

Short Research Article

Comparison of Fundamental Performance and Market Performance of the Property, Real Estate, and Construction Sector on the Impact of Covid-19

ABSTRACT

This study examines the impact of Covid-19 on the company's fundamental and market performance. The population in this study are property, real estate, and construction sector companies listed on the Indonesia Stock Exchange for the period 2018 and 2020. The sample selection was carried out by purposive sampling and obtained by as many as 53 companies. The analysis was carried out using the Wilcoxon Sign Test technique. The results show differences in actual performance as measured by profitability using the Return on Assets (ROA) ratio, and there is no difference in market performance as measured by Tobin's Q.

Keywords: Fundamental performance; market performance; ROA; Tobin's Q; Covid-19

1. INTRODUCTION

Covid-19 has spread so fast that the world economy is in crisis, including Indonesia. The government is taking countermeasures by implementing the Policy for the Enforcement of Community Activity Restrictions (PPKM) to break the Covid-19 chain. The implementation of this policy limits community mobility and impacts every type of business or sector, including the construction sector.

Based on Gross Domestic Growth (GDP) data of [which year?](#), the construction sector contracted 5.7 percent compared to the 2020 quarter of 4.5 percent. The decline in cement procurement in the fourth quarter of 2020 in Indonesia has caused the construction sector to experience a decline in GDP. Construction materials imported from outside also experienced a decline [1].

The Covid-19 pandemic is an [extraordinary](#) phenomenon that can be a test for companies to show how responsive [they](#) company is in making decisions and maneuvering in adjusting to the situation. Companies that are not able to survive or are not able to adapt have poor performance. It can be done by analyzing the actual performance and market performance to analyze whether a company has good or bad performance.

The market performance of a company can be measured using the company's value or the stock market price. [Tobin's Q](#) can calculate the value of the company. The greater the value of Tobin's Q, the greater the level of market confidence in the company's success in the

Comment [JO1]: What are you basing the phrase extraordinary on?

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future. While actual performance can be measured using accounting data such as analysis of financial ratios [2]. Management often measures the company's financial performance with profitability ratios [3]. Profitability measures how efficiently the company's management uses all assets to generate profits.

2. LITERATURE REVIEW AND HYPOTHESIS

Stakeholders are individuals or community groups that influence each other and are also influenced by the achievement of organizational goals [4]. Internal and external stakeholders are essential to the company's sustainability [5]. Internal stakeholders see the company's performance based on the financial statements to make the right decisions.

The existence of differences in the company's fundamental performance before and during the Covid-19 period is supported by research by Devi et al. (2020), which stated that there was a decrease in the profitability ratio in public companies during the Covid-19 pandemic [6]. Esomar&Christianty [7] stated differences in ROE of the hotel, restaurant, and tourism companies before and during the Covid-19 pandemic. Siswati [5] stated that the Covid-19 pandemic positively impacted technology companies. The following hypothesis was formed based on previous theories and research regarding differences in actual performance before and during the Covid-19 period.

H1: There are fundamental differences in performance as measured by the profitability of the property, real estate, and construction companies listed on the Indonesia Stock Exchange before and during the Covid-19 pandemic.

The existence of differences in the market performance of companies before and during the Covid-19 pandemic is supported by Siswati's research [5] which states that there is a significant difference between stock prices in transportation sub-sector companies before and after the announcement of the first Covid-19 case. Bakhtiar et al. [8] stated that there were significant differences in stock prices and transaction volumes of communication companies listed on the IDX before and after the announcement of the Covid-19 case entering Indonesia. The following hypothesis was formed based on previous theory and research regarding differences in market performance before and during the Covid-19 pandemic.

H2: There are differences in market performance measured by Tobin's Q property, real estate, and construction sector companies listed on the Indonesia Stock Exchange before and during the Covid-19 pandemic.

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Image 1. Research Framework

Source: developed in this study (2022)

3. METHODOLOGY

This quantitative research uses secondary data from the annual reports of property, real estate, and construction sector companies listed on the Indonesia Stock Exchange in 2018

and 2020. The report can be accessed through the official website of the company concerned. The sampling technique used the purposive sampling technique. Samples taken from this study were 53 companies.

According to Devi et al., profitability is a ratio to measure the company's ability to generate profits or measure company efficiency. As measured by Return on Assets (ROA), Profitability uses the following formula.

$$\text{ROA} = \text{net profit after tax} / \text{total assets}$$

The opinion of Effendi [9] is that market performance is measured by the value of Tobin's Q resulting from the sum of the market value of shares and the market value of debt compared to the value of all capital placed in production assets. Tobin's Q can be calculated using the following formula.

$$Q = (\text{MVS} + D) / \text{TA}$$

Information:

MVS = market value of shares (share price x number of shares outstanding)

D = debt (debt)

TA = total assets

The descriptive statistical analysis test started the process of data analysis. Then the normality test was carried out. The normality test was conducted to determine whether the data were normally distributed. The data is usually distributed if the significance value is more than 0.05. If the significance value is less than 0.05, then the data is not normally distributed. If the data is normally distributed, then the difference test conducted in this study uses a parametric test, namely the paired sample t-test. A nonparametric test is performed using the Wilcoxon sign test if the data is not normally distributed.

The paired mean difference test aims to determine whether there is a difference in the mean between the two paired groups [10]. In this study, the paired mean difference test was used to examine differences in company performance before the Covid-19 pandemic and during the Covid-19 pandemic.

4. RESULT AND DISCUSSION

62 property, real estate, and construction companies are listed on the Indonesia Stock Exchange. However, only 53 companies met the sample criteria because 6 companies did not publish annual reports, and 3 companies did not provide the required data in the published annual reports.

Table 1. Sample Criteria

| Number | Criteria | Total |
|--------|---|-------|
| 1 | Property, real estate, and construction companies consistently listed during the 2018-2020 period | 62 |
| 2 | Companies that do not publish annual reports | 6 |
| 3 | The required data is not available in the published annual report | 3 |
| | Total sample company | 53 |
| | Total research observations (2 years) | 106 |

Source: Research Data, 2022

Table 2 presents descriptive statistics of ROA and Tobin's Q before and during the Covid-19 period in Indonesia. From Table 1, the average ROA before the pandemic was 3.27, with the lowest and highest ROA of -9, respectively at PT. Metro Realty Tbk and 21.98 at PT. Lippo CikarangTbk. While the average ROA during the pandemic was -2.33, with the lowest ROA

of -43.76 at PT. IndonusaTbk's assets and the highest ROA of 19.97 occurred at PT. Puradelta Lestari Tbk.

The average Tobin's Q before the pandemic was 1.36, with the lowest and highest Tobin's Q at .19 at PT. City Retail Developments Tbk and 8.62 at PT. TotalindoEkaPersada. While the average Tobin's Q during the pandemic was 1.26, the lowest Tobin's Q of 0.22 occurred at PT. Greenwood Sejahtera Tbk and Tobin's Q, the highest of 10 occurred at MahaProperti Indonesia.

Table 2. Descriptive Statistic

| | N | Minimum | Maximum | Mean | Std. Deviation |
|----------|----|---------|---------|-------|----------------|
| ROA 2018 | 53 | -9 | 21.98 | 3.27 | 5.07 |
| ROA 2020 | 53 | -43.76 | 19.97 | -2.33 | 10.04 |
| Q 2018 | 53 | .19 | 8.62 | 1.36 | 1.42 |
| Q 2020 | 53 | .22 | 10 | 1.26 | 1.05 |

Source: Research Data, 2022

Table 3. Normality Test

| | Kolmogorov-Smirnov | | | Shapiro-Wilk | | |
|-----------------|--------------------|----|------|--------------|----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| ROA 2018 | .14 | 53 | .01 | .91 | 53 | .00 |
| ROA 2020 | .23 | 53 | .00 | .73 | 53 | .00 |
| Q 2018 | .23 | 53 | .00 | .64 | 53 | .00 |
| Q 2020 | .27 | 53 | .00 | .49 | 53 | .00 |

Source: Research Data, 2022

Table 3 shows that the significance of ROA and Tobin's Q before and during the Covid-19 period did not exceed 0.05. This shows that the data is not normally distributed. Furthermore, hypothesis testing was carried out with the Wilcoxon sign test to determine whether there was a difference between ROA and Tobin's Q before and during the Covid-19 pandemic.

Table 4. Wilcoxon Sign Test

| | ROA 2018 & 2020 | Q 2018 & 2020 |
|------------------------|-----------------|---------------|
| Z | -5.01 | -.80 |
| Asymp. Sig. (2-tailed) | .00 | .043 |

Source: Research Data, 2022

Table 4 shows that the significance value of ROA is 0.000, which is less than 0.05, meaning that the first hypothesis is accepted. The first hypothesis's acceptance indicates significant differences in ROA in property, real estate, and construction sector companies before and during the Covid-19 pandemic. The descriptive statistics show a decrease in the average net income of the company's total assets. The economic crisis during the Covid-19 pandemic has limited public demand in the property sector. People choose to use their money to meet basic needs. The results of this study are supported by research from Santoso [11], Devi, et al. [6], and Lowardi& Abdi [12], which stated that there were significant differences in company profitability before and during the Covid-19 pandemic.

The significance value of Tobin's Q is 0.426, which is more than 0.05, meaning the second hypothesis is rejected. This shows no significant difference in Tobin's Q in the property, real estate, and construction sector companies listed on the Indonesia Stock Exchange before and during the Covid-19 period. This means that the value of the property, real estate, and construction companies is not affected by Covid-19. Investors still have confidence in the

company to generate profits in the future. The results of this study are supported by the research of Manurung&Subekti [13].

5. CONCLUSION

Based on the results of the research that has been carried out, it can be concluded that there are differences in actual performance as measured by the profitability of the property, real estate, and construction sector companies listed on the Indonesia Stock Exchange before and during the Covid-19 pandemic. The company's profitability is measured by the Return on Assets (ROA) ratio. This indicates that the economic crisis during the Covid-19 pandemic caused public demand in the property, real estate and construction sectors to be limited and they chose to use their money to meet basic needs. The Covid-19 pandemic has not had an **impact** on the market performance of the property, real estate and construction sector companies. This can be seen from the absence of differences in market performance as measured using Tobin's Q property, real estate, and construction sector companies listed on the Indonesia Stock Exchange before and during the Covid-19 pandemic.

This research is limited to property, real estate, and construction sector companies. Future researchers are expected to be able to develop the population of all companies listed on the Indonesia Stock Exchange. By testing all sectors, the results can be a reference for investors in making decisions if one day there will be an economic crisis similar to Covid-19.

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Comment [JO4]: Usually when using the term impact it applies both positive and negative effects. Please make it clear whether the impact is positive or negative.
Also, the writer should add their own observation based on findings of their research in relation to the topic at hand

Comment [JO5]: It is not clear what citation style has been applied as some have date of retrieval/access while others do not.

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