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Comparison of Financial Performance and Market Performance on Pharmaceutical Companies on the Indonesian Stock Exchange Prior to and During the Pandemic

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Abstract: The aim of this research is to examine differences in financial performance and market performance in pharmaceutical companies listed on the Indonesian Stock Exchange before and during the pandemic. The research sample is 72 companies obtained by purposive sampling method. This is quantitative research with comparative analysis. Data analysis was performed using the Wilcoxon signed rank test, which was previously tested for normality. The research results show that there is no significant difference between the current ratio, quick ratio, return on assets, working capital turnover, price to book value, and price earnings ratio before and during the pandemic in pharmaceutical companies. In addition, there are significant differences between the net profit margin, debt to asset ratio, debt to equity ratio, and total asset turnover before and during the pandemic for pharmaceutical companies.

Keywords: covid-19, liquidity ratios, profitability ratios, leverage ratios, activity ratios, market ratios

I. Introduction

In 2019, the Covid virus first surfaced in Wuhan, China, and then steadily spread to other nations, including Indonesia. The virus's existence has had a significant effect on the economy. The government's decision to keep people at home to slow the spread of the Covid virus has actually led to the decline of the economy. In order to survive, many businesses are forced to follow procedures that result in layoffs and wage reductions. Only a small number of corporate sectors, such as the pharmaceutical industry, were able to do this, however, since many others were compelled to shut down as a result of their slowness in adapting, lack of funding, and declining demand.

Pharmaceutical businesses survived the outbreak and kept the Indonesian economy afloat. This is due to an upsurge in demand for Covid-related promotional, preventive, and therapeutic items that the company saw during the pandemic. Due to the pandemic's strong demand, pharmaceutical companies' profit margins have also grown. During the epidemic, investors had a good outlook for pharmaceutical companies' stock. The demand for persons who exclusively focus on Covid products and non-Covid products has reduced, and there are challenges in procuring raw materials for medicines since they are 90% dependent on imports. Pharmaceutical firms have not been immune from the detrimental effects of the pandemic.

Using financial ratio analysis, financial performance and market performance can show how financially resilient pharmaceutical businesses will be during a pandemic. A company's health state, particularly its financial situation, can be viewed in detail via financial ratio analysis. Not only do these conditions exist, but it is also possible to forecast how the company will fare in the future. According to Kasmir (2018:110), there are four different categories of financial ratios: activity, profitability, and liquidity ratios.

Market performance describes the company's success in the capital market, which can be measured by price to book value and price earnings ratio. With these two indicators, you can see how big the growth prospects for pharmaceutical companies are in the future, which can be seen from the company's stock earnings.

According to the explanation provided above, the researchers are interested in looking at the financial and market performance of pharmaceutical companies before and during the pandemic to determine whether these companies' performances improved, declined, or remained unchanged. The pharmaceutical industry was picked

because of the high level of public demand for health items connected to managing COVID-19, which is why many people believe this company to be one of the industries that has survived during the pandemic.

II. Theoretical Review and Hypotheses

2.1 Previous Studies

1. Reseach by Jauzaa and Hirawati (2021)

The title of the research is "Financial Performance of Telecommunication Sector Companies Before and During the Covid-19 Pandemic". The purpose of his research is to analyze the financial performance of telecommunications sector companies in terms of their profitability ratios before and during the pandemic. The analysis technique used is descriptive method and Hotteling's T2. The results of his research show that financial performance based on ROA, ROE and NPM increased at the start of Covid, while the Hotteling's T2 assessment showed no difference in profitability before and during the pandemic.

2.Research by Gunawan (2021)

The title of the research is "Comparison of the Financial Performance of Companies in the Food and Beverage Sector Before Covid-19 and During the Covid-19 Period". The aim of his research is to compare financial performance before Covid-19 and during Covid-19 in food and beverage sector companies using financial ratios. The analysis technique used is descriptive statistics, classic assumption test, and different test. The results of his research show that there are differences in the profitability ratios and liquidity ratios before and during the pandemic. Meanwhile, the solvency ratio and activity ratio did not show any difference before and during the pandemic.

3. Research by Widyawati and Ningtyas (2022)

The title of the research is "Analysis of Financial Performance and Share Performance Before and After the Covid-19 Pandemic on the IDX". The aim of the research is to see the differences in financial performance and stock performance of companies listed on the IDX before and during Covid-19. The analysis technique used is paired sample t-test. The results of his research show that the liquidity ratio, profitability ratio, activity ratio, and market ratio decreased between before and after the Covid-19 outbreak was announced. Meanwhile, the solvency ratio, abnormal return and stock beta increased between before and after the Covid-19 outbreak was announced. However, stock betas do not show significant differences.

4. Research byHasan, Mas, and Sopanah (2022)

The title of the research is "Financial Performance Before and During the Covid-19 Pandemic in State-Owned Companies". The aim of the research is to determine the impact of the Covid-19 pandemic on company financial performance. The analysis techniques used are descriptive quantitative analysis, inferential analysis, paired and independent sample t-tests. The results of the research show that there are differences in financial performance before and during the pandemic in construction companies.

5. Research byHamid and Muchtar (2022)

The title of the research is "Analysis of Financial Performance and Stock Performance of Banking Sector Companies Before and During the Covid-19 Pandemic". The aim of his research is to analyze differences in financial performance and share performance of companies going public in the banking sector during the Covid-19 pandemic. The analysis technique used is paired sample t-test and Wilcoxon signed rank test. The results of his research show that there are significant differences during the pandemic in the ratios of ROA, GPM, NPM, and PBV. Meanwhile, the ROE ratio did not have a significant difference during the pandemic.

6. Research Dikri, Putra, Hidayati, and Irawan (2022)

The title of the research is "Analysis of the Financial Performance of Pharmaceutical Companies Before and During the Covid-19 Pandemic". The aim of the research is to determine the financial performance of pharmaceutical companies before and during the pandemic. Apart from that, see which pharmaceutical companies are the most superior in their financial performance. The analysis technique used is financial ratio-based analysis. The results of his research show that PT. SidoMuncul is the company with the highest profitability and solvency during the pandemic, PT. Kalbe Farma is the company with the highest current ratio during the pandemic, and PT. Indofarma is the company with the highest activity ratio during the pandemic.

7. Research by Oktavian, Probowulan, and Aspirandi (2023)

The title of the research is "Financial Performance and Financial Distress of Transportation Companies Before and During the Covid-19 Pandemic". The purpose of his research is to test and analyze the financial performance and financial difficulties of transportation companies before and during the Covid-19 pandemic. The analysis technique used is the Wilcoxon signed rank test. The results of his research show that there were differences before and during the pandemic in transportation companies in terms of financial performance and financial difficulties.

2.2 Theoretical Framework

Signal Theory

According to signal theory, there are information signals about a corporation that are communicated to outside parties with an interest in the company by internal parties. Signals are directives for investors to observe management performance over a specific time period in order to actualize what the owner wants, according to Brigham and Houston in Sofiatin (2020). Financial statements from the company that detail its success may be included in the material. The financial reports submitted must be transparent and accurate in order to lessen the information asymmetry between management and business owners. If there are no information signals, outside parties will protect themselves by offering the company low prices and considering all businesses to perform similarly.

Trade off Theory

The trade-off hypothesis illustrates how a corporation should weigh the advantages and disadvantages of employing debt. The use of debt in business operations will be able to lessen the company's tax liability from interest costs; however, the greater the benefits the company receives in the form of tax savings compared to the costs it forgoes in the form of interest, the greater the amount of debt the company may incur; and vice versa, when the benefits are less than the costs. money must be spent, it is appropriate for the business to refrain from increasing its debt load because doing so will result in both real and potential insolvency.

Financial performance

Financial performance refers to the evaluation and analysis of a company in managing its resources, based on the performance and results of their financial activities. Financial performance can be beneficial for the company and for outside parties. The benefit for the company is that it can be used as a consideration for future actions, while the benefit of financial performance for external parties is as a measuring tool to assess the smoothness of a company in generating profits, paying off obligations, and so on before finally deciding to invest in the company (Dewi et al., 2018). The main indicators for assessing financial performance are:

1. Liquidity ratio

   The liquidity ratio is a reflection of the company's ability to meet short-term obligations by looking at the size of its current assets relative to its current liabilities (Hanafi and Halim, 2014:37). Types of liquidity ratios are as follows:

   a. Current ratio

      Current ratio is a ratio that measures an entity's ability to pay short-term liabilities using current assets. Current assets are assets that are expected to be converted into cash in a short time, such as cash, receivables and inventories. The higher this ratio, the better the ability of the entity to meet short-term obligations. However, a ratio that is too high can also indicate that the entity may have excess assets that are not optimized in its operations. The formula is:

$$Current\ ratio = \frac{\text{Current assets}}{Current\ assets}$$

   b. Quick ratio

      The quick ratio is a more stringent ratio in measuring liquidity because it ignores inventory in its calculations, because inventory requires more time to be converted into cash and cannot always be sold at full price. Therefore, as a more stringent ratio, the quick ratio can provide a more critical view of an entity's ability to meet short-term obligations in more urgent situations. The formula is:

$$Quick\ ratio = \frac{(\text{Aset lancar} - \text{Persediaan})}{\text{Utang lancar}}$$

2. Profitability ratio

   The profitability ratio is a measure of the effectiveness of a company's management in generating profits in a certain period (Prihadi, 2020: 166). Types of profitability ratios are as follows:

   a. Return on asset

      Return on assets is a ratio that measures how efficiently an entity uses its assets to generate profits. A higher return on assets shows that the entity is able to generate greater profits with more efficient use of assets. The

formula is:

$$Return\ on\ asset = \frac{\text{Net profit}}{\text{Total assets}} \text{ x } 100$$

b. Net profit margin

Net profit margin is a ratio that measures how much net profit is generated by each unit of an entity's revenue. Net profit margin also provides an overview of management's effectiveness in managing operational expenses and maintaining profits after taking into account all costs. The higher this ratio, indicates that the entity has a better ability to generate profits from each income generated. The formula is:

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Income}} \text{ x } 100\%$$

3. Ratio leverage

The leverage ratio is a ratio that describes how a company uses borrowed capital in the form of debt as a source of funding to increase assets and to earn or increase profits (Brigham and Houston, 2019). The types of leverage ratios are as follows:

a. Debt to asset ratio

Debt to asset ratio is a ratio that can be used to measure the percentage of a company's total assets financed by debt. This ratio provides an overview of the extent to which an entity relies on debt to fund its activities and operations. The higher this ratio, the greater the proportion of company assets financed by debt and the company's risk of settling obligations is higher and the debt interest burden borne by the company is also higher. The formula is:

$$\text{Debt to asset ratio} = \frac{\text{Total debt}}{\text{Total asset}}$$

b. Debt to equity ratio

Debt to equity ratio merupakan sebuah rasio keuangan yang dapat digunakan untuk membandingkan jumlah utang perusahaan dengan modal sendiri. Semakin tinggi rasio ini, semakin besar risiko finansial yang mungkin dihadapi perusahaan karena tingkat utang yang signifikan. Rumusnya adalah::

$$Debt\ to\ equity\ ratio = \frac{\text{Total debt}}{\text{Total equity}}$$

4. Activity ratio

The activity ratio is a ratio that can be used to measure the level of efficiency in the utilization of company resources (Weston in Riyanto, 2018). This ratio provides insight into how well a company manages its operational resources to generate revenue and profits. Types of activity ratios are as follows:

a. Total asset turnover

Total asset turnover is a measure of how efficiently a company uses all its assets (both current and fixed assets) to generate income. The higher the value of this ratio means the more efficient the use of all assets in generating sales and vice versa. The formula is:

$$Total\ asset\ turnover = \frac{\text{Net sales}}{\text{Average total assets}}$$

b. Working capital turnover

Working capital turnover is a ratio to measure the effectiveness of a company's working capital during a certain period to generate income. Companies with high working capital turnover are more efficient in running operations and generating sales. The formula is:

$$Working\ capital\ turnover = \frac{\text{Net sales}}{\text{Capital}}$$

Market Performance

Market performance is a totality, accumulation, resultant of all stock performance listed and traded on the Indonesia Stock Exchange. Market performance is also a reflection of investors' perceptions of the health and growth potential of an entity. Every company has an interest in knowing the market performance of its products, as a reflection of the success of its business in the world of business competition. Market performance is able to provide an understanding for company management of the implementation conditions that will be carried out and their impact in the future. The main indicators for assessing market performance are:

1. Price to book value

Price to book value is a measure of the comparison between the market price of a company's stock and its book value per share. Book value is the company's total equity divided by the number of outstanding shares. The lower the price to book value of a company, the better it will be. However, a very low price to book value indicates a decline in the

quality and fundamental performance of the issuer concerned (Setianto, 2016). The formula is:

$$Price\ to\ book\ value = \frac{\text{Market price per share}}{\text{Book value per share}}$$

2. Price earning ratio

Price earnings ratio is a measure of the comparison between the stock market price and the profit per share generated by the company. This ratio helps investors understand how much they have to pay for every rupiah of profit the company generates. A high price earnings ratio for shares can be interpreted as expensive shares if in the future the company is unable to achieve higher net profits. The high or low-price earnings ratio is determined by comparing it with the price earnings ratio of other shares or the price earnings of the sector/market that is suitable for comparison.

The formula is:

$$Price\ earning\ ratio = \frac{\text{Share price per share}}{\text{Earnings per share}}$$

2.3 Relationship among variables

Liquidity Ratios Before and During the Pandemic in Pharmaceutical Companies

The liquidity ratio is a measure of a company's ability to meet short-term obligations. The higher the liquidity value, the better the company's capabilities. During the pandemic, pharmaceutical companies experienced high demand for Covid-related products. This has a positive influence on the ability of pharmaceutical companies to fulfil their short-term obligations and companies also have more bargaining power in negotiating faster payments from customers, which can help increase liquidity during the pandemic compared to before the pandemic. Before the pandemic, the public' enthusiastic towards health products was low, so that the company's liquidity capacity was be lower than during the pandemic. Dikri, et al (2022) found during the pandemic, pharmaceutical companies had increased liquidity financial performance compared to that of before the pandemic. However, research by Setiyani, et al (2022) states that there was no significant change in the liquidity ratios of pharmaceutical companies before and during the pandemic.

Profitability Ratios Before and During the Pandemic in Pharmaceutical Companies

A ratio that can be used to assess a business' capacity for profit-making is the profitability ratio. The profitability ratio's value should be higher the more profitable the business is. Pharmaceutical firms have been able to expand and see higher production and sales because to the public's excitement for health products and how it has made them a vital necessity throughout the epidemic. Pharmaceutical businesses' profits are now larger and better than they were before to the epidemic due to increased sales. When comparing profitability ratios before and after the pandemic, Jauzaa and Hirawati (2021) discovered that the profitability ratio's value increased.Aliah and Dessyana (2022), however, discovered that there was no difference between pharmaceutical company profitability ratios before and throughout the pandemic, with the profitability value remaining consistent because sales remained strong even during the epidemic.

Leverage Ratio Before and During the Pandemic in Pharmaceutical Companies

The leverage ratio is a ratio that can be used to measure a company's ability to fulfill its obligations or repay its debts, both short and long term. The higher the leverage ratio, the higher the company's risk of default and it is difficult for the company to make a profit. Pharmaceutical companies during the pandemic were earning quite a good income from products related to Covid-19 so that it could affect the company's ability to manage debt and influence changes in leverage before and during the pandemic. Dikri, et al (2022) stated that there was a difference in the leverage ratio before and during the pandemic with a decrease in the leverage value. However, Athalla, et al (2022) stated that there was no significant difference in the leverage ratio of pharmaceutical companies before and during the pandemic.

Activity Ratios Before and During the Pandemic in Pharmaceutical Companies

The activity ratio is a ratio that compares the level of sales and investment in all assets owned by the company. The higher the activity ratio value, the better the company's activity. During the pandemic, pharmaceutical company operations in utilizing funds embedded in all revolving assets to generate profits from sales were very efficient. Not only that, pharmaceutical companies are also able to manage their working capital turnover to increase production needs during the pandemic. This is understandable because pharmaceutical companies during the pandemic posted high profits compared to before the pandemic. Ediningsih and Satmoko (2022) found that there was a difference in the activity ratio before and during the pandemic with an increase in the activity ratio value. However, Athallah et al (2022) stated that there was no significant difference in the activity ratio of pharmaceutical companies before and during the pandemic.

Market Performance (Price to Book Value) Before and During the Pandemic in Pharmaceutical Companies

Price to book value is a financial ratio that can be used to compare a company's current market value with its book value. The higher the price to book value of a company means the higher the market's confidence in the company's prospects, so that the higher this ratio will result in an increase in a company's share price. The valuation of the majority of pharmaceutical company shares during the pandemic is in the expensive stock category, but this does not trigger investors' intentions to continue buying pharmaceutical shares. This is because of investor sentiment regarding increasing profits and consistent performance of pharmaceutical companies in the future, which is different. compared to before the pandemic, which caused pharmaceutical company prices to plummet due to problems with the rupiah exchange rate, because the majority of medicinal raw materials still had to be imported. Hamid (2022), stated that there was a significant difference in price to book value before and during Covid-19 with a higher PBV value during the pandemic. However, Retnosari, et al (2022) stated that there was no significant difference in the price to book value before and during the pandemic.

Market Performance (Price Earnings Ratio) Before and During the Pandemic in Pharmaceutical Companies

Price earning ratio is a financial ratio that compares a company's stock price to earnings per share. The higher the value of the price earning ratio, the investors will expect high net profit growth from the company. The sales level of pharmaceutical companies during the pandemic increased drastically, thus influencing profit growth which also increased compared to before the pandemic, where increasing profit growth in pharmaceutical companies affected the rate of return to shareholders. During the pandemic, pharmaceutical shares tend to increase, but are still attractive to investors because investors believe that a high share price means the price earnings ratio will also be high. Soko and Harjanti (2022) stated that there was a significant difference in price earnings ratio before and during Covid-19 with a higher PER value during the pandemic. However, Retnosari, et al (2022) stated that there was no significant difference in the price earning ratio before and during the pandemic.

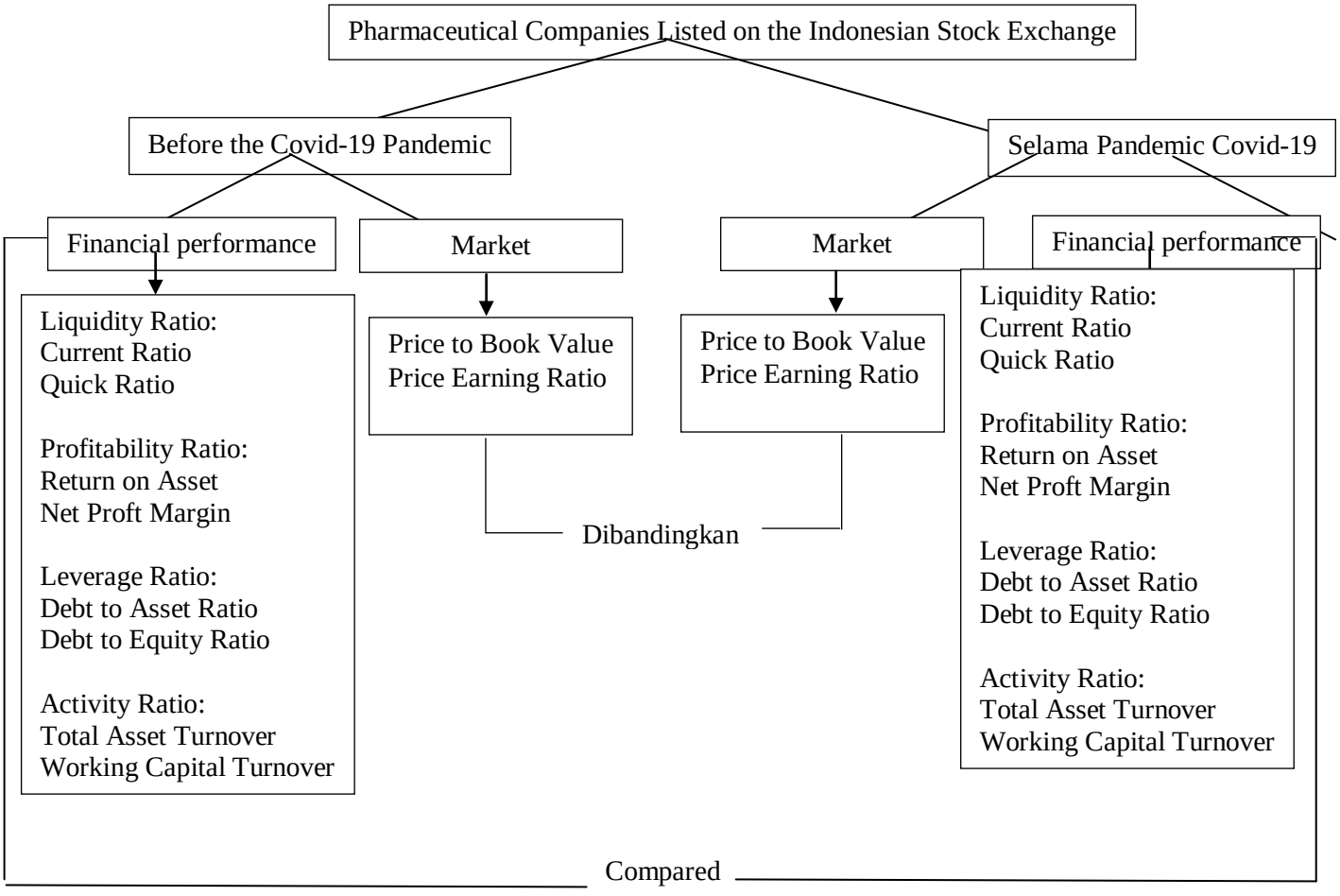

Figure 1
Framework

2.4 Research Hypothesis

Based on the existing theoretical basis, the research hypothesis is as follows:

H1: There are differences in liquidity before the pandemic and during the pandemic for pharmaceutical companies.

H2: There are differences in profitability before the pandemic and during the pandemic for pharmaceutical companies.

H3: There are differences in leverage before the pandemic and during the pandemic in pharmaceutical companies.

H4: There are differences in activity ratios before the pandemic and during the pandemic in pharmaceutical companies.

H5:There are differences in price to book value before the pandemic and during the pandemic for pharmaceutical companies.

H6:There were differences in price earning ratios before the pandemic and during the pandemic for pharmaceutical companies.

III. Method

Secondary data in the form of financial report data and stock prices for pharmaceutical companies listed on the Indonesia Stock Exchange 2017-2022 can be viewed at www.idx.co.id, the official website of the Indonesia Stock Exchange. The population used in this study are pharmaceutical companies listed on the Indonesia Stock Exchange, with company data as follows:

Table 1
Population List

No	Code	Name of Company
1	MERK	PT. Merck Indonesia Tbk
2	KLBF	PT. Kalbe FarmaTbk
3	TSPC	PT. Tempo Scan Pacific Tbk
4	DVLA	PT. Darya VariaLaboratoriaTbk
5	INAF	PT. Indofarma (Persero) Tbk
6	KAEF	PT. Kimia Farma (Persero) Tbk
7	PYFA	PT. PyridamFarmaTbk
8	SIDO	PT. IndustriJamu dan FarmasiSidoMunculTbk
9	PEHA	PT. PhaprosTbk
10	SCPI	PT. Organon Pharma Indonesia Tbk
11	SOHO	PT. Soho Global Health Tbk
12	SDPC	PT. MilenniumPharmacon International Tbk

The sample in this study will be taken from the quarterly financial reports from 2017 to 2022 using the following purposive sampling method:

Table2
Research Sample Selection Method

No	Companies	Total
1.	Pharmaceutical companies listed on the Indonesian Stock Exchange 2017-2022	12
2.	Pharmaceutical companies that do not issue quarterly financial reports for the 2017-2022 period	(6)
3.	Pharmaceutical companies that have a negative equity value	0
Number of sample companies used		6
Total research observations (6 x 12)		72

This research used financial performance and market performance variables. Financial performance is proxied by liquidity ratios (current ratio and quick ratio), profitability ratios (return on assets and net profit margin), leverage ratios (debt to asset ratio and debt to equity ratio), and activity ratios (total asset turnover and working capital turnovers). Meanwhile, market performance is proxied by price to book value and price earnings ratio.

In this study, descriptive statistics and the Shapiro-Wilk normality test were be utilized for the data analysis. Thistest was performed by examining the probabilities, assuming that the residuals are normally distributed and the probability

is greater than 0.05. In contrast, the residual value is not normally distributed if the probability value is less than 0.05. The Paired Sample T-Test is used if the data are regularly distributed. The Wilcoxon Signed Rank Test is used if the data are not normally distributed. The mean of the samples before and during the epidemic were compared using the Paired Sample T-Test and the Wilcoxon Signed Rank Test to see if there were any differences.

IV. Result and Discussion

4.1 Descriptive statistics

Descriptive statistics are used to describe and describe sample data which is displayed in the form of standard deviation values, mean values, maximum values and minimum values, along with the results and analysis:

Table 3

Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CR Before Pandemic	72	1.15	9.71	3.3093	1.82054
CR During Pandemic	72	1.13	6.87	3.1494	1.36187
QR BeforePandemic	72	.66	7.97	2.2935	1.55337
QR During Pandemic	72	.65	5.08	2.1526	1.10954
ROA Before Pandemic	72	.32	92.10	8.0158	11.49826
ROA During Pandemic	72	.07	30.99	7.8931	6.88194
NPM Before Pandemic	72	.00	1.90	.1342	.22684
NPM During Pandemic	72	.00	.52	.1399	.11144
DAR Before Pandemic	72	.07	.83	.3519	.22934
DAR During Pandemic	72	.00	.86	.3836	.25381
DER Before Pandemic	72	.07	4.72	1.0096	1.42028
DER During Pandemic	72	.01	5.94	1.2554	1.63513
TATO Before Pandemic	72	.13	2.53	.8188	.51135
TATO During Pandemic	72	.17	2.90	.7876	.56408
WCT Before Pandemic	72	.37	18.91	3.0431	3.71843
WCT During Pandemic	72	.30	23.40	3.4028	5.12831
PBV Before Pandemic	72	.50	3098175.45	343069.6742	805929.29230
PBV During Pandemic	72	.42	9903210.68	1126754.7800	2674076.42504
PER Before Pandemic	72	5.82	284.29	37.6300	42.31530
PER During Pandemic	72	1.68	214.59	36.8507	35.84640
Valid N (listwise)	72				

Source: Processed data, 2023

Prior to the pandemic, the current ratio showed that PT. Millennium had the lowest value, 1.15, PT. SidoMuncul had the highest value, 9.71, and that the average value, 3.3093, was higher than the standard deviation, 1.82054. Sample data is homogeneous as a result. In the meantime, during the pandemic, PT. Millennium obtained the lowest value of 1.13, PT. SidoMuncul obtained the highest value of 6.87, and the average value of 3.1494 is higher than the standard deviation value of 1.36187, ensuring that the sample data is homogeneous. The aforementioned figures, on average, show a reduction in pharmaceutical companies' capacity to fulfill their present responsibilities during the pandemic, even though circumstances prior to the epidemic were better.

Prior to the pandemic, the fast ratio indicated a lowest value of 0.66, acquired by the company PT. Millennium, a maximum value of 7.97, and an average value of 2.2935, which is higher than the standard deviation value of 1.55337 and indicates homogeneity of the sample data. Meanwhile, during the pandemic, PT. Millennium received the lowest value of 0.65, PT. Pyridam Farma obtained the highest value of 5.08, and the average value of 2.1526 is higher than the standard deviation value of 1.10954 to ensure that the sample data is homogeneous. The aforementioned numbers suggest that, on average, pharmaceutical businesses' ability to cover their present liabilities with their most liquid assets during the epidemic has decreased and that the situation was better prior to the pandemic.

Prior to the pandemic, return on assets showed a minimum value of 0.32, obtained by the company PT. Millennium, a maximum value of 92.10, obtained by the company PT. Merck Indonesia, and an average value of 8.0158 that is less than the standard deviation value of 11.49826, indicating heterogeneity in the sample data. The return on assets during the pandemic had a minimum value of 0.07, which the company PT. Millennium obtained, a maximum value of 30.99, which the company PT. SidoMuncul obtained, and an average value of 7.8931, which is higher than the standard deviation value of 6.88194 and indicates that the sample data is homogeneous. Because the companies had

trouble turning a profit from their assets and because things were better before the epidemic, the score above indicates that pharmaceutical companies' potential to make money decreased during the pandemic.

Before the pandemic, the net profit margin was as follows: PT Millennium obtained the minimum value of 0.00, PT Merck Indonesia obtained the maximum value of 1.90, and the average value of 0.1342 is less than the standard deviation value of 0.22684, indicating that the sample data is heterogeneous. The company PT. Millennium obtained a net profit margin during the pandemic with a minimum value of 0.00, a maximum value of 0.52, and an average value of 0.1399 that is higher than the standard deviation value of 0.11144 to ensure that the sample data is homogeneous. The average value above indicates that pharmaceutical companies' ability to make profits during the pandemic has increased, though it is not statistically significant compared to before the pandemic. Nevertheless, this shows that pharmaceutical companies have operational efficiency, good cost control, and potential profit margins during the pandemic.

The debt-to-asset ratio prior to the pandemic indicated a lowest value of 0.07, obtained by PT. SidoMuncul, a maximum value of 0.83, and an average value of 0.3519, which is higher than the standard deviation value of 0.22934 and indicates homogeneity of the sample data. The average value of 0.3836 is greater than the standard deviation value of 0.25381, indicating that the sample data is homogeneous, even if the debt to asset ratio during the pandemic had a minimum value of 0.00 achieved by PT. PyridamFarma and a maximum value of 0.86. The aforementioned figures show that, on average, DAR values for pharmaceutical companies have increased during the pandemic. This shows that the company is more risky and has a significant portion of its total assets financed by debt than it did before the pandemic, when the DAR value was lower.

The debt to equity ratio prior to the pandemic exhibited a minimum value of 0.07 obtained by PT. SidoMuncul, a maximum value of 4.72 obtained by PT. Millennium, and an average value of 1.0096 that is less than the standard deviation value of 1.42028, indicating heterogeneity in the sample data. Since the average value of 1.2554 is less than the standard deviation value of 1.63513 and the debt to equity ratio during the pandemic had a minimum value of 0.01 acquired by PT. PyridamFarma and a maximum value of 5.94 obtained by PT. PyridamFarma, the sample data is heterogeneous.The aforementioned figures show that, on average, the value of DER for pharmaceutical companies has increased during the pandemic. This shows that the company relies more on debt funding than it does on its own capital and has an effect on the financial stability of the company because interest and debt payment obligations are higher than before the pandemic, when the DER value was lower.

Prior to the pandemic, total asset turnover showed a minimum value of 0.13, obtained by the company PT. Merck Indonesia, a maximum value of 2.53, obtained by the company PT. Millennium, and an average value of 0.8188 that is higher than the standard deviation value of 0.51135, indicating that the sample data is homogeneous. The company PT. PyridamFarma obtained the minimum value for total asset turnover during the pandemic, 0.17, while the company PT. Merck Indonesia obtained the maximum value, 2.90, and the average value of 0.7876 is higher than the standard deviation value of 0.56408, indicating that the sample data is homogeneous.

The above values on average indicate that there has been a decline in the ability of pharmaceutical companies during the pandemic to generate lower income from their assets or companies to add assets without being accompanied by an appropriate increase in income during the pandemic and conditions before the pandemic were better.

Before the pandemic, working capital turnover showed a minimum value of 0.37 obtained by PT. SidoMuncul, a maximum value of 18.91 obtained by the company PT. Millennium, and an average value of 3.0431 which is less than the standard deviation value of 3.71843 and indicates that the sample data is heterogeneous. PT. PyridamFarma's working capital turnover during the pandemic had a minimum value of 0.30 and a maximum value of 23.40, and the average value of 3.4028 is less than the standard deviation value of 5.12831, indicating that the sample data is heterogeneous. The average figures above show an increase, which shows that businesses are employing working capital to create profits more effectively during the pandemic than they were under pre-pandemic conditions.

The average value of 343069.6742 is less than the standard deviation value of 805929.29230, indicating that the sample data is heterogeneous. The price to book value prior to the pandemic showed a minimum value of 0.50 obtained by PT. Millennium, a maximum value of 3098175.45 obtained by PT. SidoMuncul, and a range of values between 0.50 and 0.50. The sample data is heterogeneous because the minimum value during the pandemic was obtained by the company PT. Millennium, the maximum value was obtained by the company PT. SidoMuncul, and the average value is less than the standard deviation value (which is 2674076.42504).The values above on average indicate that there has been a decline, which indicates that there has been a change in market perception of the pharmaceutical sector during the pandemic, due to lower profit expectations or uncertainties in the industry or economy. However, a decline in share price and PBV could also create opportunities for investors seeking stocks that are currently undervalued or anticipating a future recovery in performance.

The price earnings ratio prior to the pandemic showed a minimum value of 5.82 obtained by PT. Millennium, a maximum value of 284.29 obtained by PT. Merck Indonesia, and an average value of 37.6300 that is less than the standard deviation value of 42.31530, indicating that the sample data is heterogeneous. The price earnings ratio for the company PT. PyridamFarma, meanwhile, reached a minimum value of 1.68 during the pandemic and a maximum value of 214.59; the average value of 36.8507 is higher than the standard deviation value of 35.84640, indicating that the sample data is homogeneous. The values above, on average, show a decline, which suggests that there has been a change in the market's perception of the pharmaceutical sector during the pandemic. This change is likely the result of lower profit estimates or industry or economic uncertainty, which makes investors less willing to pay for each rupiah of profit, resulting in a decrease in PER. A decrease in PER, however, might also present possibilities for investors searching for shares that may be inexpensive or hoping for a future performance improvement.

4.2 Normality test

The normality test is used in this research to determine whether the variables used are normally distributed or not, in order to determine the next testing stage. Following are the results and analysis:

Table 4
Normality test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CR Before Pandemic	.156	72	.000	.866	72	.000
CR During Pandemic	.094	72	.194	.949	72	.006
QR Before Pandemic	.189	72	.000	.821	72	.000
QR During Pandemic	.124	72	.008	.924	72	.000
ROA Before Pandemic	.252	72	.000	.503	72	.000
ROA During Pandemic	.136	72	.002	.890	72	.000
NPM Before Pandemic	.277	72	.000	.385	72	.000
NPM During Pandemic	.168	72	.000	.916	72	.000
DAR Before Pandemic	.223	72	.000	.840	72	.000
DAR During Pandemic	.259	72	.000	.821	72	.000
DER Before Pandemic	.400	72	.000	.604	72	.000
DER During Pandemic	.394	72	.000	.671	72	.000
TATO Before Pandemic	.113	72	.023	.902	72	.000
TATO During Pandemic	.151	72	.000	.825	72	.000
WCT Before Pandemic	.281	72	.000	.628	72	.000
WCT During Pandemic	.372	72	.000	.576	72	.000
PBV Before Pandemic	.495	72	.000	.481	72	.000
PBV During Pandemic	.496	72	.000	.470	72	.000
PER Before Pandemic	.226	72	.000	.646	72	.000
PER During Pandemic	.219	72	.000	.675	72	.000

Source: Processed data, 2023

The significance value of the Shapiro-Wilk normality test for the variables current ratio, quick ratio, return on assets, net profit margin, debt to asset ratio, debt to equity ratio, total asset turnover, working capital turnover, price to book value, and the price earning ratio before and during the pandemic was less than 0.05 based on the aforementioned table. The Wilcoxon Signed Rank Test was used as an alternative test because the data was not normally distributed.

4.3 Difference Test

A different test was carried out in this research to find out whether there were differences in financial performance and market performance before and during the pandemic in pharmaceutical companies on the Indonesian Stock Exchange. Below are the results and analysis:

Table 5
Ranks

		N	Mean Rank	Sum of Ranks
CR During Pandemic - CR Before Pandemic	Negative Ranks	41[a]	33.57	1376.50
	Positive Ranks	30[b]	39.32	1179.50
	Ties	1[c]		
	Total	72		
QR During Pandemic - QR Before Pandemic	Negative Ranks	46[d]	32.66	1502.50
	Positive Ranks	26[e]	43.29	1125.50
	Ties	0[f]		
	Total	72		
ROA During Pandemic - ROA Before Pandemic	Negative Ranks	36[g]	32.04	1153.50
	Positive Ranks	36[h]	40.96	1474.50
	Ties	0[i]		
	Total	72		
NPM During Pandemic - NPM Before Pandemic	Negative Ranks	19[j]	23.13	439.50
	Positive Ranks	39[k]	32.60	1271.50
	Ties	14[l]		
	Total	72		
DAR During Pandemic - DAR Before Pandemic	Negative Ranks	26[m]	30.94	804.50
	Positive Ranks	42[n]	36.70	1541.50
	Ties	4[o]		
	Total	72		
DER During Pandemic - DER Before Pandemic	Negative Ranks	27[p]	33.35	900.50
	Positive Ranks	43[q]	36.85	1584.50
	Ties	2[r]		
	Total	72		
TATO During Pandemic - TATO Before Pandemic	Negative Ranks	44[s]	33.95	1494.00
	Positive Ranks	24[t]	35.50	852.00
	Ties	4[u]		
	Total	72		
WCT During Pandemic - WCT Before Pandemic	Negative Ranks	41[v]	33.68	1381.00
	Positive Ranks	30[w]	39.17	1175.00
	Ties	1[x]		
	Total	72		
PBV During Pandemic - PBV Before Pandemic	Negative Ranks	30[y]	34.83	1045.00
	Positive Ranks	42[z]	37.69	1583.00
	Ties	0[aa]		
	Total	72		
PER During Pandemic - PER Before Pandemic	Negative Ranks	39[ab]	34.21	1334.00
	Positive Ranks	33[ac]	39.21	1294.00
	Ties	0[ad]		
	Total	72		

Source: Processed data, 2023

a. Current ratio

The table above shows that there were 41 current ratio data during the pandemic whose value is smaller than before the pandemic, 30 current ratio data during the pandemic whose value was greater than before the pandemic, and 1

data showing the current ratio value before and during the pandemic was similar.

b. Quick ratio
The table above shows that there are 46 quick ratio data during the pandemic whose value was smaller than before the pandemic, 26 quick ratio data during the pandemic whose value was greater than before the pandemic, and 0 data showing similar quick ratio values before and during the pandemic.

c. Return on assets
The table above shows that there were 36 data on return on assets during the pandemic whose value is smaller than before the pandemic, 36 data on return on assets during the pandemic whose value was greater than before the pandemic, and 0 data which shows the value of return on assets before and during the pandemic was similar..

d. Net profit margin
The table above shows that there were 19 net profit margin data during the pandemic whose value was smaller than before the pandemic, 39 net profit margin data during the pandemic whose value was greater than before the pandemic, and 14 data that show the net profit margin value before and during the pandemic was similar.

e. Debt to asset ratio
The table above shows that there were 26 debt to asset ratio data during the pandemic whose value was smaller than before the pandemic, 42 debt to asset ratio data during the pandemic whose value was greater than before the pandemic, and 4 data showing the value of the debt to asset ratio before and during the pandemic was similar.

f. Debt to equity ratio
The table above shows that there were 27 debt to equity ratio data during the pandemic whose value was smaller than before the pandemic, 43 data debt to equity ratio during the pandemic whose value was greater than before the pandemic, and 2 data showing the value of the debt to equity ratio before and during the pandemic was similar.

g. Total asset turnover
The table above shows that there were 44 total asset turnover data during the pandemic whose value was smaller than before the pandemic, 24 total asset turnover data during the pandemic whose value was greater than before the pandemic, and 4 data showing the total asset turnover value before and during the pandemic was similar.

h. Working capital turnover
The table above shows that there were 41 data on working capital turnover during the pandemic whose value was smaller than before the pandemic, 30 data on working capital turnover during the pandemic whose value was greater than before the pandemic, and 1 data which shows the value of working capital turnover before and during the pandemic was similar.

i. Price to book value
The table above shows that there are 30 data on price to book value during the pandemic whose value is smaller than before the pandemic, 42 data on price to book value during the pandemic whose value is greater than before the pandemic, and 0 data showing the value of price to book value before and during the same pandemic.

j. Price earnings ratio
The table above shows that there are 39 price earning ratio data during the pandemic whose value is smaller than before the pandemic, 33 price earning ratio data during the pandemic whose value is greater than before the pandemic, and 0 data showing the price earning ratio values before and during the pandemic are the same .

Test Statistics[a]

	CR DURING PANDEMIC - CR BEFORE PANDEMIC	QR DURING PANDEMIC - QR BEFORE PANDEMIC	ROA DURING PANDEMIC - ROA BEFORE PANDEMIC	NPM DURING PANDEMIC - NPM BEFORE PANDEMIC	DAR DURING PANDEMIC - DAR BEFORE PANDEMIC	DER DURING PANDEMIC - DER BEFORE PANDEMIC	TATO DURING PANDEMIC - TATO BEFORE PANDEMIC	WCT DURING PANDEMIC - WCT BEFORE PANDEMIC	PBV DURING PANDEMIC - PBV BEFORE PANDEMIC	PER DURING PANDEMIC - PER BEFORE PANDEMIC
Z	-.564[b]	-1.058[b]	-.901[c]	-3.235[c]	-2.259[c]	-2.003[c]	-1.962[b]	-.590[b]	-1.510[c]	-.112[b]
Asymp. Sig. (2-tailed)	.572	.290	.368	.001	.024	.045	.050	.555	.131	.911

Source: Processed data, 2023

1. **Liquidity ratio**

a. Current ratio

Based on the results of the Wilcoxon Signed Rank Test calculation, the Z value obtained is -0.564 with a p value (Asymp. Sig 2 tailed) of 0.572 which is more than the research critical limit of 0.05 so that the hypothesis decision is to reject H1 or which means there is no significant difference between liquidity (current ratio) before and during the pandemic.

b. Quick ratio

Based on the results of the Wilcoxon Signed Rank Test calculation, the Z value obtained is -1.058 with a p value (Asymp. Sig 2 tailed) of 0.290 which is more than the research critical limit of 0.05 so that the hypothesis decision is to reject H1 or which means there is no meaningful difference between liquidity (quick ratio) before and during the pandemic.

2. **Profitability ratio**

a. Return on asset

Based on the results of the Wilcoxon Signed Rank Test calculation, the Z value obtained is -0.901 with a p value (Asymp. Sig 2 tailed) of 0.368 which is more than the research critical limit of 0.05 so the hypothesis decision is to reject H2 or which means there is no significant difference between profitability (return on assets) before and during the pandemic.

b. Net profit margin

Based on the results of the Wilcoxon Signed Rank Test calculation, the Z value obtained was -3.235 with a p value (Asymp. Sig 2 tailed) of 0.001 which was less than the research critical limit of 0.05 that the hypothesis decision is to accept H2 or which means there was a difference significant difference between profitability (net profit margin) before and during the pandemic.

3. **Leverage Ratio**

a. Debt to asset ratio

Based on the results of the Wilcoxon Signed Rank Test calculation, the Z value obtained was -2.259 with a p value (Asymp. Sig 2 tailed) of 0.024 which is less than the research critical limit of 0.05 so that the hypothesis decision was to accept H3 or which means there was a difference significant difference between leverage (debt to asset ratio) before and during the pandemic.

b. Debt to equity ratio

The hypothesis decision is to accept H3, which states that there was a significant difference between leverage (debt to equity ratio) before and during the pandemic. Based on the Wilcoxon Signed Rank Test calculation results, the Z value obtained was -2.003 with a p value (Asymp. Sig 2 tailed) of 0.045, which was less than the research critical limit of 0.05.

4. **Activity ratio**

a. Total asset turnover

The hypothesis decision is to accept H4 or that there is a meaningful difference between the activity ratio (total asset turnover) before and during the pandemic based on the Wilcoxon Signed Rank Test calculation results. The Z value obtained is -1,962 with a p value (Asymp. Sig. 2 tailed) of 0.050, which was the same as the research critical limit of 0.05.

b. Working capital turnover

The hypothesis decision is to reject H4 because there was no significant difference between the activity ratio (working capital turnover) before and during the pandemic, according to the Wilcoxon Signed Rank Test calculation results. The Z value obtained is -0.590 with a p value (Asymp. Sig. 2 tailed) of 0.555, which is more than the research critical limit of 0.05.

5. **Market performance (Price to book value)**

Based on the results of the Wilcoxon Signed Rank Test calculation, the Z value obtained is -1.510 with a p value (Asymp. Sig 2 tailed) of 0.131 which is more than the research critical limit of 0.05 so that the hypothesis decision is to reject H5 or which means there is no significant difference between price to book value before and during the pandemic.

6. **Market performance (Price earnings ratio)**

The hypothesis decision is to reject H6 because there is no statistically significant difference between the price

earnings ratio before and during the pandemic, according to the Wilcoxon Signed Rank Test calculation results. The Z value obtained was -0.112 with a p value (Asymp. Sig. 2 tailed) of 0.911, which is higher than the research critical limit of 0.05.

4.4 Discussion

Based on the aforementioned testing, it is evident that there was no difference between the liquidity ratio indicated by the current ratio and quick ratio before and after the pandemic. This demonstrates that pharmaceutical businesses are able to support a constant current ratio by managing the economic shifts brought on by the pandemic with rather stable financial situations. Although the statistical analysis indicates that pharmaceutical companies' capacity to meet their current obligations has, on average, declined during the pandemic, this has little bearing on the industry's financial performance and sets it apart from pre-pandemic circumstances.The findings of this study are consistent with those of Setiyani, et al.'s research from 2022, which found that pharmaceutical companies' liquidity ratios did not significantly change before or during the pandemic. It differs from the study by Dikri et al. (2022), though, which found that pharmaceutical corporations performed financially better during the epidemic than they had before.

According to the profitability ratio indicated by return on assets, there was little to no variation in return on assets before and after the pandemic. The return on assets of pharmaceutical companies, however, is claimed to have decreased more generally. Additionally, the profitability ratio represented by the net profit margin reveals a sizable difference between the net profit margin prior to the epidemic and the net profit margin during the pandemic. It is also claimed that, generally speaking, net profit margins rose throughout the pandemic.This demonstrates that, despite the inefficient use of assets to produce cash during the pandemic, pharmaceutical companies generated very high profits for each unit of revenue. The pharmaceutical industry's enthusiasm for introducing treatments that can prevent the spread of the Covid virus, which could have a beneficial impact on profit growth in the future, is the cause of the low ROA value.

Both the debt to asset ratio and the debt to equity ratio, which are two measures of leverage, were reported to have increased during the pandemic but were different before the epidemic. This demonstrates that throughout the pandemic, pharmaceutical companies increased their debt levels at a certain ratio to their equity or assets. In order to innovate in the presentation of Covid-related products, pharmaceutical companies may take out loans to raise more finances during challenging periods like a pandemic. This can assist the company in obtaining the liquidity it needs, but it also increases the company's future interest and debt repayment liabilities. These findings are consistent with study by Dikri, et al. (2022), which found that the leverage ratios before and after the pandemic were different. There was no discernible difference between the leverage ratios of pharmaceutical corporations before and after the pandemic, according to study by Athalla, et al. published in 2022.

The activity ratio, which is represented by total asset turnover, demonstrates that there is a considerable difference between total asset turnover before the pandemic and total asset turnover during the epidemic, with this ratio being reported to drop throughout the pandemic. The decline in the total asset turnover ratio shows that pharmaceutical businesses' revenue has declined dramatically when compared to the assets they control. This might happen as a result of the pandemic's effect on the demand for pharmaceutical items, problems with the supply, or adjustments in consumer behavior. These findings support Ediningsih and Satmoko's research from 2022, which found that the activity ratio varied before and during the pandemic. There was no discernible difference between the activity ratios in pharmaceutical companies before and during the pandemic, according to research by Athallah, et al. published in 2022. Additionally, the working capital turnover activity ratio demonstrates that there is no appreciable change between working capital turnover before and after the epidemic. Furthermore, the activity ratio described by working capital turnover shows that there is no significant difference between working capital turnover before the pandemic and working capital turnover during the pandemic. However, on average, this ratio is stated to have increased during the pandemic, which shows that pharmaceutical companies are able to manage their working capital efficiently during the pandemic and the company can generate income from each unit of working capital invested, but the value is not significantly different from the situation before pandemic and pharmaceutical companies are still able to maintain a balance between current assets and current liabilities during changes in economic conditions caused by the pandemic.

Market performance described by price to book value shows that there was no significant difference between price to book value before the pandemic and price to book value during the pandemic. This shows that the company's book value was relatively stable and share prices have not experienced significant changes during that period. This could indicate that the market has a consistent perception of firm value. This result is in line with research by Retnosari, et al (2022) that there was no significant difference in price to book value before and during the pandemic. However, this is different from Hamid's research (2022) stating that there was a significant difference in price to book value before and during Covid-19, where the PBV value was higher during the pandemic.

Furthermore, market performance as described by the price earning ratio shows that there was no significant difference between the price earning ratio before the pandemic and the price earning ratio during the pandemic. This could indicate that investors have a consistent perception of the company's share value, both before and during the pandemic and reflects investor confidence in the stable performance of pharmaceutical companies and not significantly affected by changes in economic conditions. These results are in line with the research of Retnosari, et al (2022) which stated that there was no significant difference in the price earning ratio before and during the pandemic. However, it is different from the research of Soko and Harjanti (2022), which stated that there was a significant difference in the price earning ratio before and during Covid-19, where the PER value was higher during the pandemic.

Conclusion

Based on the results of the analysis above:

1. The liquidity ratios of pharmaceutical companies as illustrated by the current ratio and quick ratio were not significantly different before and during the pandemic, however, both showed a decrease on average.
2. The profitability ratios of pharmaceutical companies as illustrated by their return on assets were not significantly different before and during the pandemic, but on average they have decreased. Meanwhile, the profitability ratio as described by the net profit margin was significantly different before and during the pandemic, where the value experienced an increase.
3. The leverage ratios of pharmaceutical companies, as illustrated by the debt to asset ratio and debt to equity ratio, were significantly different before and during the pandemic, where their values increased.
4. The activity ratio of pharmaceutical companies as described by total asset turnover was significantly different before and during the pandemic, where the value decreased. Meanwhile, the activity ratio as described by working capital turnover was not significantly different before and during the pandemic, however, on average, the value increased.

5. Market performance as described by price to book value and price earning ratio was not significantly different before and during the pandemic, but on average these two ratios showed a decline during the pandemic.

References

[1.] Aliah, N. A. N., &Dessyana, D. (2022). AnalisisProfitabilitas Perusahaan FarmasiSebelum Dan Pada SaatPandemiCovid 19: Profitabilitas. JurnalManajemen, Akuntansi, Ekonomi, 1(1), 1-8.

[2.] Dikri, P., Putra, P. P., Hidayati, R. N. F., &Irawan, F. (2022). AnalisisKinerjaKeuangan Perusahaan FarmasiSebelum dan Selama Masa Pandemi Covid-19. Akuntansiku, 1(4), 269-280.

[3.] Ediningsih, S. I., &Satmoko, A. (2022). PerbedaanKinerjaKeuanganSebelum dan SaatPandemi Covid-19 pada Perusahaan Makanan dan Minuman di Bursa Efek Indonesia. Dialektika: JurnalEkonomi dan IlmuSosial, 7(1), 44-54.

[4.] Gunawan, F. H. (2021). PerbandinganKinerjaKeuangan Perusahaan SektorMakanan Dan MinumanSebelum Covid-19 Dan Pada Masa Covid-19. Media Akuntansi Dan Perpajakan Indonesia, 3(1), 19-36.

[5.] Hasan, A., Mas, N., &Sopanah, A. (2022). KinerjaKeuanganSebelum dan Masa Pandemi Covid-19 Pada Perusahaan BUMN. Owner: Riset dan JurnalAkuntansi, 6(4), 3836-3847.

[6.] Hamid, F. P., &Muchtar, M. (2022). AnalisisKinerjaKeuangan dan KinerjaSaham Perusahaan SektorPerbankanSebelum dan SaatPandemi Covid-19. JurnalManajemen STIE Muhammadiyah Palopo, 8(2), 217-234.

[7.] Jauzaa, A., &Hirawati, H. (2021). Financial performance of telecommunication sector companies before and during the Covid-19 pandemic. Airlangga Journal of Innovation Management, 2(2), 131.

[8.] Oktavian, D. D. O. D. D., Probowulan, D. P. D., &Aspirandi, R. M. A. R. M. (2023). Financial Performance Dan Financial Distress Perusahaan TransportasiSebelum Dan SelamaPandemi Covid-19. JRAK (JurnalRisetAkuntansi dan Bisnis), 9(1), 12-21.

[9.] Sofiatin, D. A. (2020). PengaruhProfitabilitas, Leverage, Likuiditas, Ukuran Perusahaan, KebijakanDevidenTerhadap Nilai Perusahaan (StudiEmpiris Pada Perusahaan ManufakturSubsektorIndustri Dan Kimia Yang Terdaftar Di Bei Periode 2014-2018). Prisma (Platform RisetMahasiswaAkuntansi), 01, 47-57.

[10.] Soko, F. A., &Harjanti, M. F. (2022). PerbedaanKinerja Perusahaan PerbankanSebelum dan SaatPandemi Covid-19. In Proceeding of National Conference on Accounting & Finance (pp. 306-312).

[11.] Widyawati, N. L., &Ningtyas, M. N. (2022). Analysis of Financial Performance and Share Performance Before and After The Covid-19 Pandemic On The Idx. JurnalIlmiahBisnis Dan Ekonomi Asia, 16(2), 292-307.

Book

[12.] Brigham, E. F. dan J.F. Houston. 2019. Dasar-dasarManajemenKeuangan. EdisiEmpatBelas. BukuDua. SalembaEmpat. Jakarta.

[13.] Hanafi, Mamduh M. dan Abdul Halim, 2014, AnalisisLaporanKeuangan., Edisitujuh., UPP AMP YKPN, Yogyakarta.

[14.] Kasmir. 2018. AnalisisLaporanKeuangan. EdisiPertamaCetakanKesebelas. Jakarta: Raja GrafindoPersada.

[15.] Prihadi, Toto. 2020. AnalisisLaporanKeuangan. 2nd ed. Jakarta: PT GramediaPustaka Utama.