

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

Rika Meiliana Tohar ^{a*}, Susi ^a and Tri Joko Prasetyo ^a

^a Faculty of Economics and Business, University of Lampung, Indonesia.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2022/v22i2230705

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/90424>

Short Research Article

Received 23 June 2022
Accepted 13 August 2022
Published 18 August 2022

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

The spread of Covid-19 is 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.

*Corresponding author: E-mail: rikatohar@gmail.com;

Based on Gross Domestic Growth (GDP) data of 2020, the construction sector contracted by 5.7 percent in the fourth quarter of 2020 (YoY) compared to the 2020 third quarter by 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 a phenomenon that can be a test for companies to show how responsive the 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 [2].

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 which shows the performance of management in managing the assets of the company [3]. The greater the value of Tobin's Q, the greater the level of market confidence in the company's success in the future [4]. While actual performance can be measured using accounting data such as analysis of financial ratios [5]. Management often measures the company's financial performance with profitability ratios [6]. Profitability is a company measuring tool in generating profits using all company assets.

This study examines the impact of Covid-19 on company fundamentals and market performance of property, real estate and construction sector companies listed on the Indonesia Stock Exchange for the period 2018 and 2020. This research is divided into five parts, namely introduction, literature review and hypotheses, research methodology, results and discussion, conclusion.

2. LITERATURE REVIEW AND HYPOTHESES

Stakeholders are individuals or community groups that influence each other and are also influenced by the achievement of organizational

goals [7]. Internal and external stakeholders are essential to the company's sustainability [8]. 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. [9] which stated that there was a decrease in the profitability ratio in public companies during the Covid-19 pandemic. Esomar and Christianty [10] stated differences in ROE of the hotel, restaurant, and tourism companies before and during the Covid-19 pandemic. Siswati [8] 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 [8] 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. [11] 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.

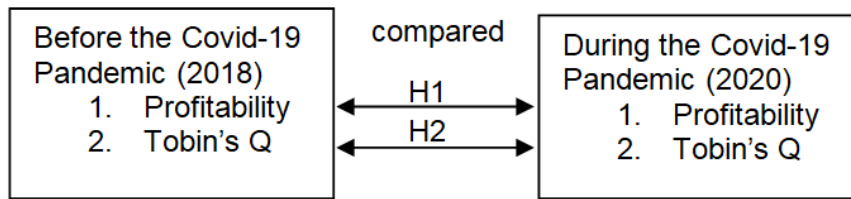


Fig. 1. Research framework
 Source: Developed in this study (2022)

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. [9], 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.

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

The opinion of Effendi [11] is that market performance is measured by the value of Tobin's Q resulting from the sum of the market capitalization 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.

$$Q = (MC + D) / TA$$

Where,

- MC = market capitalization (share price x number of shares outstanding)
- D = 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 [12]. 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. RESULTS 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 2, 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 Cikarang Tbk. While the average ROA during the pandemic was -2.33, with the lowest ROA of -43.76 at PT. Indonusa Tbk'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. Totalindo Eka Persada. 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 Maha Properti Indonesia.

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 shows that the statistical 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 [13], Devi, et al. [9], and Lowardi & Abdi [14], which stated that there were significant differences in company profitability before and during the Covid-19 pandemic.

The statistical significance value of Tobin's Q is 0.426, is more than 0.05, meaning the second hypothesis is rejected. This shows no statistically 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 [15].

Table 2. Descriptive statistic of ROA and Tobin's Q

	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 of ROA and Tobin's Q

	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 4. Wilcoxon sign test

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

Source: Research data, 2022

5. CONCLUSION

The conclusion from the results of this study is that there are differences in actual performance as measured by the profitability of property, real estate, and construction companies listed on the Indonesia Stock Exchange before and during the current period. 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 did not have a negative 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 that caused by the Covid-19 pandemic.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. National Development Planning Agency. Quarter IV 2020 Economic Development Report for Indonesia and the World. 2021;4(4). Accessed on 28 November 2021. Available:https://www.bappenas.go.id/files/5016/1759/6871/Laporan_Perkembangan_Ekonomi_Indonesia_dan_Dunia_Triwulan_IV_2020.pdf.pdf
2. Roosdiana R. The impact of the Covid-19 pandemic on the performance of property and real estate companies listed on the IDX. *Journal of IKRA-ITH Economics*. 2020;4(2):133–141.
3. Tjandrakirana R, Monika M. The influence of financial performance on company value on registered manufacturing companies listed on the indonesia stock exchange. *Sriwijaya Journal of Management and Business*. 2014;12(1):1-16.
4. Wufron W. Effect of company size on financial performance and its implications for company value in manufacturing companies listed on the indonesia stock exchange. *Journal of Economic Discourse*. 2017;16(3):140-154.
5. Sodikin S, Sahroni N. Analysis of financial performance and market performance before and after the acquisition (Case on the Acquisition of PT. Agung Podomoro Land Tbk.). 2016;2(11):81-90.
6. Priatna H. Company performance measurement with profitability ratios. *Scientific Journal of Accounting*. 2016; 7(2):44-53.
7. Freeman REE, McVea J. A stakeholder approach to strategic management. *SSRN Electronic Journal*; 2001. Available:<https://doi.org/10.2139/ssrn.263511>
8. Siswati A. Impact of the Covid-19 pandemic on financial performance (Case Study on Technology Companies Listed on the IDX). 2021;2(1).
9. Devi S, Warasniasih NMS, Masdiantini PR. The impact of COVID-19 pandemic on the financial performance of firms on the Indonesia stock exchange. *Journal of Economics, Business, & Accountancy Venture*. 2020;23(2). Available:<https://doi.org/10.14414/jebav.v23i2.2313>
10. Esomar MJF, Christianty R. The impact of the Covid-19 pandemic on the financial performance of service sector companies on the IDX. *JKBM (Journal of Business Concepts and Management)*. 2021; 7(2):227–233. Available:<https://doi.org/10.31289/jkbm.v7i2.5266>
11. Bakhtiar F, Farild M, Wahyudi W. The impact of Covid 19 on the comparison of share prices and transaction volume of shares of telecommunication companies listed on the IDX. *Journal of Iqtisaduna*. 2020;6(2):167–174.
12. Effendi M. Tobin's Q and Altman Z-Score as a measure of company performance. *Journal of Accounting and Business Management*. 2017;1.

13. Santoso B. Analysis of the effect of the Covid-19 pandemic on the sectoral financial performance of issuers on the indonesia stock exchange. *Journal of Management and Business Review*. 2021;18(2):1–17. Available:<https://doi.org/10.34149/jmbr.v18i2.268>
14. Lowardi R, Abdi M. The effect of the Covid-19 pandemic on the performance and financial condition of public companies in the property sector. *Journal of Managerial and Entrepreneurship*. 2020;3(2):463–470.
15. Manurung D, Subekti KV. The Effect of the Covid-19 pandemic on the performance of telecommunication stock prices listed on the Indonesia stock exchange. *Managerial Accounting Journal*. 2021;6(1):18–29. Available:<https://doi.org/10.52447/jam.v6i1.4591>

© 2022 Tohar et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/90424>