can be seen in 2018 Q4 with an initial ratio value of 22.87% to 2019 Q4 there was an increase with a ratio value of 26.35%. in the post-covid period, their ratio value at the end of 2020 was 28.99% which shows that SIDO continues to increase compared to the period before covid 19. In addition, the ROE ratio value owned by SIDO is the highest ratio among other pharmaceutical companies.

Net Profit Margin (NPM)



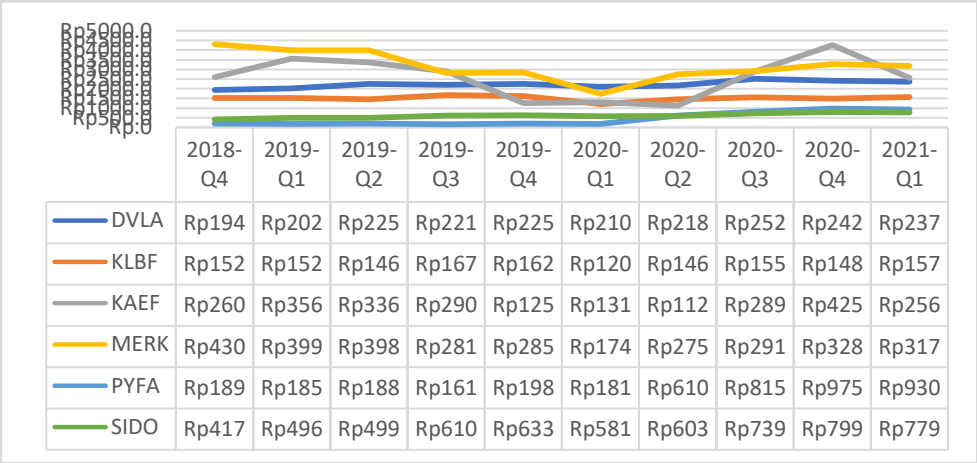
	2018-Q4	2019-Q1	2019-Q2	2019-Q3	2019-Q4	2020-Q1	2020-Q2	2020-Q3	2020-Q4	2021-Q1
DVLA	11.8	17.2	12.4	12.5	12.2	11.6	14.9	11.5	8.86	16.5
KLBF	11.8	11.2	11.4	11.5	11.2	11.6	12.1	12.1	12.1	12.0
KAEF	5.39	0.73	1.34	0.89	0.17	0.62	1.09	0.64	0.20	0.66
MERK	6.11	7.08	1.93	3.43	10.5	21.5	11.3	12.5	10.9	21.0
PYFA	3.37	2.95	1.45	2.67	3.78	5.52	4.69	8.26	7.97	9.24
SIDO	24.0	29.2	26.5	27.1	26.3	31.6	28.3	28.3	28.0	33.9

Figure 3.8

In the NPM chart of the listed pharmaceutical industry companies, SIDO companies have the highest ratio values compared to other companies. In 2018 Q4 the SIDO company was at a ratio value of 24.02% which then increased in 2019 Q1 with a ratio value of 29.27%. The NPM ratio value at SIDO companies tends to increase, from the period before covid 19 and after covid 19, these companies can maintain their profitability level stably and even tend to increase during the period after covid 19 appeared in Indonesia. for DVLA companies in the period before covid 19, their ratio values tend to fluctuate. In 2018 Q4 with a ratio value of 11.81%, DVLA companies experienced an increase in 2019 Q1 with a ratio value of 17.28% which then decreased again until 2019 Q4 with a ratio value of 12.23%. in the period after covid 19 appeared in Indonesia, DVLA again decreased in 2020 Q1 with a ratio value of 11.68%. The increase in the NPM ratio value occurred in 2020 Q2 with a ratio of 14.97% but decreased again in 2020 Q3 and 2020 Q4 with a ratio value of 11.50% and 8.86%,

respectively. But surprisingly, in 2021 Q1 the ratio value has increased again with a ratio value of 16.57%. at KLBF companies in the period before covid 19, the NPM ratio value tends to be stable with an average of 11.46%. Unlike the case in the period after covid 19 appeared in Indonesia, their NPM ratio value tends to increase with an average value of 12.01%. the value of the NPM ratio at the KAEF company, in 2018 Q4 was 5.39% which then in 2019 Q1 decreased with a ratio value of 0.73%. an increase in the ratio value in the period before covid 19, namely in 2019 Q2 with a ratio value of 1.34% but again it decreased in 2019 Q3 and 2019 Q4 with a ratio value of 0.89% and 0.17%. in the period after covid 19, KAEF in 2020 Q1 had a ratio value of 0.62% and increased in 2020 Q2 with a ratio value of 1.09%. however, in 2020 Q3 and 2020 Q4, their NPM ratio declined again with a ratio value of 0.64% and 0.20%, respectively. For MERK, the average value of their NPM ratio in the pre-covid-19 period was 5.81%. Unlike the case in the period after covid 19 appeared in Indonesia, their NPM ratio increased significantly with an average ratio value of 15.49%. the same thing also happened to the average NPM ratio value before and after covid 19 in PYFA companies, which was 2.84% and 7.14% so it can be concluded that the NPM ratio value in PYFA companies tended to increase in the period after covid 19.

Stock Price of Public listed Pharmaceutical Companies



	2018-Q4	2019-Q1	2019-Q2	2019-Q3	2019-Q4	2020-Q1	2020-Q2	2020-Q3	2020-Q4	2021-Q1
DVLA	Rp194	Rp202	Rp225	Rp221	Rp225	Rp210	Rp218	Rp252	Rp242	Rp237
KLBF	Rp152	Rp152	Rp146	Rp167	Rp162	Rp120	Rp146	Rp155	Rp148	Rp157
KAEF	Rp260	Rp356	Rp336	Rp290	Rp125	Rp131	Rp112	Rp289	Rp425	Rp256
MERK	Rp430	Rp399	Rp398	Rp281	Rp285	Rp174	Rp275	Rp291	Rp328	Rp317
PYFA	Rp189	Rp185	Rp188	Rp161	Rp198	Rp181	Rp610	Rp815	Rp975	Rp930
SIDO	Rp417	Rp496	Rp499	Rp610	Rp633	Rp581	Rp603	Rp739	Rp799	Rp779

Figure 3.9

In the picture above is a stock price chart for public companies in the Indonesian pharmaceutical industry, the highest share price is MERK companies in 2018 Q4 with a price of Rp. 4,300. In the period before covid 19, the MERK`s stock price continued to decline until 2020 Q1 with a share price of Rp. 1,740. However, the MERK`s stock price increased again in 2020 Q2 with a price of Rp. 2,750 and continued to increase until 2021 Q1 with a share price of Rp. 3,170. While the lowest share price is in the PYFA company with a price of Rp. 189 in 2018 Q4, even in 2019 Q3 at a price of Rp. 161. PYFA's share price began to increase after covid 19 appeared in Indonesia in 2020 Q1 with a price of Rp. 181 and continued to increase significantly until the period of 2021 Q1 with a share price of Rp. 930. At the DVLA stock price before covid 19 and after covid 19 appeared, the stock price tends to be stable with an average of Rp. 2,134 (before covid 19) and Rp. 2318 (after covid 19). On KLBF share prices, the average share price before the covid 19 period was Rp. 1,559 and the average KLBF share price after covid 19 was Rp. 1,452, so it can be concluded that there was a decline in the period after covid 19. In KAEF's share price, the average The average share price before the covid 19 period was IDR 2,734 while the average share price after the covid 19 period was IDR 2,426. Even so in 2020 Q4, KAEF had experienced a share price increase of Rp.4,250 which was the highest share price among other pharmaceutical companies that occurred in the period after the emergence of covid 19 in Indonesia. At SIDO companies, their stock prices tend to increase steadily from the period before covid 19 to the period after covid 19 with an average share price of IDR 531 (before covid 19) and IDR 700 (after covid 19).

Paired T-test Analysis

Paired t-test is a method used to investigate the comparison of variables at a certain time. A paired t-test is used when we are interested in the difference between two variables for the same subject, often the two variables are separated by time.

The basis for the decision to accept or reject Ho in this study is as follows:

a. If the value of t-value < t-table and significance > 0.05, then Ho is accepted and H1 is rejected, meaning that there is no significant difference in the data in the period before the covid-19 pandemic (before data) with the covid-19 period (after data)
b. If the value of t-value > t-table and significance < 0.05, then Ho is rejected and H1 is accepted, meaning that there is a significant difference in the data in the period before the covid-19 pandemic (before data) with the covid-19 period (after data)

Table 3. 1 Paired Samples T-test Analysis of 6 Public Listed Pharmaceutical Companies

Paired Differences									
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig (2-tailed)
Pair 1	Current Ratio Before-Current Ratio After	-.04667	.87670	.16006	-.37403	.28070	-292	29	.773
Pair 2	Cash Ratio Before-Cash Ratio After	-.00433	.37142	.06781	-.14303	.13436	-.064	29	.949
Pair 3	TATO Before-TATO After	.17333	.46807	.08546	-.00145	.34811	2.028	29	.052
Pair 4	ITO Before-ITO After	1.03967	2.99048	.54598	-.07700	2.15633	1.904	29	.067
Pair 5	DAR Before-DAR After	.00067	.10657	.01946	-.03913	.04046	.034	29	.973
Pair 6	DER Before-DER After	.03733	.55114	.10062	-.16846	.24313	.371	29	.713
Pair 7	ROE Before-ROE After	.00567	.07740	.01413	-.02324	.03457	.401	29	.691
Pair 8	NPM Before-NPM After	-.02867	.04622	.00844	-.04592	-.01141	-3.397	29	.002
Pair 9	Stock Price Before-Stock Price After	59.9667	892.32677	162.91583	-273.23363	393.16696	.368	29	.715

The table above is the result of a paired sample t-test on 6 public companies in the Indonesian pharmaceutical industry in the period before and after covid 19 or 2018 Q4-2021 Q1.
From all the FRA ratio variables and Stock Price in public listed companies in the Indonesian pharmaceutical industry, which in this study were compared using a paired t test in the period before and after covid 19 appeared in Indonesia, it can be concluded that only the Net Profit Margin ratio value has a significant difference.

Paired T-test analysis of each public listed pharmaceutical companies

The following are the results of a comparison of each public listed pharmaceutical company`s Current Ratio, Cash Ratio, Total Assets Turnover, Inventory Turnover, Debt to Assets Ratio, Debt to Equity Ratio, Return on Equity, Net Profit Margin, and Stock Price:

Table 3. 2 Paired T-test of Each Public Listed Pharmaceutical Companies

Ratio	DVLA			KLBF			KAEF		
	t-value	Sig (2-tailed)	Result	t-value	Sig (2-tailed)	Result	t-value	Sig (2-tailed)	Result
Liquidity Ratio									
Current Ratio	-.769	.485	Reject H1	2.592	.061	Reject H1	2.364	.077	Reject H1
Cash R	-1.023	.364	Reject H1	-8.84	.427	Reject H1	.984	.381	Reject H1
Activity Ratio									
TATO	.858	.439	Reject H1	.899	.419	Reject H1	.733	.504	Reject H1
ITO	1.336	.253	Reject	.613	.573	Reject	.504	.640	Reject

			H1			H1			H1
Solvability Ratio									
DAR	-.583	.591	Reject H1	-2.514	.066	Reject H1	.553	.610	Reject H1
DER	-.634	.560	Reject H1	**-2.875**	**0.45**	**Accept H1**	.781	.478	Reject H1
Profitability Ratio									
ROE	1.268	.274	Reject H1	.645	.554	Reject H1	.991	.378	Reject H1
NPM	.134	.900	Reject H1	-2.449	0.70	Reject H1	.930	.405	Reject H1
Stock Price									
Stock Price	**-7.130**	**.002**	**Accept H1**	1.533	.200	Reject H1	.417	.698	Reject H1
Ratio	**MERK**			**PYFA**			**SIDO**		
	t-value	**Sig (2-tailed)**	**Result**	**t-value**	**Sig (2-tailed)**	**Result**	**t-value**	**Sig (2-tailed)**	**Result**
Liquidity Ratio									
CR	-2.511	.066	Reject H1	-1.344	.250	Reject H1	.715	.514	Reject H1
Cash R	-.148	.890	Reject H1	**-3.789**	**.019**	**Accept H1**	.918	.410	Reject H1
Activity Ratio									
TATO	.705	.520	Reject H1	.836	.450	Reject H1	.587	.588	Reject H1
TITO	1.225	.288	Reject H1	1.126	.323	Reject H1	.533	.622	Reject H1
Solvability Ratio									
DAR	2.182	.095	Reject H1	-.793	.472	Reject H1	-1.540	.198	Reject H1
DER	1.993	.117	Reject H1	-.909	.415	Reject H1	-1.343	.250	Reject H1
Profitability Ratio									
ROE	-1.055	.351	Reject H1	-1.292	.266	Reject H1	.334	.755	Reject H1
NPM	**-5.001**	**.007**	**Accept H1**	**-5.047**	**.007**	**Accept H1**	-1.777	.150	Reject H1
Stock Price									
Stock Price	1.462	.218	Reject H1	**-3.530**	**.024**	**Accept H1**	**-7.629**	**.002**	**Accept H1**

The difference in the value of the ratio and stock price for public companies in the pharmaceutical industry does not have much significant difference between the period before covid and after covid 19 appeared in Indonesia. In DVLA and SIDO companies, the only significant difference is the Stock Price. In KLBF companies, the only significant difference is the DER ratio. In MERK companies, the only significant difference is in the NPM ratio. In the PYFA company, the significant difference is in the Cash Ratio, NPM, and Stock Price. Meanwhile, in KAEF companies, all ratios and stock prices do not have a significant difference.

Multiple Linear Regression Research Data Analysis of Stock Price (panel data)

Before conducting a panel data regression, the regression model should meet the classic assumption test to meet the statistical requirement. The classic assumption test comprises of Normality, Multicollinearity, Heteroscedasticity, and Auto Correlation.

Normality Test

The normality test is a process to obtain the information regarding the data model whether the data model is normally distributed or not. The regression model is said to be normally distributed if the plotting data that describes the actual data follow a diagonal line. Other than that, to ensure the data is normally distributed, the author uses normality test with Kolmogorov Smirnov test [10].

a) Significant value < 0,05, the data is not normally distributed
b) Significant value > 0,05, the data is normally distributed

Table 3. 3 One Sample K-S Test

One-Sample Kolmogorov-Smirnov Test		
Unstandardized Residual		
N		60
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	807.18183315
Most Extreme Differences	Absolute	.102
	Positive	.082
	Negative	-.102
Test Statistic		.102
Asymp. Sig. (2-tailed)		.195[c]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Source: (Data processing by Author using SPSS,2022)

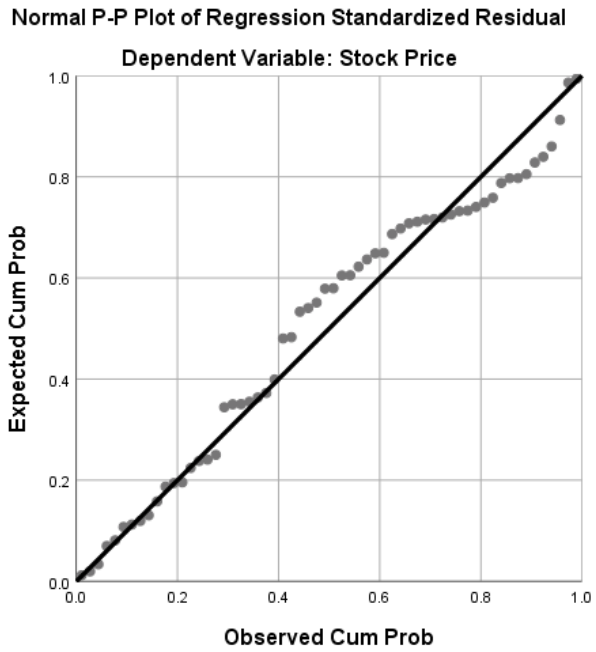


Figure 3. 1 Normal P-P Plot of Regression
Source: (Data processing by Author using SPSS,2022)

Based on the figure 3.10 above, the Kolmogorov Smirnov test results show that the value of Sig> 0.05 where 0.195> 0.05. In addition, the Normal P-Plot image shows that the plot follows the diagonal line. So, it can be said that the data variables in this study are normally distributed.
From the result of the two tests above for normality test, consistent results are obtained that the data in this study are normally distributed

Multicollinearity Test

Based on the results of data processing, the results of the multicollinearity test are obtained, as follows:

Table 3. 4 Multicollinearity Test

Coefficients[a]	
	Collinearity Statistics

Model		Tolerance	VIF
1	Current Ratio	.310	3.228
	Cash Ratio	.185	5.412
	Total Assets Turnover	.217	4.616
	Inventory Turnover	.142	7.020
	Debt to Assets Ratio	.292	3.424
	Return on Equity	.205	4.888
a. Dependent Variable: Stock Price			

Source: (Data processing by Author using SPSS,2022)

Multicollinearity test is a test used to test whether a regression model occurs between the independent and the dependent variables. The decent regression model should not be found a correlation between the independent variables. The testing phase of the multicollinearity test can be seen in the Tolerance value and the VIF value.

The basis of decision making as follows:

a) Value of VIF (Variance Inflation Factor) < 10 is not founded Multicollinearity in the regression model.
b) Tolerance Value > 0,01, is not founded Multicollinearity in regression model

Based on the VIF value and the Tolerance value in the image above, it can be concluded that the regression data model does not have multicollinearity because all data on variable X to variable Y is VIF < 10.00 and all Tolerance values > 0.10.

Heteroscedasticity Test

Heteroscedasticity is a problem because least squares regression (OLS) assumes that all residues are taken from a population that has constant variance (homoscedasticity). The consequences of heteroscedasticity occur can result in the obtained OLS estimator still meeting the unbiased requirements, but the obtained variance becomes inefficient, meaning that the variance tends to enlarge so that it is no longer a small variance.

Based on the results of data processing, the results of the Heteroscedasticity test were obtained, as follows:

Table 3. 5 Heteroscedasticity Test

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	953.631	415.453		2.295	.026
	Current Ratio	-72.373	75.636	-.206	-.957	.343
	Cash Ratio	6.558	155.117	.012	.042	.966
	Total Assets Turnover	47.968	372.926	.033	.129	.898
	Inventory Turnover	39.554	65.025	.193	.608	.546
	Debt to Assets Ratio	83.911	614.153	.030	.137	.892
	Return on Equity	-3469.700	1938.654	-.474	-1.790	.079
a. Dependent Variable: ABS_RES						

Source: (Data processing by Author using SPSS,2022)

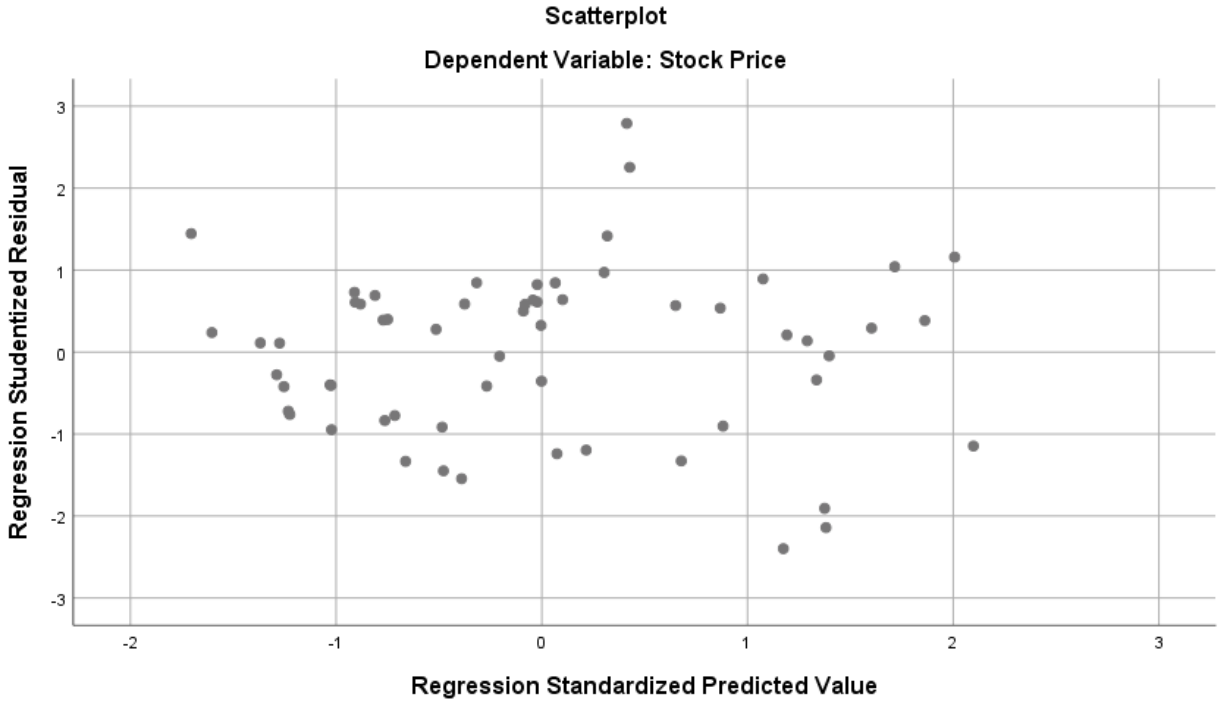


Figure 3. 2 Scatterplot of Regression
Source: (Data processing by Author using SPSS,2022)

Based on the picture above, the results of the heteroscedasticity test, it was found that all sig values > 0.05. This shows that the data in this regression test does not contain heteroscedasticity. In addition, according to [10], a data can be said to have no heteroscedasticity if the plot on the scatterplot table does not have a clear pattern (wavy, widen then narrowed), and the points spread above and below 0 on the Y axis, so it can be concluded that test data in this study does not occur heteroscedasticity.

Autocorrelation Test

The following is a table of the results of the autocorrelation test.

Table 3. 6 Autocorrelation Test

Model Summary[b]					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	.707[a]	.501	.444	851.64666	1.088
a. Predictors: (Constant), Return on Equity, Total Assets Turnover, Current Ratio, Debt to Assets Ratio, Cash Ratio, Inventory Turnover					
b. Dependent Variable: Stock Price					

Source: (Data processing by Author using SPSS,2022)

The basis for taking the presence or absence of autocorrelation can be seen from the following provisions according to [11] :

1) If the DW number is below -2, there is a positive autocorrelation
2) If the DW number is between -2 to +2, there is no autocorrelation
3) If the DW number is above +2 there is a negative autocorrelation

Based on figure 3.12, the result is (-2<1,088<2). So, it can be stated that there is no autocorrelation problem in this regression model

Multiple Linear Regression Research Data

Based on the results of data processing, the results of multiple linear regression analysis are obtained, on the effect of Current Ratio, Cash Ratio, Total Assets Turnover, Inventory Turnover, Debt to Assets Ratio, and Return on Equity on Stock Prices in 6 public listed pharmaceutical companies on the IDX, as follows:

Table 3. 7 Multiple Linear Regression

Coefficients[a]				
Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	2727.379	809.437	
	Current Ratio	-642.975	147.363	-.761
	Cash Ratio	554.075	302.218	.414
	Total Assets Turnover	1261.031	726.582	.362
	Inventory Turnover	-451.197	126.690	-.916
	Debt to Assets Ratio	1601.661	1196.569	.240
	Return on Equity	9809.976	3777.128	.557
a. Dependent Variable: Stock Price				

Source: (Data processing by Author using SPSS,2022)

Based on the table above, the result of the multiple linear regression equation are obtained As follows:

Y = 2727.379 + (-649.975)X1 + (554.075)X2 + (1261.031)X3 + (-451.197)X4 + (1601.661)X5 + (9809.976)X6 + e

Coefficient of Determination

Based on the results of the coefficient of determination both simultaneously and partially are obtained, as follows:

Table 3. 8 Coefficient of Determination

Model Summary[b]			
Model	R	R Square	Adjusted R Square
1	.707[a]	.501	.444
a. Predictors: (Constant), Return on Equity, Total Assets Turnover, Current Ratio, Debt to Assets Ratio, Cash Ratio, Inventory Turnover			
b. Dependent Variable: Stock Price			

Source: (Data processing by Author using SPSS,2022)

Based on table above, the result of the coefficient of simultaneous determination are shown by the R-Square value of 0.501 or 50,1%, this shows that 50,1% of the contribution of the influence of Current Ratio, Cash Ratio, Total Assets Turnover, Inventory Turnover, Debt to Assets Ratio, and Return on Equity to Stock Prices.

F test (Simultaneous Test)

The F test basically shows whether all the independent or independent variables referred to in the model have a joint effect on the dependent variable. The conditions for testing the F-test hypothesis are as follow:

- if fcount>ftable and significance < 0.05, then H0 is rejected and Ha is accepted, meaning that there is a simultaneous effect of all independent variables on the dependent variable.
- if fcount<ftable and significance >0.05, then H0 is accepted and Ha is rejected, meaning that there is no simultaneous effect of all independent variables on the dependent variable

The following is the formula for F table = F (k ; n-k) = F (6 ; 54) = 2,270

In this study, f table is obtained from the results of 5% probability, df1= 6 and df2 =60-6 =54, then the results are 2,270

Based on the results of data processing, the results of the simultaneous hypothesis with the f test are obtained, as follows:

Table 3. 9 F-test of Regression (Simultaneous Test)

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3169523.493	6	528253.915	2.765	.021[b]
	Residual	10126790.476	53	191071.518		
	Total	13296313.969	59			
a. Dependent Variable: ABS_RES						
b. Predictors: (Constant), Return on Equity, Total Assets Turnover, Current Ratio, Debt to Assets Ratio, Cash Ratio, Inventory Turnover						

Source: (Data processing by Author using SPSS,2022)

Based on the table above, simultaneous hypothesis testing with the f test, obtained fcount of 2,765 with a significance (p-value) of 0.021, due to the results of fstatictics>ftable (2,765 > 2,270) and a significance of 0,021<0,05, then H0 is rejected and Ha is accepted, so that it can be stated that there is a simultaneous influence of Current Ratio, Cash Ratio, Total Assets Turnover, Inventory Turnover, Debt to Assets Ratio, Return on Equity on Stock Prices in 6 pharmaceutical company on the IDX.

T test (Partial Test)

The T-test is used to partially test the hypothesis in order to show the effect of each independent variable individually on the dependent variable.

The conditions for testing the f-test hypothesis are as follows:

-If t count > t table and significance < 0.05, then H0 is rejected and Ha is accepted, meaning that there is a partial effect of the independent variable on the dependent variable.

-If t count < t table and significance > 0.05, then H0 is accepted and Ha is rejected, meaning that there is no partial effect of the independent variable on the dependent variable.

The following is the formula for T table: t (α/2; n-k-1) = t (0,025; 53)

In this study t table is obtained from the results of 5% probability, df1= 6 and df2 =60-6-1 =53, then the results is 2,00575 or 2,006.

Based on the results of data processing, the partial hypothesis results obtained by t-test, as follows:

Table 3. 10 T-test of Regression (Partial Test)

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2727.379	809.437		3.369	.001
	Current Ratio	-642.975	147.363	-.761	-4.363	.000
	Cash Ratio	554.075	302.218	.414	1.833	.072
	Total Assets Turnover	1261.031	726.582	.362	1.736	.088
	Inventory Turnover	-451.197	126.690	-.916	-3.561	.001
	Debt to Assets Ratio	1601.661	1196.569	.240	1.339	.186
	Return on Equity	9809.976	3777.128	.557	2.597	.012
a. Dependent Variable: Stock Price						

Source: (Data processing by Author using SPSS,2022)

Based on table above, the results of each test between the independent variables and the dependent variable are obtained, as follows:

a) Effect of Current Ratio on Stock Price

Testing the hypothesis on the effect of Current Ratio on Stock Prices, obtained a t-count of -4.363 with a significance (p-value) of 0.000, because the results of t-count > t-table(-4.363>2.006) and a significance of 0.000<0.05, then H0 is rejected and Ha is accepted, the results of t-count is negative. Indicates the opposite direction, so it can be stated that partially there is negative effect of the Current Ratio on the Stock Prices of 6 public listed pharmaceutical companies on the IDX.

b) Effect of Cash Ratio on Stock Price

Testing the hypothesis on the effect of Cash Ratio on Stock Prices, obtained a t-count of 1.833 with a significance (p-value) of 0.072, because the results of t-count<t-table (1.833<2.006) and a significance of 0.072>0.05, then H0 is accepted and Ha is rejected, so it can be stated that partially there is no effect of Cash Ratio on Stock Prices.

c) Effect of Total Assets Turnover Ratio on Stock Price

Testing the hypothesis on the effect of Total Assets Turnover Ratio on Stock Prices, obtained a t-count of 1.736 with a significance (p-value) of 0.088, because the results of t-count<t-table (1.736<2.006) and a significance of 0.088>0.05, then H0 is accepted and Ha is rejected, so it can be stated that partially there is no effect of Total Assets Turnover Ratio on Stock Prices.

d) Effect of Inventory Turnover Ratio on Stock Price

Testing the hypothesis on the effect of Inventory Turnover Ratio on Stock Prices, obtained a t-count of -3.561 with a significance (p-value) of 0.001, because the results of t-count > t-table (-3.561>2.006) and a significance of 0.001<0.05, then H0 is rejected and Ha is accepted, the results of t-count is negative. Indicates the opposite direction, so it can be stated that partially there negative effect of the Inventory Turnover Ratio on the Stock Prices of 6 public listed pharmaceutical companies on the IDX.

e) Effect of Debt to Assets Ratio on Stock Price

Testing the hypothesis on the effect of Debt to Assets Ratio on Stock Prices, obtained a t-count of 1.339 with a significance (p-value) of 0.186, because the results of t-count<t-table (1.339<2.006) and a

significance of 0.186>0.05, then H0 is accepted and Ha is rejected, so it can be stated that partially there is no effect of Debt to Assets Ratio on Stock Prices.

f) Effect of Return on Equity Ratio on Stock Price

Testing the hypothesis on the effect of Return on Equity Ratio on Stock Prices, obtained a t-count of 2.597 with a significance (p-value) of 0.012, because the results of t-count > t-table (2.597>2.006) and a significance of 0.012<0.05, then H0 is rejected and Ha is accepted. So it can be stated that partially there is positive effect of the Return on Equity Ratio on the Stock Prices of 6 public listed pharmaceutical companies on the IDX.

IV. Conclusion and Recommendation

Conclusion

There are some objectives of this study: comparison of the ratio values of all pharmaceutical companies in the period before and after the emergence of covid 19, comparison of the ratio values for each pharmaceutical company in the period before and after covid 19. As well as evaluating the ratio value partially having an effect on stock prices in 2018 Q4 – 2021 Q1, and evaluate the ratio value simultaneously has an effect on stock price in 2018 Q4 – 2021 Q1.

1. The ratio value which had a significant difference in the period before and after covid 19, was only in the Net Profit Margin ratio of the Profitability measurement with a sig-2 tailed value of 0.002 < 0.05 with a t value of -3.397> 2.004 which means that in the NPM ratio in the period before and after covid 19, the ratio value has a significant difference with the high average NPM ratio value in the period after covid 19 appeared in Indonesia. It means that the emergence of covid-19 has a positive effect to Net Profit Margin ratio. Meanwhile, in the ratios of Activity, Solvability, and Liquidity measurement of each ratio, there is no significant difference in the period before and after covid 19. So it can be concluded that in the pharmaceutical companies analyzed by the author, the impact of covid 19 on the company's financial performance is not has a significant impact except on the net profit margin ratio when calculated simultaneously.
2. Comparison of the ratio values for each company in the pharmaceutical industry, it was found that the DVLA in the period before and after covid 19 there was a significant difference in the ratio value in Stock Prices. The emergence of covid 19 has positive effect to Stock Prices.
3. Comparison of the ratio values for each company in the pharmaceutical industry, it was found that the KLBF in the period before and after covid 19 there was a significant difference in the ratio value in the Debt to Equity Ratio. The emergence of covid 19 has positive effect to DER.
4. Comparison of the ratio values for each company in the pharmaceutical industry, KAEF in the period before and after covid 19, there is no ratio value that has a significant difference
5. Comparison of the ratio values for each company in the pharmaceutical industry, it was found that MERK in the period before and after covid 19 there was a significant difference in the ratio value in Net Profit Margin. The emergence of covid 19 has positive effect to NPM
6. Comparison of the ratio values for each company in the pharmaceutical industry, it was found that PYFA in the period before and after covid 19 there were significant differences in the ratio values in Cash Ratio, Net Profit Margin, and Stock Price. The emergence of covid 19 has positive effect to Cash Ratio, NPM, and Stock Price
7. Comparison of the ratio values for each company in the pharmaceutical industry, it was found that SIDO in the period before and after covid 19 there was a significant difference in the ratio value in Stock Price. The emergence of covid 19 has positive effect to Stock Price
8. In the multiple linear regression tested during the 2018 Q4-2021 Q1 period. Current Ratio, Cash Ratio, Total Assets Turnover, Inventory Turnover, Debt to Assets Ratio, and Return on Equity simultaneously have an effect on stock price.
9. In the multiple linear regression on the partially t-test test, there is an opposite effect of the Current Ratio on the Stock Prices of 6 public listed pharmaceutical companies on the IDX. It means that Current Ratio has negative effect to Stock Price.
10. In the multiple linear regression on the partially t-test test, there is an opposite effect of the Inventory Turnover on the Stock Prices of 6 public listed pharmaceutical companies on the IDX. It means that Inventory Turnover has negative effect to Stock Price.
11. In multiple linear regression on partially t-test test, there is an effect of the Return on Equity Ratio on the Stock Prices of 6 public listed pharmaceutical companies on the IDX. It means that Return on Equity has Positive effect to Stock Price.

Recommendations

- About stock price

Despite the high share price, pharmaceutical companies must be able to maintain their financial performance, especially in terms of profitability ratio.

- Reducing unproductive assets

During this pandemic condition, companies must be able to prioritize products that are most needed by the community first and reduce products or assets that are deemed unrelated to COVID-19, so that the use of assets becomes more effective.

- Innovation and Technology

The world's demand for drugs, vaccines, and medical device technology that is able to overcome COVID-19 is still in high demand by the world so that it becomes a reference for pharmaceutical companies to compete in creating their newest products related to COVID-19

- Raw materials

Pharmaceutical companies in Indonesia must innovate to create their own medicinal raw materials and not depend on imports from abroad

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