Analyzing the Impact of COVID-19 Pandemic on the Performance of Property Companies

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ABSTRACT

This research aimed to investigate variations in company performance before and after the onset of COVID-19 pandemic. The population consists of all companies engaged in property and real estate sector with possession of 53 Sharia shares. A representative sample of 45 companies was selected for 2018 to 2021 using a purposive sampling method to obtain a total sample of 90 data points before and after COVID-19. Subsequently, the data obtained were analyzed to determine the differences in financial performance indicators, such as profitability (NPM, ROE, and ROA), liquidity (cash ratio and current ratio), and solvency (DER and DAR). The results showed that there were significant variations between company financial performance before and after COVID-19. There were also differences in the indicators of profitability, liquidity, and solvency. In this context, net profit margin (NPM) ratio experienced a significant decline from 11.46% to -17.59% due to the pandemic. As measured by DER (debt-to-equity ratio) and DAR (debt to asset ratio), company solvency also showed significant differences. This research had authenticity or originality in examining differences in company performance before and after the pandemic in property and real estate sectors. A deeper understanding of the pandemic on corporate financial performance was reported, contributing to the academic literature in the area.

1. INTRODUCTION

Coronavirus disease (COVID-19) pandemic outbreak was discovered in Wuhan City, China, at the end of 2019. The virus has spread to other countries, namely Italy, Spain, France, the UK, and the USA, developing into a health crisis, and was declared a pandemic on March 11, 2020 by WHO. COVID-19 pandemic had a global impact on various fields, specifically health, economics, social, and education. Movement restrictions, lockdowns, and business closures also resulted in a global recession in the property sub-sector.

The industrialized world has the biggest challenge, which is the completion of a much-needed re-evaluation to ascertain the level of uncertainty regarding the impact on economic recovery [1]. Most countries have experienced a decline in gross domestic product due to social distancing policies and business units being closed, including schools and public facilities. The pandemic compelled the business world to implement mitigation strategies, prompting numerous government authorities to devise monetary, social, and aid package policies aimed at alleviating the hardships faced by businesses [2]. In the poverty and real estate sector, vulnerability is impacted, providing several different policies between countries. For instance, there is a relief for debt holders for three months in UK, as well as policies to maintain value and liquidity [3, 4].

The pandemic spread in Indonesia in early 2020, precisely on 2 March 2020, with the discovery of 2 infected people. The policy to overcome the outbreak is to carry out social distancing or large-scale social restrictions (PSBB). According to the data presented by Worldometer, there was an increase in daily instances of the spread until September 2020. During the period, the confirmed cases reached 29 million, resulting in 928 thousand fatalities. In July 2020, there were 218 thousand confirmed cases, leading to 8 thousand deaths. Based on the data, Indonesia is in 9th and 23rd positions in Asian and global ranking concerning confirmed cases. Even though the percentage of deaths has decreased in Indonesia since March 2020, the magnitude of cases is still the highest in the world. In September 2020, the average case of death reached 3.99% and 3.18% in Indonesia and on a global scale, respectively [5]. Meanwhile, various aspects of community life are greatly affected by the pandemic. Since the Indonesian government announced the first case, a policy has been taken to limit community activities to inhibit the transmission. Efforts to reduce the spread have significantly impacted social activities, triggering an increase in unemployment, resulting in a slowdown and sharp decline in financial growth performance. This unemployment reduces people's income and disrupts the level of consumption [6-8].

Indonesian Central Bureau of Statistics explained, "Indonesian economy in 2020 faced a decline from the previous year of 2.07% with GDP at current prices and per capita reaching RP 15,434.2 trillion and Rp 56.9 million,

respectively. According to BPS, growth and contraction occurred in property sector, transportation and warehousing, procurement of food and beverage facilities, company services, giant trade, and repair of two and four-wheeled vehicles. Conversely, positive growth occurred in the health services and social activities, information and communication, water supply, agriculture, forestry, and fisheries sectors." [9].

Concerning property sector, Bank Indonesia (BI) explained, "Property price index (IHPR) experienced a decrease in medium and large houses. This can be seen from sales growth in the first quarter of 2020, with a contraction of -43.19% (yoy), compared to the fourth quarter of 2019, which experienced growth of 1.19% (yoy). Large, medium, and small houses decreased by -13.99% (yoy), -50.63% (yoy), and -42.74% (yoy), respectively. Home sales growth was also reduced in the first to second quarters of 2020. In the first three months of 2020, home sales fell by 43.2% compared to 2019 in the same period. In the second quarter of 2020, a decrease was recorded with a total of -25.6% and the figure was below 0%" [10], as shown in Figure 1.
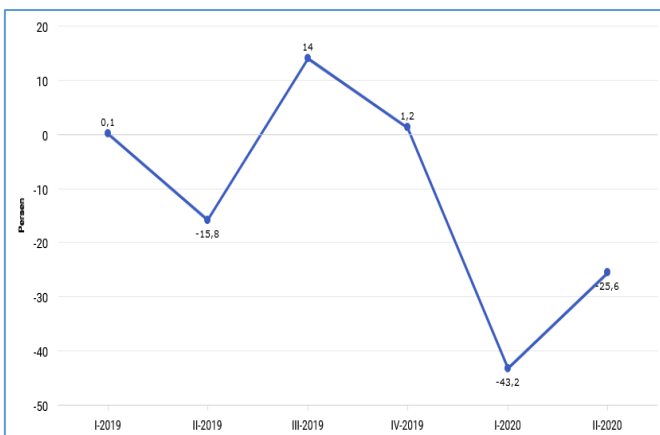
Figure 1. Home sales growth by quarter (yoy)

The condition of the spread certainly has an impact on the decline in profit in various businesses, reducing company performance. Property and real estate companies listed on the IDX are used as objects in this research, where the ongoing pandemic has decreased business in the sector. Therefore, the financial performance in the first semester of 2020 decreased compared to the previous period. The most significant decline occurred at PT Alam Sutera Realty Tbk (ASRI), which recorded a net loss of Rp 512.5 billion with a net profit of Rp 158.8 billion. Meanwhile, PT Ciputra Development Tbk's (CTRA) profit decreased by 42.8% from Rp 296.4 billion to Rp 169.5 billion. PT Pakuwon Jati Tbk (PWON) earned Rp 482.6 billion as the highest net profit among the other five issuers in the first semester of 2020. The profit also decreased by 64.7% from the first semester of 2019 but managed to print a net profit of Rp 1.4 trillion.

The financial performance of PPRO during the pandemic is quite depressing. Based on the statements, until the third quarter of 2020, PPRO earned a net profit of Rp 76.7 billion. This figure dropped by 65% from the achievement in 2019, which was recorded at Rp 216.4 billion. For the third quarter of 2020, sales and operating income of Rp 1.27 trillion was recorded. Meanwhile, PT Summarecon Agung Tbk (SMRA) also experienced a decline in performance. SMRA reported that the revenue in the third quarter of 2020 decreased by 26.05% annually (yoy) from Rp 4.41 trillion in the third

quarter of 2019 to Rp 3.26 trillion in 2020. The net profit also decreased from a net profit of Rp 314.61 billion to a net loss of Rp 12.25 billion.

BSDE earned revenue of Rp 4.28 trillion in January-September 2020 period. The revenue in the third quarter of 2020 decreased by 18.16% from the realization in the third quarter of 2019, which was recorded at Rp 5.23 trillion. The net profit of this Sinarmas Group property issuer decreased by 79.67% to Rp 469.56 billion but reached Rp 2.31 trillion in January-September 2019. Furthermore, ASRI's revenue until the third quarter of 2020 decreased by 43.88% annually (yoy) to Rp 1.1 trillion from Rp 1.96 trillion. With a recorded cost of Rp 599.05 billion, ASRI posted a gross profit of Rp 503.58 billion. Due to a large amount of general and administrative expenses of Rp 245.37 billion and interest expenses of Rp 528.56 billion, a loss of Rp 977.65 billion was reported. In the third quarter of 2019, ASRI still recorded a net profit of Rp 213.59 billion.

Various research regarding the effects of the pandemic on financial performance include research conducted by Siswati [11]. The differences were obtained between NPM, CR, and TATO but there was no variation for DER. Nofiar and Chasanah [12] research shows no difference in CR, ROA, and TATO.

The results of company financial ratios, including liquidity, solvency, and profitability (ROA, NPM, and ROI) in plantation and mining companies did not show any significant differences [13]. According to Song and Yeon [14], restaurant companies with large assets, good leverage, good cash flow, small ROA, and branches in other countries are more resistant to the impact caused by COVID-19 than similar companies. Uchehara et al. [4] showed that historical financial downturns served as a benchmark for understanding the macroeconomic repercussions of the pandemic on property and real estate market. The research used procedural methods and incorporates legal contexts to effectively reduce risks associated with the impact of the pandemic.

Nanda et al. [15] reported that COVID-19 increased the change process in property companies driven by urbanization and digitalization factors by focusing on asset selection, changes to online stores, investment management, and customer engagement. Richter and Wilson [16] stated that financial market developments dominated claim losses due to the pandemic demographics and other factors.

2. LITERATURE REVIEW

According to the theory of capital structure, companies achieve a balance between borrowed and own capital to maximize firm value [17, 18]. NPM (net profit margin) measures company profitability by comparing net profit with revenue. A high NPM shows the efficiency in generating profit from the income. In capital structure theory, a high NPM can contribute to an increase in ROE (return on equity) and ROA (return on assets) [19]. ROE measures the rate of return obtained by shareholders or company owners from the invested capital. The result shows that companies can provide profitable results for the owners. In this context, the relationship with capital structure can include the use of debt. According to capital structure theory, debt can increase ROE because the variable has a lower cost than equity [20].

ROA measures company ability to generate profits from using assets. High ROA shows the efficiency in using assets

to generate profits. In capital structure theory, companies with a balanced capital structure or the right proportion of debt tend to possess a higher ROA [21]. DER (debt-to-equity ratio) measures the proportion of company debt to equity. A higher result indicates companies rely on operating and investment financing debt. In the capital structure theory, a balanced DER or the right proportion of debt can affect financial performance, including ROE and ROA. cash ratio measures the ability to meet short-term obligations using cash and equivalents. A high cash ratio indicates a good level of liquidity and company ability to meet obligations quickly. In capital structure theory, good liquidity can affect the ability to pay interest and principal debt, affecting ROE and ROA. Meanwhile, DAR (debt to asset ratio) measures the proportion of company total debt to the assets. A high DAR shows company dependence on debt in financing the assets. In capital structure theory, a high level of the variable can affect ROE and ROA.

3. MATERIALS AND METHODS

3.1 Population and sample

The population consisted of companies operating in property and real estate sector. The sample comprised financial reports of property and real estate companies for the 2018 – 2021 period on an annual basis, and a purposive sampling method was used. Based on the criteria, the number of property and real estate companies with Sharia shares used as samples is $45 \times 2 = 90$ financial data before and after COVID-19.

3.2 Operational definition of variables

Table 1 shows the variables used in this research.

Table 1. Operational definition of research variables

Variable	Formulation	Scale
Liquidates		
Cash Ratio	$Cash\ ratio = \dfrac{Cash + Securities}{Current\ Liabilities} \times 100\%$	Ratio
Current Ratio	$Current\ Ratio = \dfrac{Current\ Assets}{Current\ Liabilities} \times 100\%$	Ratio
Solvability		
Debt to Assets Ratio	$DAR = \dfrac{Total\ Debt}{Total\ Assets} \times 100\%$	Ratio
Debt to Equity Ratio	$DAR = \dfrac{Total\ Debt}{Total\ Equity} \times 100\%$	Ratio
Profitability		
Return on Assets (ROA)	$ROA = \dfrac{Net\ Profit}{Total\ Assets} \times 100\%$	Ratio
Return on Equity (ROE)	$ROE = \dfrac{Net\ Profit}{Total\ Equity} \times 100\%$	Ratio
Net Profit Margin (NPM)	$NPM = \dfrac{Net\ Profit}{Net\ Sales} \times 100\%$	Ratio

3.3 Data analysis method

A paired-sample t-test was used with an alpha of 5% to determine the difference in financial performance before and after COVID-19. The t-test formula used for paired samples is:

$$t = \frac{\delta}{SD\delta\ /\ \sqrt{n}} \qquad (1)$$

Description:
δ: Average deviation (difference between sample before and sample after)
SD_δ: The standard deviation of δ (difference between before and after samples)
n: Samples
The statistical t-test was selected because the data was paired before and after COVID-19.

4. RESULTS

4.1 Descriptive statistic

Descriptive statistics explain the minimum, maximum, and average values of all variables, as shown below:

Profitability
Descriptive profitability can be obtained based on data processing, as presented in Table 2.

Table 2. Descriptive statistics of NPM ratio

Description	N	Minimum	Maximum	Mean
NPM Before Covid	90	-101.59	250.97	11.4580
NPM After Covid	90	-307.51	592.35	-17.5896
Valid N (Listwise)	90			

Source: Field research data processed (2023)

According to Table 2, the minimum and maximum value of the NPM ratio before the pandemic was -101.59% and 250.97%, with an average value of 11.458% in bad condition below the standard of 40%. Furthermore, the minimum and maximum values were -307.51% and 592.35% with an average of -17.5896%, which was in bad condition below the standard of 40%.

Referring to Table 3, the minimum and maximum ROE ratio before the pandemic was -497.64% and 33.42% with an average of -0.2648%, which was in bad condition below the standard of 40%. Meanwhile, the minimum and maximum values of ROE ratio after COVID-19 pandemic were -480.63% and 60.99% with an average of -7.9326%, which was in bad condition below the standard of 40%.

Table 3. Descriptive statistics of ROE ratio

Description	N	Minimum	Maximum	Mean
ROE Before Covid	90	-497.64	33.42	-.2648
ROE After Covid	90	-480.63	60.99	-7.9326
Valid N (Listwise)	90			

Source: Field research data processed (2023)

Referring to Table 4, the minimum and maximum values of ROA before the pandemic were -10.88% and 22.84% with an average of 2.588%, which was in bad condition below the

standard of 30%. Meanwhile, minimum and minimum values after the pandemic were -43.31% and 27.56% with an average of -1.08%, which was in bad condition below the standard of 30%.

Table 4. Descriptive statistics of ROA ratio

Description	N	Minimum	Maximum	Mean
ROA Before Covid	90	-10.88	22.84	2.5880
ROA After Covid	90	-43.31	27.56	-1.0846
Valid N (listwise)	90			

Source: Field research data processed (2023)

Liquidity

The liquidity ratio is reflected through the current and cash ratios, and the descriptive statistics are as follows:

Table 5. Descriptive statistics of cash ratio

Description	N	Minimum	Maximum	Mean
Cash Ratio Befor Covid	90	1.82	666.21	71.1134
Cash Ratio After Covid	90	1.88	308.90	52.7574
Valid N (Listwise)	90			

Source: Field research data processed (2023)

Referring to Table 5, the minimum and maximum values of cash ratio variable before the pandemic were 1.82%, and 666.21%, with an average of 71.1134%, which was in good condition above the standard of 50%. In addition, the minimum and maximum values after the pandemic were 1.88% and 308.90% with an average of 52.7574%, which was in good condition above the standard of 50%.

Table 6. Descriptive statistics of current ratio

Description	N	Minimum	Maximum	Mean
Current Ratio Before Covid	90	17.86	2488.19	294.0389
Current Ratio After Covid	90	14.68	1554.83	252.3986
Valid N (Listwise)	90			

Source: Field research data processed (2023)

Referring to Table 6, the minimum and maximum values of the current ratio variable before the pandemic were 17.86% and 2,488.19% with an average of 294.0389%, which was in good condition above the standard of 200%. In addition, the minimum and maximum values after the pandemic were 14.68% and 1,554.83%, with an average of 252.3986%, which was in good condition above the standard of 200%.

Solvency

The solvency ratio is reflected through DAR and DER with descriptive statistics.

Table 7. Descriptive statistics of debt to equity ratio

Description	N	Minimum	Maximum	Mean
DER Before Covid	90	5.55	4449.82	162.3716
DER After Covid	90	5.42	1181.74	163.1031
Valid N (Listwise)	90			

Source: Field research data processed (2023)

Referring to Table 7, the minimum and maximum values of DER before the pandemic were 5.55% and 4,449.82% with an average of 162.3716% in the warning condition above the standard of 100%. Furthermore, the minimum and maximum values after the pandemic were 5.42 and 1181.74%, with an

average of 163.10% in a warning condition above the standard of 100%.

Table 8. Descriptive statistics of debt to asset ratio

Description	N	Minimum	Maximum	Mean
DAR Before Covid	90	5.26	97.26	42.7900
DAR After Covid	90	5.14	90.99	48.2001
Valid N (Listwise)	90			

Source: Field research data processed (2023)

In Table 8, the minimum and maximum values of DAR before the pandemic were 5.26% and 97.26% with an average of 42.79% in good condition less than 100%. Meanwhile, the minimum and minimum values after the pandemic were 5.14% and 90.99% with an average of 44.20% in good condition less than 100%.

4.2 The difference in NPM before and after COVID-19

Before analyzing the differences, the normality of the data must be known, with the following results.

Table 9. Test of normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
NPM Before COVID-19	.219	90	.000	.789	90	.000
NPM After COVID-19	.235	90	.000	.652	90	.000
a. Lilliefors Significance Correction						

Source: Field research data processed (2023)

In Table 9, the significance values of KS and SW were all < 0.05 since the data were not normally distributed. Therefore, the Wilcoxon Signed Rank Test was conducted with the following results.

Table 10. Test statistics

NPM Before COVID-19 NPM After COVID-19	
Z	-5.506[b]
Asymp. Sig. (2-tailed)	.000
b. Based on Positive Ranks	

Source: Field research data processed (2023)

Table 10 obtained a z-value of -5.5 with a probability value of 0.000 < 0.05 since there was a difference in NPM between before and after the pandemic.

4.3 The difference in ROE before and after COVID-19

The normality test values are obtained in Table 11 based on data processing.

Table 11. Tests of normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ROE Before COVID-19	.405	90	.000	.186	90	.000
ROE After COVID-19	.377	90	.000	.262	90	.000
a. Lilliefors Significance Correction						

Source: Field research data processed (2023)

Referring to Table 11, the significance values of KS and SW were all <0.05, and the data were not normally distributed.

Therefore, the Wilcoxon Signed Rank Test was conducted with the following results.

Table 12 obtained a z-value of -5.6 with a probability value of 0.000 < 0.05 since ROE value differed before and after the pandemic.

Table 12. Test statistics

ROE Before Covid ROE After Covid	
Z	-5.639[b]
Asymp. Sig. (2-tailed)	.000
b. Based on Positive Ranks	

4.4 The difference in ROA before and after COVID-19

Based on data processing, the results of normality testing are shown in Table 13.

Table 13. Tests of normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ROA Before COVID	.138	90	.000	.921	90	.000
ROA after COVID	.228	90	.000	.679	90	.000
a. Lilliefors Significance Correction						

In Table 13, the significance values of KS and SW were all < 0.05, and the data was not normally distributed. Therefore, the Wilcoxon Signed Rank Test was conducted with the following results.

Table 14 obtained a z-value of -5.8 with a probability of 0.000 < 0.05 since ROA value before and after the pandemic was different.

Table 14. Test statistics

	ROA Before Covid ROA After Covid
Z	-5.818[b]
Asymp. Sig. (2-tailed)	.000
b. Based on Positive Ranks	

4.5 The difference in cash ratio between before and after COVID-19

Based on data processing, the results of normality testing are shown in Table 15.

Table 15. Tests of normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Cash Ratio Before Covid	.260	90	.000	.593	90	.000
Cash Ratio After Covid	.215	90	.000	.722	90	.000
a. Lilliefors Significance Correction						

Referring to Table 15, the significance values of KS and SW were all < 0.05 since the data was not normally distributed. Therefore, the Wilcoxon Signed Rank Test was conducted with the following results.

Table 16. Test statistics

	Cash Ratio before Covid – Cash Ratio after Covid
Z	-2.990[b]
Asymp. Sig. (2-tailed)	.003
a. Wilcoxon Signed Ranks Test	
b. Based on positive ranks	

Table 16 obtained a z-value of -2.99 with a probability value of 0.003 < 0.05 and cash ratio value before and after the pandemic was different.

4.6 The difference in the current ratio before and after COVID-19

Based on data processing, the results of normality testing are shown in Table 17.

Table 17. Tests of normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Current Ratio Before Covid	.220	90	.000	.578	90	.000
Current Ratio After Covid	.259	90	.000	.605	90	.000
a. Lilliefors Significance Correction						

Referring to Table 17, the significance values of KS and SW were all < 0.05 since the data was not normally distributed. Therefore, the Wilcoxon Signed Rank Test was conducted with the following results.

Table 18. Test statistics

	Current Ratio Before Covid Current Ratio After Covid
Z	-3.261[b]
Asymp. Sig. (2-tailed)	.001
b. Based on Positive Ranks	

Table 18 obtained a z-value of -3.3 with a probability value of 0.001 < 0.05 and the Current Ratio value before and after the pandemic was different.

4.7 The difference in DER before and after COVID-19

Based on data processing, the results of normality testing are shown in Table 19.

Table 19. Tests of normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
DER Before Covid	.370	90	.000	.222	90	.000
DER After Covid	.252	90	.000	.650	90	.000
a. Lilliefors Significance Correction						

Referring to Table 19, the significance values of KS and SW were all < 0.05 since the data was not normally distributed. Therefore, the Wilcoxon Signed Rank Test was conducted with the following results.

Table 20. Test statistics

	DER Before Covid DER After Covid
Z	-4.631[b]
Asymp. Sig. (2-tailed)	.000
b. Based on Negative Ranks	

Source: Field research data processed (2023)

Table 20 obtained a probability value of 0.000 < 0.05, and the value of the DER before and after the pandemic was different.

4.8 The difference in DAR before and after COVID-19

Based on data processing, the results of normality testing are obtained in Table 21.

Table 21. Tests of normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
DAR Before Covid	.071	90	.200*	.985	90	.369
DAR After Covid	.082	90	.185	.979	90	.149
*. This is a Lower Bound of the True Significance						
a. Lilliefors Significance Correction						

Source: Field research data processed (2023)

Referring to Table 21, the significance values of KS and SW were all > 0.05 since the data was normally distributed. Therefore, a paired-sample t-test was conducted with the following results.

Table 22. Paired samples test

			Pair 1
			DAR Before Covid - DAR After Covid
Paired Differences	Mean		-5.41011
	Std. Deviation		12.69479
	Std. Error Mean		1.33815
	95% Confidence Interval of the Difference	Lower	-8.06898
		Upper	-2.75124
	t		-4.043
	df		89
	Sig. (2-tailed)		.000

Source: Field research data processed (2023)

Table 22 obtained a probability value of 0.000 < 0.05 and the value of the Asset Ratio before and after the pandemic was different. The average values of DAR before and after the pandemic were 42.79 and 48.20, showing an increase of 5.41%, as shown in Table 23.

Table 23. Paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	DAR Before Covid	42.7900	90	19.53632	2.05931
	DAR After Covid	48.2001	90	20.70114	2.18209

Source: Field research data processed (2023)

5. DISCUSSION

5.1 The difference in NPM before and after COVID-19

The significance values of KS and SW were all < 0.05 and the data were not normally distributed. Therefore, the Wilcoxon Signed Rank Test was tested with a probability value of 0.000 < 0.05, with a difference between NPM values before and after the pandemic.

In NPM ratio, the minimum and maximum values were -101.59% and 250.97%, with an average of 11.458% in bad condition below the standard of 40%. Furthermore, the minimum and maximum values after the pandemic were -307.51% and 592.35% with an average of -17.5896% in bad condition below the standard of 40%. NPM before and after the pandemic recorded positive and negative values, respectively. This variable is a ratio used in assessing profit margins on sales and the impact of the pandemic has caused the general average of Proverti and Real Estate Companies to experience losses. Therefore, companies are inefficient in determining the cost of goods sold, and sales decreased significantly due to the condition of people who experienced a decline in financial condition, reducing purchasing power for property and real estate.

According to Hartati et al. [22], there is a significant difference between NPM in Health Sector Companies listed on the IDX before and after the pandemic. Ahffha and Pradana [23] reported no significant difference between the variables in technology companies listed on the IDX.

5.2 The difference in ROE before and after COVID-19

The significance values of KS and SW were all < 0.05, and the data was not normally distributed. Therefore, the Wilcoxon Signed Rank Test was carried out with a probability value of 0.000 < 0.05 since there was a difference in ROE value before and after the pandemic.

The minimum and maximum ROE values before the pandemic were -497.64% and 33.42% with an average of -0.2648% in bad condition below the standard of 40%. Furthermore, the minimum and maximum values after the pandemic were -480.63% and 60.99% with an average of -7.9326% in bad condition below the standard of 40%. This explains that ROE of property companies before the pandemic was in bad condition and experienced more decrease after.

ROE is the return printed for shareholders and this was not provided by property companies due to loss before and after the pandemic. Therefore, companies cannot manage costs effectively and efficiently, with the large number of people infected, resulting in the implementation of a Lockdown policy to limit the spread of the pandemic. This policy has a very significant disruption of community activities and affects all sectors. Company operations continue to incur costs and salaries for employees despite the decrease in revenue.

Research by Nofiar and Chasanah [12] found differences in ROE before and after the pandemic at Bank Himbara. However, this differs from the study of Hartati et al. [22], where the variable is not different before and after the pandemic in health sector companies listed on the IDX.

5.3 The difference in ROA before and after COVID-19

The significance values of KS and SW are all < 0.05, meaning the data is not normally distributed. Therefore, the

Wilcoxon Signed Rank Test was carried out with a probability value of 0.000 < 0.05 since ROA value before and after the pandemic was different.

The minimum and maximum ROA values before and after the pandemic were -10.88% and 22.84%, with an average of 2.588% in bad condition below the standard of 30%. Furthermore, the minimum and maximum values after the pandemic were -43.31% and 27.56% with an average of -1.08% in bad condition below the standard of 30%. The condition before the pandemic was positive since property and real estate companies were able to generate profits even though below the standard. During the pandemic, the condition was detrimental due to the losses experienced. The provides an overview for leaders, investors, or analysts regarding the efficiency level carried out by company management when managing assets to generate income. Before COVID-19 pandemic, property companies were not fully able to use assets efficiently to make a profit. Similarly, assets were not efficiently used due to losses during COVID-19.

Research by Nofiar and Chasanah [12] shows differences in ROA before and after the pandemic at Bank Himbara. According to Festiana et al. [13], ROA in plantation and mining companies showed no significant difference.

5.4 The difference in cash ratio between before and after COVID-19

The significance values of KS and SW were all < 0.05 since the data was not normally distributed. Therefore, the Wilcoxon Signed Rank Test was tested with a probability value of 0.003 <0.05, showing a difference in cash ratio value between before and after the pandemic. The minimum and maximum values of the variable were 1.82% and 666.21%, with an average of 71.1134% in good condition above the standard of 50%. In this context, Rp 1 of debt owned can be paid with Rp 0.71 of cash held by companies. Furthermore, the minimum and maximum cash ratio values after the pandemic were 1.88% and 308.90%, with an average of 52.7574% in good condition above the standard of 50%. This shows that Rp 1 of debt owned can be paid with Rp 0.52 of cash held by company. Descriptively, cash ratio in property companies was in good condition above the 50% standard. The general cash ratio in property and real estate companies averaged 71.1134% and decreased by 18.356% but was 52.7574% during the pandemic.

Cash ratio reflected the position of company cash and the equivalents to guarantee current obligations or short-term debt. Understanding the value of cash ratio assists in taking strategic steps to save company finances. Therefore, company management must control the value of cash ratio regularly for effective and smooth operational activities. Alcander and Nuraini [24] and Nuraida et al. [25] found that there was no difference in cash ratio between the two periods.

5.5 The difference in current ratio between before and after COVID-19

The significance values of KS and SW were all < 0.05, meaning the data was not normally distributed. Therefore, the Wilcoxon Signed Rank Test was tested with a probability value of 0.001 < 0.05 since there was a difference in the Current Ratio value of the two periods.

The minimum and minimum values of the current ratio before the pandemic were 17.86% and 2,488.19%, with an

average of 294.0389% in good condition above the standard of 200%. Meanwhile, the minimum and maximum values of the current ratio after the pandemic were 14.68% and 1,554.83% with an average of 252.3986% in good condition above the standard of 200%.

The current ratio descriptive condition showed that the two periods were in good condition, above the standard of 200%. However, there was a decrease of 41.64%, indicating the detrimental effects of the pandemic. Current or working capital ratio is a financial metric used to measure the short-term cash available to companies and this reflects the ability to clear debts within one year. Therefore, property companies have an excellent ability to pay obligations when due during the two periods.

Siswati [11] found differences in the current ratio between the two periods in Technology Companies listed on the IDX. In contrast, Nuraida et al. [25] reported no difference in cash ratio.

5.6 The difference in DER before and after COVID-19

The significance values of KS and SW were all < 0.05 since the data was not normally distributed. Therefore, the Wilcoxon Signed Rank Test was carried out with a probability value of 0.000 < 0.05 since there was a difference between the two periods.

The minimum and maximum values of DER before the pandemic were 5.55% and 4,449.82%, with an average of 162.3716% in a warning condition above the standard of 100%. Furthermore, the minimum and maximum values after the pandemic were 5.42% and 1181.74%, with an average of 163.10% in a warning condition above the standard of 100%. The descriptive statistics above show no change in DER between the two periods, despite an average increase of 0.7284%. This condition explains that the pandemic does not affect the variables in property companies.

DER reflects company ability to pay off all debts. The smaller the ratio, the greater the companies can pay off the debts. A large DER ratio can impact performance due to increased debt, reducing profits. The value below 100% shows that companies have less debt than the capital. The accumulated losses are more than the amount of equity when DER value of companies is negative. Siswati [11] found differences between during and after the pandemic in Technology Companies listed on the IDX. In contrast, Alcander and Nuraini [24] reported no difference in the variable between the two periods.

5.7 The difference in DAR between before and after COVID-19

The significant values of KS and SW were all > 0.05 since the data was normally distributed. Therefore, a paired-sample t-test was carried out with a probability value of 0.000 < 0.05, and the value of DAR before and after the pandemic was different. The average values of DAR before and after COVID-19 were 42.79 and 48.20, showing an increase of 5.41.

In DER ratio, the minimum and maximum values before the pandemic were 5.26% and 97.26%, with an average of 42.79% in good condition less than 100%. Furthermore, the minimum and maximum values after the pandemic were 5.14% and 90.99%, with an average of 44.20% in good condition less than 100%. The average DER value increased by 1.41% between the two periods but remained in good condition less than 100%.

Creditors preferred companies with a low DER value to increase the level of guarantee when liquidation occurs.

Insolvency occurs when companies cannot pay off short-term debt. In this context, the assets are sold to pay debts before reimbursing investors. Creditors may also reconsider extending loans for investment to companies with a higher level of debt than wealth. Hilaliyah et al. [26] found differences between before and after the pandemic in companies listed on the IDX. In contrast, Alcander and Nuraini [24] reported no difference in DER between the two periods.

5.8 Managerial implication

Managers need to pay special attention to efforts to increase profitability after COVID-19 pandemic. Meanwhile, NPM, ROE, and ROA analysis can be used as indicators to evaluate financial performance. The factors affecting profitability must be identified, such as costs, operational efficiency, marketing strategies, and company liquidity. Cash and current ratios are essential in ensuring high liquidity to meet short-term obligations. Managers must closely monitor cash flow, optimize inventory management, increase cash inflows, and reduce liquidity risk.

A crucial managerial implication is maintaining company solvency level. DER and DER must be monitored closely to prevent an increase in debt. Managers need to conduct risk analysis and manage capital structure, including debt restructuring. The objective is to ensure the repayment of debts and the maintenance of long-term financial stability. The pandemic has changed the business landscape significantly and the managerial implication is the need to adjust business strategy in dealing with the changes. In addition, managers need to re-evaluate business plans, consider changing customer needs and market trends, and adopt a more adaptive and innovative approach to doing business. This includes exploring new business models, digitizing and diversifying products or services, and implementing relevant technologies.

6. CONCLUSION

In conclusion, the NPM ratio for property and real estate companies before and after COVID-19 was reported to experience a decline from 11.4% to 17.6%. Furthermore, there was a significant difference between the values of profitability (NPM, ROE, ROA), liquidity (cash ratio and current ratio), and solvency (DER and DER). A sizeable difference was reported between the level of profitability (NPM, ROE, ROA) of companies before and after COVID-19 pandemic. As measured by cash and current ratios, company liquidity also experienced a significant difference. The solvency level represented by DER and DER showed a difference between the two periods.

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