IRJEMS International Research Journal of Economics and Management Studies
Published by Eternal Scientific Publications
ISSN: 2583 – 5238 / Volume 3 Issue 1 January 2024 / Pg. No: 116-120
Paper Id: IRJEMS-V3I1P115, Doi: 10.56472/25835238/IRJEMS-V3I1P115

Original Article

Financial Performance, Leverage, and Firm Value During COVID-19 in Indonesia

[1]Cristian Kenny, [2]Maryati, [3]Ika Fibrianti, [4]Nina Febriana Dosinta, [5]Khristina Yunita, [6]Elok Heniwati
[1,2,3,4,5,6]Faculty of Economics and Business, Universitas Tanjungpura, Pontianak, Indonesia.

Received Date: 24 December 2023 Revised Date: 29 December 2023 Accepted Date: 03 January 2024 Published Date: 09 January 2024

Abstract: *This study investigates financial performance, leverage, and firm value during COVID-19 in Indonesia. This study uses Tobin's Q as a proxy for firm value in LQ45 index companies for 2020-2022. The findings of this study indicate that Return on Assets and Return on Equity as proxies for financial performance have a significant effect on firm value. Then, Debt to Asset Ratio and Debt to Equity Ratio as leverage proxies do not affect firm value. The findings of this study imply that during COVID-19 in Indonesia, the company must maintain and improve financial performance to ensure business continuity and signal for investor decisions.*

Keywords: *Financial Performance, Leverage, Firm Value.*

I. INTRODUCTION

The COVID-19 pandemic began to enter Indonesia in early 2020, which caused major turmoil in the Indonesian capital market. The Indonesian Stock Exchange recorded a decline of 5.1% from its performance in 2019. The Indonesian capital market will strengthen again in 2021 and 2022.

In the capital market, the owner's wealth is based on the price of the shares he owns. The Indonesia Stock Exchange (BEI) as the institution that oversees stock trading in Indonesia informs stock price movements, including through the index, namely LQ45. The LQ45 index was selected according to the criteria created by the BEI and is the 45 issuers that got the best score according to calculations from the BEI. The LQ45 index contains 45 issuers that have high levels of market capitalization and liquidity [2]. Thus, it is important for issuers indexed by LQ45 to pay more attention to company value and be able to maintain their position on the LQ45 index.

In making investment decisions, investors generally analyze several essential pieces of information which are considered signals in determining investment. This information can be obtained from financial reports as explained in signaling theory that there are signals that can help investors recognize the company's condition [3]. The author analyzes the ability of financial performance and leverage to become signals in making investment decisions during COVID-19 in Indonesia.

Previous research conducted by [4] examined financial performance, leverage, and LQ45 company size in influencing company value for the 2018-2020 period. The research results found that profitability has a unidirectional relationship with Price Book Value (PBV) as a proxy for company value. Furthermore, [5] tested financial performance in determining changes in company value through PBV with the SEM-PLS method. The research results indicate that profitability has a direct relationship with company value. Previous studies used PBV as a proxy for company value, while this research uses a different proxy, namely Tobin's Q.

This research develops previous research by analyzing financial performance and leverage as determinants of LQ45 company value. The research was conducted during the COVID-19 period in Indonesia, namely 2020 to 2022. It is hoped that the results of this research can contribute to the development of literature regarding signaling theory and then can become an alternative consideration in decision-making in LQ45 companies.

II. LITERATURE REVIEW

A. Signaling Theory

Delegation of operational functions by shareholders to management can cause inequality in the ownership of internal company information. This condition gives rise to information asymmetry, where shareholders have less information than management who are directly involved in managing the company. This problem causes investors to need information related to the condition of the company obtained from financial reports to help make decisions [3]. Investors pay attention to the rise and fall of certain parameters to assess a company's future prospects.

B. Financial Performance and Firm Value

Firm value shows how much confidence investors have in management's ability to manage the company to increase its wealth [1]. Investors who are interested in the company's prospects will buy shares and entrust their funds to management to generate investment returns. The market mechanism will cause share prices to increase and decrease according to the demand and supply for these shares.

Management's task to increase company value is of course carried out by focusing on points that investors pay attention to, one of which is financial performance. Financial performance shows management's achievements in managing the company as seen from the profits generated [6]. With large profits, the company will have more sources of funds to support future business development plans. Large profits are distributed to shareholders as dividends, which is an attractive investment return for investors and makes profits a good signal in helping investor decision-making [7]. Profit can be a signal that shows the company's financial strength. The company management will run more smoothly with good financial strength. This positive impact will certainly increase investors' confidence to invest their capital in the company [4],[5],[8][17], so the following first hypothesis:

H_1: Financial Performance has an effect on Firm Value

C. Leverage and Firm Value

An increase in firm value as good leverage management. Leverage refers to the decision to finance company assets which prioritizes debt or capital. Debt originates from external to the company and has costs that are not cheap because the company will be charged interest costs during the period of borrowing funds. With debt, a company's commitment to the repayment of loans is created, thereby reducing management waste and increasing productivity [18].

Leverage refers to a company's ability to obtain assets or funds from debt. The level of leverage shows creditors' confidence in the company's ability to repay debts, so that it can form investors' perceptions that management can manage its funding sources well [16], so the following second hypothesis:

H_2: Leverage has an effect on Firm Value

D. Conceptual Framework

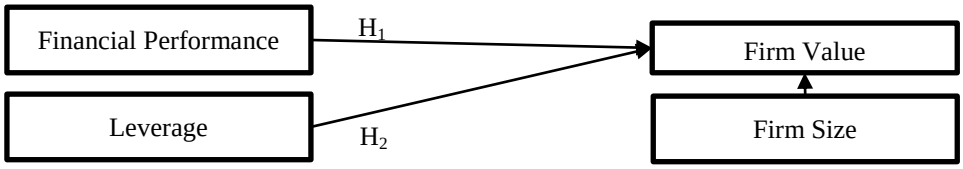

Figure 1: The Conceptual Framework

Source: Processed by Authors (2024)

III. RESEARCH METHOD

This research uses an associative approach that studies the relationship between profitability, leverage, company size and company value. Companies indexed by LQ45 during the 2020-2022 period are the population in this research. The purposive sampling criteria used; are companies that have published complete 2020-2022 annual reports and consistently indexed by LQ45 during the research period. With these criteria, 90 observations were obtained (30 companies x 3-year research period).

This research measures the exogenous variable financial performance (X1) with two indicators, namely ROA (X1.1) and ROE (X1.2), while leverage (X2) is measured with the DAR (X2.1) and DER (X2.2) indicators. The endogenous variable firm value (Y1) is measured by one indicator, namely Tobin's Q (Y1.1). This research adds firm size (C1) with the SIZE indicator (C1.1) as a control variable.

This research uses the SEM-PLS method to investigate changes in company value using the Tobins'Q indicator as done by [5]. Testing was carried out with the help of the WarpPLS 7.0 application. Testing the feasibility of the model will be carried out by analyzing the validity and reliability of each indicator. Acceptance or rejection of the hypothesis is based on t-statistics testing. The operational definitions of variables and indicators are described in Table 1 as follows:

Table 1: Descriptions of Variables

Variable	Definition	Indicator	Scala
Endogenous Firm Value (Y_1)	Firm value shows how much the company values the assets it owns [1].	Tobin's Q= $\frac{\text{MV Equity + BV Debt}}{\text{BV Asset}}$ Source: [12] [10]	Ratio

Exogenous Financial Performance (X_1)	Firm financial performance refers to the profits that can be generated from managing its assets [6]	$ROA=\frac{\text{Earning After Tax}}{\text{Total Asset}}$ $ROE=\frac{\text{Earning After Tax}}{\text{Total Equity}}$ Source: [10]	Ratio Ratio
Leverage (X_2)	Leverage shows the level of use of debt as a source of company funds [6]	$DAR=\frac{\text{Total Debt}}{\text{Total Asset}}$ $DER=\frac{\text{Total Debt}}{\text{Total Equity}}$ Source: [6]	Ratio Ratio
Control Firm Size (C_1)	Firm Size refers to the size of the business scope. Large companies have more opportunities to generate returns on investment [22].	Size=Ln(Total Asset) Source: [10]	Ratio

Source: Processed by Authors (2024)

IV. RESULTS AND DISCUSSION

A. Descriptive Statistics

Table 2 presents the results of descriptive statistical analysis. Tobin's Q has a mean value of 1.794, which shows that the market assessment of LQ45 companies is on average 1.794 greater than its book value. The company value proxied by Tobin's Q ranges from 0.549 to 14.415. The standard deviation value exceeds the average (1.943>1.794), meaning that the distribution of company values among sample companies is quite high.

Financial performance as proxied by ROA and ROE has a mean value of 0.081 and 0.184 respectively. Both standard deviation values exceed the mean (0.083>0.081 and 0.243>0.184), meaning that the distribution of financial performance data in the sample companies is quite high. The distribution of ROA data is between -0.029 to 0.454, while ROE is between -0.073 to 1.451. The minimum value of ROA (-0.029) and ROE (-0.073) is negative, indicating that the sample company experienced losses during the research period.

Table 2: Descriptive Statistics

Indicator	Mean	Min	Max	Standard Deviation	Number of Observations Used
Tobin's Q ($Y_{1.1}$)	1,794	0,549	14,415	1,943	90
ROA ($X_{1.1}$)	0,081	-0,029	0,454	0,083	90
ROE ($X_{1.2}$)	0,184	-0,073	1,451	0,243	90
DAR ($X_{2.1}$)	0,519	0,112	0,890	0,226	90
DER ($X_{2.2}$)	2,243	0,126	16,079	2,997	90
SIZE ($C_{1.1}$)	32,153	30,048	35,228	1,359	90

Source: Managed by Authors (2024)

Leverage proxied by DAR and DER respectively has a mean value of 0.519 and 2.243. This shows that most of the sample company's assets tend to be financed by debt. DAR values range from 0.112 to 0.890, while DER values range from 0.126 to 16.079. Based on the standard deviation and mean values, the distribution of DER among sample companies is higher than DAR (2.997>2.243 and 0.226<0.519). Meanwhile, the control variable company size has a mean value of 32.153, exceeding the standard deviation of 1.359, so the distribution of sample company data is quite low.

B. Validity and Reliability Test

Table 3: Validity Test Results

Validity	Indicator	Research Variable				Information
		X1	X2	C1	Y1	
Loading Factor (Convergent Validity)	ROA (X1.1)	(0,944)	-0,152	-0,020	-0,356	Valid
	ROE (X1.2)	(0,944)	0,152	0,020	0,356	Valid
	DAR (X2.1)	-0,110	(0,998)	0,096	0,194	Valid
	DER (X2.2)	0,110	(0,810)	-0,096	-0,194	Valid
	Size (C1.1)	0,000	0,000	(1,000)	0,000	Valid
	Tobin's Q (Y1.1)	0,000	0,000	0,000	(1,000)	Valid
Average Variance Extracted (AVE)	Financial Performance (X1)	0,892				Valid
	Leverage (X2)		0,874			Valid
	Firm Size (C1)			1,000		Valid
	Firm Value (Y1)				1,000	Valid

Source: Managed by Authors (2024)

Table 4: Reliability Test Results

Composite Reliability	Financial Performance (X_1)	0,943	Reliable
	Leverage (X_2)	0,933	Reliable
	Firm Size (C_1)	1,000	Reliable
	Firm Value (Y_1)	1,000	Reliable

Source: Managed by Authors (2024)

Validity and reliability testing on SEM-PLS was carried out using convergent validity, average variance extracted (AVE) and composite reliability methods. Convergent validity tests the validity of the outer loading of each indicator. An indicator is declared valid in explaining latent variables if it has an outer loading value that is above 0.7. AVE tests the convergent validity and reliability of constructs in the research model. When the AVE value is above 0.5, the construct meets the requirements for convergent validity and reliability. Composite reliability tests whether all the construct indicators for each latent variable are reliable or not. A construct indicator is declared reliable if it has a composite reliability value above 0.7. The test results in Tables 3 and 4 show that all indicators are declared valid and reliable.

C. R Square Test

Table 5: R Square Test Results

	R Square	R Square Adjusted
Firm Value (Y_1)	0,847	0,842

Source: Managed by Authors (2024)

The R Square test aims to find out how well exogenous variables explain changes in endogenous variables. The greater the R Square value, the smaller the error level in the modeling. In Table 5, it can be seen that in the research model, exogenous variables can explain changes in company value by 84.2%, while the remaining 15.8% is explained by other factors not examined in this research. This shows that the exogenous variables in the research are sufficient to explain changes in endogenous variables.

D. Hypothesis Test

The coefficient value shows how much each exogenous variable can explain changes in the endogenous variable. A unidirectional relationship between variables can occur if the coefficient is positive. When the coefficient is negative, there is a relationship in the opposite direction between variables. If the path coefficients have p values below 0.05, then the exogenous variables can significantly influence the endogenous variables. The t-statistics test results are presented in Table 6, while the test model is presented in Figure 2.

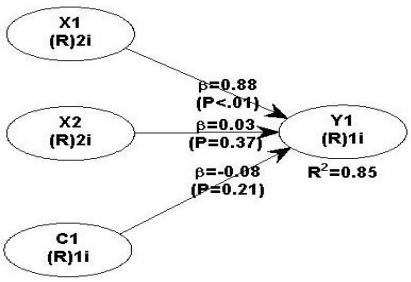

Figure 2: Research Model

Source: Managed by Authors (2024)

Table 6 presents that financial performance (X1) significantly influences company value (Y1) (p-value < 0.001), resulting in acceptance of the first hypothesis (H1). The path coefficient value of 0.884 indicates the unidirectional relationship between financial performance and company value. In line with signal theory, large profits can be a good sign for investors in making investment decisions, which tends to encourage an increase in company value [23]. ROA and ROE are a form of positive signal for LQ45 investors during the COVID-19 period in Indonesia. Large profits as a signal of the possibility of dividend distribution. Increased demand and limited supply will push share prices up, resulting in an increase in company valuation.

Tests in Table 6 show that Tobin's Q cannot be significantly influenced by the leverage (X2) (p-value = 0.371), resulting in the rejection of the second hypothesis (H2). Rejection of H2 also contradicts the findings of [18] which revealed that loan repayment commitments can reduce waste on the part of management and increase productivity. Meanwhile, the control

variable firm size (C1) does not influence company value (Y1). In the COVID-19 situation, even large companies can fail if they do not carry out good management.

Table 6: Hypothesis Test Results

Hypothesis	Variable Relation		Path Coefficients	P *Values*	Decisions
H_1	X_1 (ROA & ROE)	Y_1 (Tobin's Q)	0,884	<0,001	Accepted
H_2	X_2 (DAR & DER)	Y_1 (Tobin's Q)	0,035	0,371	Rejected
	C_1 (SIZE)	Y_1 (Tobin's Q)	-0,083	0,211	

Source: Managed by Authors (2024)

V. CONCLUSION

This research finds that there is a significant effect of financial performance on firm value, and there is no significant effect of leverage on firm value. During COVID-19 in Indonesia, LQ45 investors tend to like profitable companies, because they guarantee a large return on investment. The level of leverage is not relevant in investor decision-making during the COVID-19 period. These findings imply that during the COVID-19 period, LQ45 companies must be able to maintain their financial performance for business continuity and signals for investor decisions.

This research is not free from various limitations. The research was conducted on companies indexed by LQ45 but did not attention to differences in the industry of each issuer. Research only focuses on financial performance without the level of earnings management. Recommendations for future studies with industry type and earnings management to identify factors that influence company value.

VI. REFERENCES

[1] A. H. Prasetyo, *Valuasi Perusahaan*. Jakarta: PPM, 2011.

[2] P. P. Ginting, Dr. I. Sadalia, and Dr. A. S. Silalahi, "Price Earnings Ratio as The Basis for Assessing Fair Price of LQ45 Index Stock in BEI (Indonesia Stock Exchange)," *International Journal of Research & Review*, vol. 6, no. 7, pp. 91–104, 2019.

[3] M. Spence, "Job Market Signaling," *Q J Econ*, vol. 87, no. 3, pp. 355–374, 1973.

[4] B. A. Santoso and I. Junaeni, "Pengaruh Profitabilitas, Leverage, Ukuran Perusahaan, Likuiditas, dan Pertumbuhan Perusahaan Terhadap Nilai Perusahaan," *Owner: Riset & Jurnal Akuntansi*, vol. 6, no. 2, pp. 1597–1609, Mar. 2022, doi: 10.33395/owner.v6i2.795.

[5] M. Nugroho and A. Halik, "The Effect of Growth and Systematic Risk on the Firm's Value: Profitability as a Mediating Variable," *Journal of Economics, Business, & Accountancy Ventura*, vol. 23, no. 3, Mar. 2021, doi: 10.14414/jebav.v23i3.2468.

[6] D. A. Harjito and Martono, *Manajemen Keuangan*. Yogyakarta: Ekonisia, 2013.

[7] N. Pristianingrum, "Pengaruh Ukuran, Profitabilitas, dan Pengungkapan CSR Terhadap Nilai Perusahaan Manufaktur yang Terdaftar Di Bursa Efek Indonesia," in *Prosiding Seminar Nasional dan Call For Paper Ekonomi dan Bisnis*, 2017, pp. 353–364.

[8] N. Aprilia and E. Wahjudi, "Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan dengan Variabel Moderasi Corporate Governance," *Jurnal Riset Akuntansi dan Keuangan*, vol. 9, no. 3, pp. 525–534, 2021, doi: 10.17509/jrak.v9i3.32512.

[9] A. D'Amato and C. Falivena, "Corporate Social Responsibility and Firm Value: Do Firm Size and Age Matter? Empirical Evidence from European Listed Companies," *Corp Soc Responsib Environ Manag*, vol. 27, no. 2, pp. 1–16, Mar. 2019, doi: 10.1002/csr.1855.

[10] H. N. Dang, V. T. T. Vu, X. T. Ngo, and H. T. V. Hoang, "Study The Impact of Growth, Firm Size, Capital Structure, and Profitability on Enterprise Value: Evidence of Enterprises in Vietnam," *Journal of Corporate Accounting and Finance*, vol. 30, no. 1, pp. 144–160, Jan. 2019, doi: 10.1002/jcaf.22371.

[11] R. Harianto and A. Hendrani, "Pengaruh Profitabilitas, Leverage dan Ukuran Perusahaan Terhadap Nilai Perusahaan," *Fair Value: Jurnal Ilmiah Akuntansi dan Keuangan*, vol. 4, no. 9, 2022.

[12] A. Husna and I. Satria, "Effects of Return on Asset, Debt to Asset Ratio, Current Ratio, Firm Size, and Dividend Payout Ratio on Firm Value," *International Journal of Economics and Financial Issues*, vol. 9, no. 5, pp. 50–54, Sep. 2019, doi: 10.32479/ijefi.8595.

[13] D. E. Putri, R. N. Ilham, and A. Syahputri, "Efek Mediasi Profitabilitas pada Pengaruh Leverage dan Ukuran Perusahaan Terhadap Nilai Perusahaan," *Edunomika*, vol. 05, no. 02, pp. 1–12, 2021.

[14] N. S. A. Salam, "Pengaruh Kinerja Keuangan terhadap Nilai Perusahaan dengan Variabel Moderasi Dividen," *Jurnal Riset Akuntansi dan Keuangan*, vol. 11, no. 1, pp. 131–150, 2023, doi: 10.17509/jrak.v11i1.45254.

[15] N. P. Santosa, A. D. R. Atahau, and S. Martono, "Pengaruh Struktur Modal Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Mediasi," *Jurnal Riset Akuntansi dan Keuangan*, vol. 10, no. 2, pp. 315–328, 2022, doi: 10.17509/jrak.v10i2.37971.

[16] Y. Thanatawee, "Institutional Ownership and Firm Value in Thailand," *Asian Journal of Business and Accounting*, vol. 7, no. 2, p. 2014, 2014.

[17] I. F. Yani and Yatimin, "The Effect of Firm Size, Leverage, Profitability and Dividend Policy on Firm Value in Retail and Wholesale Subsectors Listed on IDX Period 2015-2020," *Balance Jurnal Ekonomi*, vol. 18, no. 1, pp. 1–8, 2022.

[18] F. Y. Astuti, S. Wahyudi, and W. Mawardi, "Analysis of Effect of Firm Size, Institutional Ownership, Profitability, and Leverage on Firm Value With Corporate Social Responsibility (CSR) Disclosure as Intervening Variables (Study on Banking Companies Listed on Bei Period 2012-2016)," *Jurnal Bisnis STRATEGI*, vol. 27, no. 2, pp. 95–109, 2018.

[19] S. F. Bon and S. Hartoko, "The Effect of Dividend Policy, Investment Decision, Leverage, Profitability, and Firm Size on Firm Value," *European Journal of Business and Management Research*, vol. 7, no. 3, pp. 7–13, May 2022, doi: 10.24018/ejbmr.2022.7.3.1405.

[20] Q. Tsaniatuzaima and E. Maryanti, "Pengaruh CR, ROA, DER terhadap Nilai Perusahaan dengan Good Corporate Governance sebagai Variabel Moderasi," *Owner: Riset & Jurnal Akuntansi*, vol. 6, no. 3, pp. 2253–2265, Jul. 2022, doi: 10.33395/owner.v6i3.880.

[21] F. A. Wahyudi and M. Sholahuddin, "The Effect of Profitability, Leverage, and Firm Size on Firm Value (Case of Registered Company in Jakarta Islamic Index 2015-2020 period)," in *Advances in Economics, Business and Management Research*, 2022, pp. 380–385.

[22] S. Wijayaningsih and A. Yulianto, "The Effect of Capital Structure, Firm Size, and Profitability on Firm Value with Investment Decisions as Moderating," *Accounting Analysis Journal*, vol. 10, no. 3, pp. 150–157, 2021, doi: 10.15294/aaj.v10i3.50744.