INDONESIAN JOURNAL OF MULTIDISCIPLINARY SCIENCE

P-ISSN: 2808-5957
E-ISSN: 2808-6724

The analysis of the performance of LQ45 issuers on IDX during the COVID-19 pandemic

Luthfia Zulfa[*], School of Bussines, Institut Pertanian Bogor, Bogor, West Java, Indonesia
Noer Azam, School of Bussines, Institut Pertanian Bogor, Bogor, West Java, Indonesia
Bayu Bandono, School of Bussines, Institut Pertanian Bogor, Bogor, West Java, Indonesia

[*]Email for Correspondence: zulfaluthfia@gmail.com

Keywords:

performance analysis
LQ45
IDX
COVID-19

ABSTRACT

The objective of this study is to examine the factors that have influenced the performance of Indonesian companies listed in the Indonesia Stock Exchange's LQ45 stock index during the COVID-19 pandemic, spanning the period from 2017 to 2022. The study is divided into two main periods: the period preceding the pandemic (2017-2019) and the period following the pandemic (2020-2022). The coefficient of determination (R^2) is employed to ascertain the extent to which independent variables, including liquidity, leverage, profitability, activity, managerial ownership, institutional ownership, company size, and company age, can explain variations in the dependent variable, namely company performance. The results demonstrate that leverage has a significant negative impact on company performance, whereas managerial ownership does not affect both groups. Conversely, institutional ownership exerts a positive and significant influence on firm performance. This study offers insights into the factors that can be regulated or monitored to maintain the company's stability and growth. Additionally, it enhances knowledge of firms' ability to survive in challenging economic conditions and provides implications for regulators and investors.

This is an open-access article under the CC BY-SA license.

INTRODUCTION

The global outbreak of Coronavirus Disease 2019 (COVID-19) has presented challenges for many businesses and organizations. A survey conducted by Bank Indonesia in April 2020 found that approximately 59.1% of companies experienced a decline in turnover during the pandemic. However, some companies not only demonstrated resilience in navigating the challenges posed by the pandemic but also exhibited growth and success in the face of the crisis. A survey by McKinsey & Company (2020) identified three key determinants for companies that successfully weathered and even thrived during the COVID-19 pandemic: ample resources, flexibility, and the capacity to adapt to market changes. This is supported by numerous studies that indicate that companies that successfully navigate the challenges of the global pandemic are those with the capacity to adapt to market dynamics. A study by PwC (2020) indicated that companies demonstrating resilience through innovation and flexible strategies exhibited a higher likelihood of survival during the pandemic. Furthermore, those adept at effective risk management and possessing ample resources were better positioned to withstand the impacts of the COVID-19 pandemic.

Extensive research has examined the repercussions of the COVID-19 pandemic on the economy, particularly on companies. Devi et al. (2020) reveal a substantial impact on the profitability and activities of companies in Indonesia. Achim et al. (2022) illustrate the pandemic's deleterious effects on the ability of companies across various service sectors in Romania to meet corporate obligations. In contrast, (Kubiczek & Derej, 2021) conducted research on Polish companies, which indicated a negative impact on transportation, logistics, and tourism. However, some companies in the digital and health industries have experienced significant profits. Additionally, there has been a paucity of research on the factors enabling companies to endure the challenges posed by the COVID-19 pandemic. Research conducted by Beattie & Smith (2013) shows that financial statement analysis can help companies identify problems that occur and take appropriate action to overcome them.

Building upon previous studies, the investigation employs the financial statement analysis method, focusing on companies listed in the LQ45 Stock Index. Financial statement analysis entails the examination of a company's financial performance through the analysis of information presented in its financial statements. This encompasses an examination of various aspects, including sales performance, profit, cash flow, financial ratios, and other relevant indicators. In the context of the challenges posed by the ongoing pandemic, financial statement analysis assumes heightened significance, as companies must monitor their financial health with greater vigilance, enabling prompt and informed decision-making in response to emerging issues. This study employs financial ratios for analysis, as these ratios serve as metrics to assess the company's financial performance and resilience in challenging economic conditions, such as the ongoing pandemic.

The financial ratios utilized in this study encompass liquidity ratio, leverage ratio, profitability ratio, and activity ratio. In addition to the aforementioned ratios, the study will also examine other factors that may influence a company's capacity to withstand the challenges posed by the COVID-19 pandemic. These factors include ownership structure, company size, and company age. The resilience of a company in the context of the COVID-19 pandemic is contingent upon the assessment of critical financial ratios, including liquidity, leverage, profitability, and activity. Additionally, factors such as company size, age, and ownership structure influence the adaptability of a company in the face of external challenges. Moreover, Mousa et al. (2021) observe that companies that have survived the pandemic demonstrate a robust capital structure, high liquidity, and operational efficiency. Given the dearth of research examining the factors that contribute to companies' survival during the ongoing pandemic in Indonesia, this study aims to identify these crucial factors. Consequently, this study seeks to investigate the factors that contribute to companies' resilience in the face of the ongoing pandemic. The focus of this research encompasses all companies within the LQ45 Stock Index that have demonstrated resilience during the ongoing pandemic.

This research examines the factors that have influenced the performance of companies listed in the LQ45 stock index on the Indonesia Stock Exchange (IDX) during the Covid-19 pandemic from 2017 to 2022. The researchers expect it to give a broader view of the topic discussed and become a reference for future relevant research. The hypotheses used are:

1) H1: Liquidity affects company performance
2) H2: Leverage does not affect company performance
3) H3: Profitability affects company performance
4) H4: Activity affects company performance
5) H5: Managerial ownership does not affect company performance
6) H6: Institutional ownership affects firm performance
7) H7: Company size affects company performance
8) H8: Company age affects company performance

METHOD

The research is quantitative research with the data analysis method using the regression analysis method using Eviews 13. The secondary data utilized in this study is obtained from the LQ45 Stock Index on the Indonesia Stock Exchange (IDX). The data set encompasses the period preceding the advent of the Coronavirus Disease 2019 (COVID-19) pandemic (2017-2019) and the subsequent period of the pandemic (2020-2022). It includes financial reports and other pertinent information sourced from the Indonesia Stock Exchange (IDX) official website (www.idx.id). The population under examination comprises companies listed on the LQ45 Stock Index on the IDX during the specified periods. Purposive sampling was employed, with specific criteria applied, including companies included in the Index during the pre-Covid-19 and the pandemic periods, those consistently publishing consecutive audited financial reports, and the completeness of required data (including cash, current liabilities, total liabilities, total assets, net income, net sales, management and institutional ownership of shares, and the establishment year reported in Indonesian rupiah).

Table 1. The Number of Samples Based on Criteria

Description	Total
Companies included in the LQ45 Stock Index list on the Indonesia Stock Exchange (IDX) for the period 2017-2022	73
Companies with incomplete audited financial statements for 2017-2022	8
The company does not have complete financial statement data and the data needed by researchers	6
Financial statements are not expressed in rupiah	9
Number of companies that meet the sample criteria	**50**
Year of observation (year)	6
Number of analysis units	**300**

Table 1 illustrates that the LQ45 Stock Index on the Indonesia Stock Exchange comprises 50 companies that meet the specified research criteria. The observation period spans from 2017 to 2022, encompassing 300 data points. This study employs nine variables, comprising one dependent variable and seven independent variables. The dependent variable is company performance, operationalized through Tobin's Q ratio. The independent variables are financial performance, operationalized through financial ratios, namely liquidity, leverage, profitability, and activity; managerial ownership structure and institutional ownership; company size; and company age.

RESULTS AND DISCUSSION

In accordance with the proposed research models, a normality test is conducted prior to the data being processed. The normality test determines whether confounding or residual variables exhibit a normal distribution within the regression model. The most commonly utilized residual normality test is the Jarque-Bera (JB) test, which is available within the Eviews 13 application program. The null hypothesis for the normality test is as follows: It can be reasonably assumed that residuals are not distributed in a normal manner. The residuals are normally distributed. In the standard measurement test, the decision-making criteria for the Jarque-Bera test probability results are smaller than or equal to 0.05 (Probability ≤ 0.05). In such cases, the null hypothesis is rejected, indicating that the residual model is not normally distributed. If the probability result of the Jarque-Bera test is greater than 0.05 (Probability > 0.05), then the null hypothesis is accepted, indicating that the residuals are normally distributed.

A normality test was conducted, and the resulting probability value was found to be 0.000000. The probability value of the Jarque-Bera test results, 0.000000, is less than 0.05. The results of the test indicate that the null hypothesis (H_0) is rejected, indicating that the residuals are not normally distributed. To overcome residual models that are not normally distributed, a model transformation is carried out until a model that meets the assumptions of a normal distribution is produced. After transforming the model, the data from the normality test results for the assumption of data normality in the random effect model are shown in Figure 1.

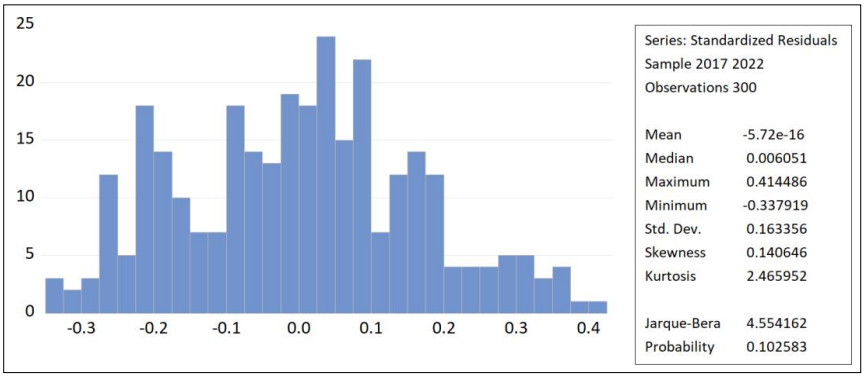

Figure 1. Normality Test Results After Transformation

In accordance with the findings illustrated in Figure 1, the transformed probability value is established to be 0.102583 after the implementation of the requisite statistical transformation. The transformed probability value resulting from the Jarque-Bera test is greater than 0.05. The null hypothesis (H_0) is not rejected, indicating that the model's residuals exhibit a normal distribution. Based on this data, it can be concluded that after the normality test, the variables including liquidity (X_1), leverage (X_2), profitability (X_3), activity (X_4), managerial ownership (X_5), institutional ownership (X_6), firm size (X_7), and firm age (X_8) all fulfill the assumption of normal distribution.

The Significance Test of Regression Coefficient Pre-COVID-19 and Post-COVID-19

The objective of this examination is to ascertain whether the independent variables (liquidity, leverage, profitability, activity, managerial ownership, institutional ownership, company size, and company age) exert an influence on the dependent variable (company performance) in a simultaneous manner, both "Pre-COVID-19" (2017-2019) and "Post-COVID-19" (2020-2022). To ascertain the potential alterations in the interrelationships between variables, the analysis is partitioned into two principal periods: before and after the COVID-19 pandemic (2017-2019 and 2020-2022).

Table 2. T-Test Results Pre-COVID-19 and Post-COVID-19

Variable	Pre-COVID-19 (2017-2019)		Post-COVID-19 (2020-2022)	
	t-Statistic	Prob.	t-Statistic	Prob.
X1	-1.717997	0.0880	-1.485789	0.1396
X2	6.238367	0.0000	3.150222	0.0020
X3	-0.701921	0.4839	-4.139475	0.0001
X4	-3.751796	0.0003	-1.965256	0.0514
X5	1.090642	0.2773	1.432337	0.1543
X6	6.916733	0.0000	-0.701575	0.4841
X7	2.837439	0.0052	2.596207	0.0104
X8	-0.225110	0.8222	-0.342843	0.7322

Table 3 illustrates the partial impact of various independent variables (liquidity, leverage, profitability, activity, managerial ownership, institutional ownership, company size, and company age) on the dependent variable (company performance) during the pre-COVID-19 period (2017-2019) and the post-COVID-19 period (2020-2022). In the period preceding the onset of the global pandemic (2017-2019), four of the eight independent variables exhibited a statistically significant impact on the dependent variable. These were leverage, activity, institutional ownership, and company size.

The liquidity variable (X1) demonstrates no notable variation in company performance before and following the advent of the global pandemic. The variable of leverage (X2) remains significant and exerts a considerable influence on company performance in both periods, indicating that debt levels remain a pivotal factor. The analysis revealed that profitability (X3) became a significant factor after the pandemic, underscoring the pivotal role of profitability in navigating economic challenges. Following the pandemic, activity (X4) was found to be insignificant, indicating that the impact of operating activities was diminished in the context of challenging economic conditions. Managerial ownership (X5) demonstrates an upward trajectory as a determinant of firm performance, although it lacks statistical significance. Institutional ownership (X6) lost its statistical significance following the pandemic, indicating a shift in the role of this factor. Firm size (X7) retains its significance across both periods, suggesting that firm size continues to exert a pivotal influence. Firm age (X8) is statistically insignificant in both periods, suggesting that, in the context of the pandemic, this factor does not exert a statistically significant effect on firm performance.

Subsequently, the R-squared determination test was conducted to ascertain the degree of correlation between the independent variables (liquidity, leverage, profitability, activity, managerial ownership, institutional ownership, company size, and company age), whether in the pre-COVID-19 period (2017-2019) or the post-COVID-19 period (2020-2022).

Table 3. Coefficient of Determination (R^2) Pre-COVID-19 and Post-COVID-19

	Pre-COVID-19 (2017-2019)	Post-COVID-19 (2020-2022)
R Squared	0.4296	0.2643

Table 3 illustrates that the R^2 value is 0.4296, indicating that the independent variables in the regression model can explain approximately 42.96% of the variation in firm performance during the pre-pandemic period. However, the R^2 value declines to 0.2643 during the pandemic, suggesting that the capacity of the independent variables to influence firm performance is reduced. This change is a reflection of the complex interaction between external influences and firm performance in the unpredictable economic times caused by the COVID-19 pandemic.

The Significance Test of Regression Coefficient Based on Status in LQ45

The objective of the Significance Test of Regression Coefficients Based on Status in LQ45 is to ascertain the influence of each independent variable, including liquidity, leverage, profitability, activity, institutional and managerial ownership, company size, and company age, on the dependent variable, namely business performance in relation to the company's status in the LQ45 index. The results of this test identify the variables that significantly affect changes in company performance based on changes in the status of the LQ45 index.

Table 4. T-test Results Based on Status on LQ45

Variable	In and Out of LQ45		Stay in LQ45	
	t-Statistic	***Prob.***	***t-Statistic***	***Prob.***
X1	1.918182	0.0582	-1.451139	0.1484
X2	2.709809	0.0080	2.985320	0.0032
X3	-2.978984	0.0037	-1.517680	0.1308
X4	-1.999801	0.0484	-3.017088	0.0029
X5	-0.013719	0.9891	0.845540	0.3989
X6	7.724985	0.0000	0.149727	0.8811
X7	3.363812	0.0011	3.643425	0.0003
X8	0.125630	0.9003	-1.913158	0.0572

The significance test of regression coefficients based on the status in LQ45 revealed that liquidity (X1) had no significant impact on firm performance in both the surviving and exiting groups of firms. Meanwhile, leverage (X2) had a significant positive impact on firm performance in both groups. Profitability (X3), although it has a significant negative effect on the outgoing and incoming groups, is not significant for the group that stays in the LQ45 index. Corporate activity (X4) has a significant negative effect on company performance, while managerial ownership (X5) shows no significant effect on both groups. Institutional ownership (X6) has a positive impact on the exit or entry group but is not significant in the surviving group. Firm size (X7) is a significant factor that has a positive effect on firm performance in all groups. However, firm age (X8) has no significant impact on firm performance.

Meanwhile, the value of the Coefficient of Determination (R^2) based on status in LQ45 is examined to ascertain the extent to which independent variables, including liquidity, leverage, profitability, activity, managerial ownership, institutional ownership, company size, and company age, can explain variations in the dependent variable, namely company performance.

Table 5. Coefficient of Determination (R^2) Based on Status in LQ45

	In and Out of LQ45	Stay in LQ45
R Squared	**0.5172**	**0.1902**

Table 5 demonstrates that the regression model can account for approximately 51.72% of the observed variation in firm performance within this group, as indicated by the R-squared value of 0.5172 for both entering and exiting LQ45. Conversely, the model is only able to explain 19.02% of the variation in company performance in the group that remains within the LQ45 index, based on the R-squared value of 0.1902 for remaining within LQ45.

Discussion

This discussion analyzes the findings of the tested hypotheses, which involve variables such as liquidity, leverage, profitability, activity, managerial ownership, institutional ownership, firm size, and firm age. The objective of these hypotheses is to provide a more profound comprehension of the elements that may influence the performance of a firm in the context of the considerable uncertainty posed by the pandemic. Each variable is examined to ascertain its particular impact on the performance of a firm. The significant findings of each hypothesis are elucidated in the context of the COVID-19 pandemic, illustrating how each variable may affect the performance of a firm in this crisis.

The term "liquidity" is used to describe the extent to which a company can meet its short-term financial obligations. A high level of liquidity is indicative of a company's capacity to effectively fulfill all short-term obligations that must be resolved. This study's central hypothesis is that there is a causal relationship between a company's liquidity and its subsequent financial performance. This is stated as the null hypothesis (H1): "Liquidity affects company performance." Descriptive statistical data indicates that the mean value of liquidity is 2.990, with a standard deviation of 8.325. The minimum value for variable X1 is 0.010, and the maximum value is 67.773. These results indicate a significant variation in company liquidity, along with a fairly high standard deviation. The partial test (T-test) conducted for the 2017-2019 and 2020-2022 periods yielded insignificant coefficient values, with significance values above the predetermined threshold. Similarly, when comparing groups of companies that are in and out of LQ45 and those that stay in LQ45, the liquidity variable does not demonstrate consistent significance. It can be concluded that **there is no substantial evidence to support hypothesis H1, which states that liquidity affects company performance. Hypothesis H1 is therefore rejected.** This differs from the findings of previous research conducted by (Ali et al., 2018; Oktaviarni et al., 2019; Qiu, 2023) which demonstrated a positive and significant correlation between liquidity and firm value. However, the results of this study are consistent with those of Chaerul Bariyyah & Malau

(2023) which indicates that liquidity has a negative effect on company performance. Therefore, it can be concluded that a company with a higher liquidity ratio is more likely to survive the challenges posed by the COVID-19 pandemic.

Leverage is a measure of a company's capacity to fulfill its financial obligations, encompassing both short-term and long-term responsibilities. The proposed hypothesis is H2, which states that leverage does not affect company performance. Descriptive statistics provide an overview of the variability and distribution of leverage in the research data, with an average value of 0.641, a minimum value of 0.041, and a maximum value of 1.693. The results of the correlation test also indicate an upward trend in the points on the scatter plot, suggesting a positive correlation between leverage and company performance. Nevertheless, the T-test results indicate that the coefficient for variable X2 is 0.1492 with a t-statistic of 3.502081, which is statistically significant at the 0.05 level. Consequently, the alternative hypothesis, which states that **leverage does not affect firm performance, H2, is rejected based on these results**. Furthermore, partial testing based on period and LQ45 status also confirms the significance of variable X2 on company performance. The results of this study diverge from those of previous research conducted by (Devi et al., 2020; Oktaviarni et al., 2019) which concluded that leverage does not affect firm value. This implies that the high or low leverage of a company does not influence its ability to survive during the circumstances and conditions of the COVID-19 pandemic. Conversely, this study demonstrates that leverage exerts a significant influence on a company's capacity to sustain its performance in the context of economic challenges precipitated by the COVID-19 pandemic. This finding aligns with the conclusions of (Chabachib et al., 2020) who posit that leverage is positively correlated with company performance.

Profitability is employed as an evaluative indicator to assess the company's capacity to generate profits, providing information about the amount of profit earned through a comparison between the net profit generated by the company and the net income generated by the company. The hypothesis proposed in this study is H3: Profitability affects company performance. The initial analysis and descriptive statistics indicate that there is considerable variability in the data concerning profitability (X3), with an average value of 0.641, a minimum value of 0.041, and a maximum value of 1.693. This provides an initial description of the data distribution. The results of the t-test indicate that during the 2017-2019 period, variable X3 did not exert a statistically significant influence on company performance (sig value = 0.4839). However, during the 2020-2022 period, variable X3 was found to have a statistically significant impact on company performance (sig value = 0.0001). Moreover, an additional analysis based on LQ45 status revealed that variable X3 has a significant impact on company performance within the "Stay in LQ45" status category (sig value = 0.1308), whereas in the "In and Out of LQ45" status category, variable X3 was not found to be significant (sig value = 0.0037). Consequently, it can be concluded that variable X3 is a significant determinant of company performance. Consequently, the alternative hypothesis, which states that **profitability affects company performance, H3, is accepted**. The results of this study align with those of Devi et al. (2020), which demonstrates that profitability has a positive and significant impact on firm value. Additionally, these findings are consistent with those of Setiawati & Lim (2018) which also indicates that profitability exerts a positive influence on firm value. The findings of the research conducted by Azizah & Munir (2022) indicate that profitability has a significant effect on company performance.

The results of the T-test, grouped by period, indicate that in the pre-COVID-19 (2017-2019) period, variable X4 is statistically significant in relation to company performance (p-value = 0.0003), whereas in the post-COVID-19 (2020-2022) period, variable X4 is not statistically significant (p-value = 0.0514). Further analysis based on the LQ45 group indicates that variable X4 is significant to company performance in the "In and Out of LQ45" status category (sig value = 0.0484), but not significant in the "Stay in LQ45" status category (sig value = 0.0029). Consequently, the results of the T-test and partial test indicate that the Activity variable (X4) has a significant influence on company performance. However, the impact may vary depending on the period and specific group of companies. Therefore, the hypothesis that **Activities affect company performance, H4, is accepted**, with an emphasis on variations in impact depending on the time context and company group. This finding is consistent with the findings of Devi et al. (2020), which demonstrated that activity levels can influence firm value. In other words, increasing the level of activity can be a factor that supports the survival of the company in dealing with the challenges posed by the COVID-19 pandemic.

Managerial ownership is a share ownership pattern in which management, which encompasses the board of directors and the board of commissioners, holds a partial share ownership in the company. The hypothesis to be tested in this study is H5: Managerial ownership does not affect company performance. The results of the t-test indicate that the variable representing managerial ownership (X5) is not statistically significant in relation to firm performance. The coefficient for X5 is -0.01730 with a t-statistic of -0.139619, and the p-value (significance) is 0.8891, which is greater than the general significance level of 0.05. It can thus be concluded that there is no significant relationship between managerial ownership and firm performance. Further testing based on the period (2017-2019 and 2020-2022) as well as the LQ45 company group yielded comparable

results. The results indicate that, both in terms of the overall period and within specific company groups, the variable X5 remains statistically insignificant concerning company performance. It can thus be concluded that **managerial ownership (X5) has no significant effect on company performance, and hypothesis H5 can be accepted.** This study differs from the findings of Mueller & Spitz-Oener (2006) who found a positive relationship between managerial ownership and firm performance. Nevertheless, the findings of this study align with those of Tertius & Christiawan (2015) which demonstrate that firm value is not influenced by managerial ownership. Consequently, even in the context of a high proportion of managerial ownership, the survival of a company in the current circumstances of the COVID-19 pandemic cannot be guaranteed.

Institutional ownership refers to the proportion of shares held by entities such as non-governmental organizations (NGOs), private companies, and pension funds. The central hypothesis of this study is that institutional ownership affects company performance. The results of the T-test indicate that the Institutional Ownership variable (X6) is a significant predictor of firm performance. The coefficient for X6 is 0.07996, with a t-statistic of 7.254302. The significance value, 0.0000, is less than the general significance level of 0.05. Consequently, it can be posited that the Institutional Ownership variable exerts a significant influence on company performance. Subsequently, partial testing based on the period (2017-2019 and 2020-2022) and the LQ45 company group also corroborated this result. In both periods and company groups, Institutional Ownership continues to exert a significant influence on company performance. These findings indicate that institutional ownership (X6) has a positive and significant effect on company performance. The hypothesis that **institutional ownership affects company performance, H6, is accepted based on the results of the data analysis conducted**. The results of this study differ from those of Merzyana & Dermawan (2020) who found that firm value experiences a significant negative impact when institutional ownership decreases. Manurung & Wijaya (2022) also found that institutional ownership has a negative effect on company performance.

Company size is a parameter used to categorize the dimensions of a company based on various parameters. The hypothesis to be tested in this study is H7: The results of the T-test indicate that the coefficient for variable X7 is 0.06924, with a t-statistic of 4.739338, and a very low significance value, namely 0.0000. Consequently, it can be posited that variable X7 is a significant factor in the performance of the company. Subsequently, based on the temporal framework encompassing the 2017-2019 and 2020-2022 periods, variable X7 continues to exhibit a significant association with company performance, with a very low significance value (p-value <0.05). Similarly, when analyzed based on the LQ45 group status category, variable X7 remains significant to company performance in both the LQ45 in and out category, with a significance value of 0.0011. Similarly, within the category of stay in LQ45, variable X7 is found to be significantly correlated with company performance (sig value = 0.0003). The hypothesis that **company size affects company performance (H7) is accepted**, with the caveat that the extent of its impact varies depending on the context and group of companies in question. The findings of this study are consistent with those of Ukhriyawati & Dewi (2019) which indicates that company size has a negative impact on company performance. However, the results also demonstrate that company size has no significant effect on company performance. In contrast to the findings of Maryam & Ramadhani (2019) which states that company size has a positive effect on company performance, Chaerul Bariyyah & Malau (2023) also stated that company size has no significant effect on company performance.

Company age is defined as the duration of time that has elapsed since the company's establishment and sustainability on the Indonesia Stock Exchange (IDX). The results of the T-test indicate that the regression coefficient (T-count) for X8 is -1.635961 with a significance value of 0.1029. This implies that the age of the company has no significant effect on company performance. The results indicate that, during the 2017-2019 period, X8 had no significant effect on company performance. Similarly, during the 2020-2022 period and based on the entry-exit status of LQ45, X8 also had no significant effect. Consequently, the hypothesis that **company age affects company performance, H8, is rejected.** The findings of this study diverge from those of Dewi & Wirajaya (2013) which posits that the length of a company's existence has a positive and significant impact on its value. This indicates that as a company ages, its capacity to navigate challenging circumstances, including maintaining resilience during crises such as the COVID-19 pandemic, increases. However, this differs from the findings of von Bonsdorff et al. (2018) which indicates that the age of the company can negatively affect employee workability, which in turn can have an impact on company performance.

The results of this study contribute to the accumulation of knowledge concerning the factors that influence firm performance. This knowledge is of practical and theoretical value, and it has several important implications for companies, regulators, and investors. An understanding of the relationship between variables such as liquidity, leverage, managerial and institutional ownership with firm performance can serve as a strategic guide for the management of these variables, to increase the competitiveness and profitability of the company. From the regulatory perspective, this research offers insights into the factors that can be regulated or monitored to ensure the stability and growth of the company. A comprehensive understanding of the interrelationships between variables such as liquidity, leverage, managerial, and institutional ownership with firm performance can assist regulators in formulating more effective policies to mitigate risk and safeguard the interests of shareholders. Conversely, for investors, an appreciation of the link between specific variables and

company performance can inform more discerning investment decisions. These findings can serve as a basis for investors to assess prospective investments and identify potential risks or opportunities that may arise in their overall portfolios.

CONCLUSION

This study examines two pivotal aspects pertaining to the performance of listed companies on the LQ45 stock index in Indonesia during the Coronavirus Disease 2019 (COVID-19) pandemic. The findings suggest that a number of factors influence the capacity of listed companies to maintain their position on the LQ45 stock index in Indonesia, particularly in the context of challenges and uncertainties associated with the pandemic of Coronavirus Disease 2019 (COVID-19).

The LQ45 stock index companies are distinguished by high liquidity, controlled leverage, substantial managerial and institutional ownership, and a considerable company size. These attributes are positively associated with corporate performance during the pandemic. Companies that have endured the crisis tend to exhibit favorable profitability, moderate activity levels, and relatively young company age.

The factors influencing a company's ability to survive on the LQ45 stock index during the pandemic include leverage (X2), profitability (X3), activity (X4), institutional ownership (X6), and company size (X7). These variables demonstrate a significant impact on a company's performance, with some variables exhibiting consistent effects and others varying depending on the temporal context and the company in question.

This study examines the resilience of companies in the face of challenging economic conditions, offering insights for regulators and investors alike. It should be noted, however, that the present study is not without limitations. Firstly, the present study is constrained in its scope, focusing on financial data analysis for constituents of the LQ45 stock index on the Indonesia Stock Exchange (IDX). Consequently, the findings may not be universally applicable to businesses outside of this index. Secondly, the research was conducted during the period of the global pandemic, which may have resulted in the omission of long-term effects and post-pandemic business dynamics. It is therefore recommended that further research be conducted in order to enhance understanding of the factors influencing company performance during the period of the pandemic, with particular attention paid to macroeconomic factors, crisis management strategies, leadership, corporate culture, and corporate social responsibility. Moreover, a more focused analysis of specific industrial sectors, small and medium-sized enterprises, and comparisons with previous crises could provide deeper insights. Future research should investigate the influence of macroeconomic factors, crisis management strategies, leadership, corporate culture, and corporate social responsibility.

REFERENCES

Achim, M. V., Safta, I. L., Văidean, V. L., Mureșan, G. M., & Borlea, N. S. (2022). The impact of COVID-19 on financial management: evidence from Romania. *Economic Research-Ekonomska Istrazivanja*, *35*(1), 1807–1832. https://doi.org/10.1080/1331677X.2021.1922090

Ali, M., Andari, D., Indah Bayunitri, B., Sugiartiningsih, S., & Ariffian, A. (2018). Analysis of Financial Performance based on Liquidity and Profitability Ratio (Case Study on PT Unilever in period 2013-2017). In *Article in International Journal of Engineering and Technology* (Vol. 7). https://www.researchgate.net/publication/330496686

Azizah, L., & Munir, M. (2022). Analysis of the Effect of Company Performance on Company Value with Profitability as an Intervening Variable. *European Journal of Business and Management Research*, *7*(3), 102–106. https://doi.org/10.24018/ejbmr.2022.7.3.1413

Beattie, V., & Smith, S. J. (2013). Value creation and business models: Refocusing the intellectual capital debate. *The British Accounting Review*, *45*(4), 243–254. https://doi.org/10.1016/J.BAR.2013.06.001

Chabachib, M., Setyaningrum, I., Hersugondo, H., Shaferi, I., & Pamungkas, I. D. (2020). Does financial performance matter? Evidence on the impact of liquidity and firm size on stock return in Indonesia. *International Journal of Financial Research*, *11*(4), 546–555. https://doi.org/10.5430/ijfr.v11n4p546

Chaerul Bariyyah, S., & Malau, M. (2023). Effect of Liquidity, Asset Structure, Managerial Ownership and Growth Rate on Company Performance. *Journal of Economics, Finance and Accounting Studies*, *5*(3), 87–95. https://doi.org/10.32996/jefas

Devi, S., Warasniasih, N. M. S., Masdiantini, P. R., & Musmini, L. S. (2020). The Impact of COVID-19 Pandemic on the Financial Performance of Firms on the Indonesia Stock Exchange. *Journal of Economics, Business, & Accountancy Ventura*, *23*(2), 226–242. https://doi.org/10.14414/jebav.v23i2.2313

Dewi, A. S. M., & Wirajaya, A. (2013). Pengaruh Struktur Modal, Profitabilitas dan Ukuran Perusahaan pada Nilai Perusahaan. *E- Jurnal Akutansi Universitas Udayana*, *4*(2), 358–372.

Kubiczek, J., & Derej, W. (2021). Financial performance of businesses in the COVID-19 pandemic conditions – comparative study. *Polish Journal of Management Studies*, *24*(1), 183–201. https://doi.org/10.17512/pjms.2021.24.1.11

Manurung, M. R. A., & Wijaya, J. R. T. (2022). The Effect of Family Ownership, Institutional Ownership, Managerial Ownership, Blockholder Ownership, And Board of Directors On Company Performance. *Ratio: Reviu Akuntansi Kontemporer Indonesia*, *3*(2), 125. https://doi.org/10.30595/ratio.v3i2.14773

Maryam, D., & Ramadhani, Y. C. (2019). Agency Cost as An Intervening Variable in the Impact of Capital Structure and Company Size on Company Performance. *Jurnal Akuntansi, Manajemen Dan Ekonomi*, *21*(3), 54–60.

Merzyana, F., & Dermawan, E. S. (2020). Faktor yang Mempengaruhi Nilai Perusahaan Manufaktur yang Terdaftar di BEI. *Jurnal Multiparadigma Akutansi Tarumanagara*, *2*(1), 376–384.

Mousa, M., Nosratabadi, S., Sagi, J., & Mosavi, A. (2021). The effect of marketing investment on firm value and systematic risk. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 1–17. https://doi.org/10.3390/joitmc7010064

Mueller, E., & Spitz-Oener, A. (2006). Managerial Ownership and Company Performance in German Small and Medium-Sized Private Enterprises. *German Economic Review*, *7*(2), 233–247.

Oktaviarni, F., Murni, Y., & Suprayitno, B. (2019). Pengaruh Profitabilitas, Likuiditas, Leverage, Kebijakan Dividen, dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Jurnal Akuntansi*, *9*(1), 1–16. https://doi.org/10.33369/j.akuntansi.9.1.1-16

Qiu, Y. (2023). Leverage, liquidity, cash flows and company performance of Chinese listed logistics companies during COVID-19 based on multiple linear regression model and data mining. *Advances in Economics and Management Research*, *5*, 122–129.

Setiawati, L. W., & Lim, M. (2018). Analisis Pengaruh Profitabilitas, Ukuran Perusahaan, Leverage, dan Pengungkapan Sosial terhadap Nilai Perusahaan pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Periode 2011-2015. *Jurnal Akutansi*, *12*(1), 29–57.

Tertius, M. A., & Christiawan, Y. J. (2015). Pengaruh Good Corporate Governance terhadap Kinerja Perusahaan pada Sektor Keuangan. *Business Accounting Review*, *3*(1), 223–232.

Ukhriyawati, C. F., & Dewi, R. (2019). Pengaruh Struktur Modal, Pertumbuhan Perusahaan dan Ukuran Perusahaan terhadap Nilai Perusahaan Pada Perusahaan LQ-45 Yang Terdaftar di Bursa Efek Indonesia. *Jurnal Equilibiria*, *6*(1).

von Bonsdorff, M. E., Zhou, L., Wang, M., Vanhala, S., von Bonsdorff, M. B., & Rantanen, T. (2018). Employee Age and Company Performance: An Integrated Model of Aging and Human Resource Management Practices. *Journal of Management*, *44*(8), 3124–3150. https://doi.org/10.1177/0149206316662314