

The Role of Company Size and Board of Commissioners on Company Value in Disrupted Economics

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ABSTRACT

The Covid-19 condition that has passed has provided many important lessons and has disrupted the performance and productivity of almost all industries, including manufacturing companies. Such condition has become a challenging task for companies to find solutions to maximize company value to survive, let alone increase in these conditions. Bad like that. This research aims to confirm whether company size, board of commissioners, and Covid-19 conditions significantly affect company value. By taking data from manufacturing companies during the past two years of research during the Covid-19 period, this study uses a descriptive quantitative approach with multiple linear regression analysis techniques and modeling Covid-19 as a moderator. This study uses a purposive sampling method to select manufacturing companies on the Indonesia Stock Exchange. The research data spans two years upon 159 companies, resulting in 318 data points. The research results show that the variables of company size and board of commissioners do not significantly affect company value, but Covid-19 can significantly influence company value. Covid-19 then moderated the company size and board of commissioners variables, and it was discovered that the company size and board of commissioners variables had a significant influence on company value; this demonstrates that Covid-19 has had a devastating effect on company value.

Keywords: Board Of Commissioners, Company Value, Covid-19, Size.



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INTRODUCTION

Maximizing firm value is one of the goals of managers as agents. Therefore, firm value is a central focus of corporate finance. The objective of this study is to assess the magnitude of the influence of company size and the board of commissioners, with the moderating effect of Covid-19, on firm value within the manufacturing sector of companies listed on the Indonesia Stock Exchange (BEI) over the year of 2020-2021. This research paper provides a comprehensive review of previous

studies conducted on the topic of company size. It aims to analyze the significance of company size, specifically in terms of assets and sales, on firm value. Additionally, the study examines the impact of the board of commissioners, considering both the total number of board members and the presence of independent commissioners, on firm value. Furthermore, the research investigates the influence of company size, in terms of total assets and sales, moderated by the Covid-19 pandemic on firm value. Similarly, it explores the significance of the board of commissioners, considering both the total number of board members and the presence of independent commissioners, moderated by the Covid-19 pandemic on firm value. Lastly, the study delves into the relationship between company size and the board of commissioners, considering the moderating effect of the Covid-19 pandemic on firm value.

The national manufacturing industry saw a notable deterioration in its performance starting in March 2020, as seen by a notable decrease in the Manufacturing PMI (Purchasing Managers' Index) within the manufacturing sector. According to Kusuma, (2019), there was a decline in the metric from 51.9 in February 2020 to 45.3 in March 2020, and then reached its nadir at 27.5 in April 2020. The aforementioned phenomenon was corroborated by an authoritative declaration issued by the government via the Ministry of Industry in April 2020. The statement highlighted that numerous sectors within the manufacturing industry encountered a notable reduction in production capacity, reaching as high as 50 percent. However, it is worth noting that the healthcare equipment and pharmaceutical industries were exceptions to this trend (CNN Indonesia, 2020).

According to the World Bank's projections in 2020 CCAF et al., (2020), the world economy was anticipated to see a contraction of 5.2 percent as a consequence of the Covid-19 pandemic, resulting in the most severe recession since the conclusion of World War II (<https://thedocs.worldbank.org>). The global economy has been significantly affected by the Covid-19 pandemic, leading to protracted economic turbulence. This condition has resulted in notable impacts on equity markets and other stock indexes across the globe (CCAF et al., 2020). Based on the findings of Larcker et al.'s investigation, it was observed that a mere 0.7 percent of corporations initially provided disclosure regarding the ramifications of the Covid-19 epidemic. As the severity of the pandemic escalated, an increasing number of companies commenced the disclosure of the repercussions of Covid-19. A significant majority of these companies, around 99.6%, furnished some form of disclosure pertaining to the pandemic (Larcker et al., 2020).

Conversely, there has been an observable decrease in the value of firms since the initiation of the Covid-19 pandemic. This is supported by the substantial decline of 38 percent in the Dow Jones Industrial Average during March 2020, as well as the 35 percent decrease in the Standard & Poor's Global Ratings Index (S&P) within the span of a single month, specifically February Johnston, (2020). Bose et al., (2022) research asserts that Covid-19 has affected firm value. The assessment of a company as a whole, including investment offers, sometimes involves the consideration of firm value as an important signal by external parties. When a company's valuation is elevated, the market generally perceives the company as being in a favorable operational state and capable of ensuring the long-term preservation of shareholders' interests. Investors allocate their capital by purchasing stocks with the expectation of obtaining future economic advantages. Hence, it can be inferred that when a company's profit-generating capacity improves, investors want larger economic benefits, leading to a subsequent positive effect on the company's overall worth.

Large companies often have widely distributed shares, meaning they are less controlled or dominated by specific parties. Conversely, smaller enterprises often have a higher degree of share concentration within a limited geographic scope. According to Setiadharmas & Machali, (2017), there is a greater propensity for large corporations to engage in risk-taking behavior by selling their shares in order to fulfill their sales growth requirements. The magnitude of a corporation can be inferred from the aggregate value of its assets. According to Oktaviani, (2020), there exists a positive correlation between the size of a firm and its ability to secure both internal and external sources of

funding. This, in turn, can have a significant impact on the overall worth of the organization. Prior studies examining the influence of organizational scale on the valuation of firms have produced divergent findings. According to the study conducted by Mule et al., (2015), it was determined that the size of a company does not exhibit a statistically significant impact on its market value. Conversely, research undertaken by Berger and Patti indicates a favorable correlation between company size and firm value (Al-Slehat, 2019).

On another note, the expertise or counseling provided by board members serves as a quality service for management and the company, contributing to firm value in a way the market cannot provide. Board members with expertise in specific areas can offer valuable insights in shaping the company's strategy and organization (Daily & Dalton, 1994). The key internal mechanism employed by the board of commissioners is the control function, which serves to monitor management's opportunistic conduct. This function plays a crucial role in aligning the interests of shareholders and managers (Oktari et al., 2018).

The presence of Independent Commissioners is crucial for a company's overall value, as Independent Commissioners can play a role in resolving conflicts by communicating shareholder objectives to the management. As companies face increasing complexity and challenges, internal company commissioners have several limitations, not only in terms of their level of independence but also due to the quality of individual internal commissioners (Malini et al., 2021). The presence of Independent Commissioners is continually reinforced to ensure their effectiveness, often with the support of an Audit Committee (Malini et al., 2021), and studies like (Oktari et al., 2018) have shown that Independent Commissioners do indeed have an impact on firm value.

Hypotheses Development

Large organizations are characterized by their strong operational consistency in conducting their business activities. Signaling theory posits that the magnitude of a corporation is regarded as a favorable indication by investors, suggesting that the company possesses promising possibilities. Hence, the appeal of larger corporations to investors results in a surge in stock prices and overall firm valuation (Abdalmuttaleb Musleh Al-Sartawi & Reyad, 2018). This phenomenon is consistent with the findings of Adiputra & Hermawan, (2020) and Faisal et al., (2020), whose study indicates a positive relationship between company size and firm value.

A large company size facilitates more accessible access to the capital markets, enabling the company to obtain additional funding for its operations readily. The concept of firm size refers to the extent or quantity of the assets possessed by an organization (Oktaviani, 2020). The quantity of a company's total assets might serve as an indicator of its size. Pangaribuan & Pangaribuan, (2020), who researched banking companies in Indonesia, found that corporate size, as proxied by total assets, could not significantly influence company value even though it was mediated by public information disclosure.

Board members are a management group responsible for overseeing and ensuring the company operates in line with its objectives. An imbalanced number of directors on the board can impact the efficiency of decision-making processes, which, in turn, can lead to a decline in company performance and subsequently affect the decrease in firm value (Doku et al., 2023). The Board of Commissioners plays a crucial role in a company, mainly overseeing operations, implementing corporate governance, and managing risks and internal controls. The major component of Corporate Governance is represented by the Board of Commissioners, whose primary role is to ensure the implementation of the company's strategic objectives, provide oversight of management's activities, and enforce responsibility within the organization (Kufo & Shtembari, 2023). The primary function of the Board of Commissioners is to act as a supervisory entity and exert influence over the firm's value (Eklemet et al., 2023). The correlation between the quantity of board members and business value is substantiated by the viewpoints pertaining to the service and control functions that the board

is capable of offering. Given that both of these functions are more likely to be provided by the Board of Commissioners in the corporate governance structure in Indonesia, this research hypothesis is limited to the size or number of board members only. Oktari et al., (2018) examined corporate governance factors and board structure's impact on a company's market value.

In the research conducted by Sudirman et al., (2022) and Souther, (2021), it was found that board size has a negative impact on firm value. Conversely, a positive relationship was found by Oktari et al., (2018), Buallay et al.,(2017), and Lidyah et al., (2019). In the context of Pakistan corporate governance, Bhat et al., (2018) did a study which found that the size of the board of directors does not have a significant impact on business value.

This research is different from previous ones (this is the novelty of this research) because this research uses real annual report data during the Covid-19 period so that real practices can be found regarding company value reported during the disrupted economics period (during the Covid-19 period), which is influenced by company size (which is proxied by total assets and total sales) and the role of the board of commissioners as the highest supervisor (which is proxied by the size and independence of the board of commissioners).

The global spread of Covid-19 in 2020 resulted in a decrease in demand for products, heightened levels of uncertainty, and disruptions in supply networks. As a result, strict quarantine policies were implemented in many countries, severely limiting economic activities (Goodell, 2020; Zhang et al., 2020)). Previous researchers have shown that Covid-19 resulted in a decrease in the Gross Domestic Product (GDP) of countries, with economic losses ranging from \$30 billion to \$100 billion, impacting changes in market demand and supply as well as negative returns on capital (Yang et al., 2023). Intensive news coverage of the pandemic can lead to global panic, and such catastrophic events can trigger negative market responses (Ichev & Marinč, 2018).

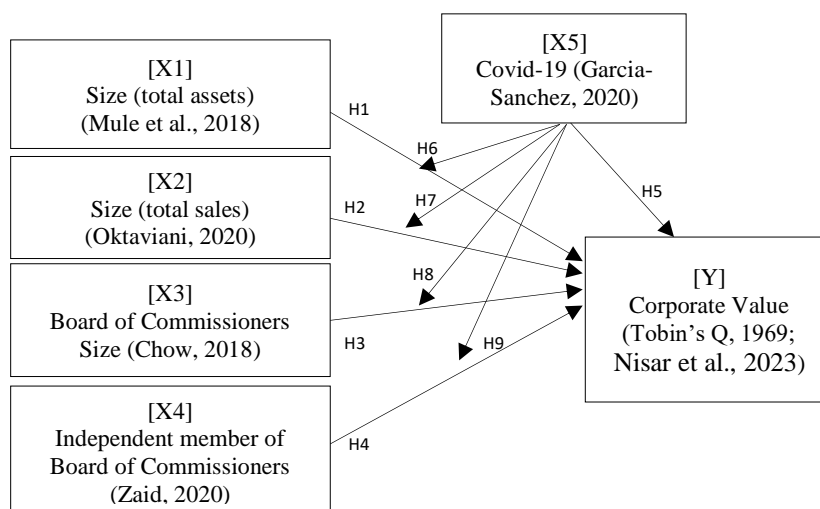


Fig 1. Conceptual Framework

Source: several sources as stated in the figure

The ongoing epidemic has had a detrimental impact on the majority of firms, however a minority have experienced advantageous outcomes as a result. According to the Central Statistics Agency Badan Pusat Statistik, (2020), corporate sectors negatively impacted include corporate services, accommodation, food and beverages, and transportation. On the other hand, the health sector, water supply, waste management, recycling, and information and communication are among the corporate sectors that have benefited. Because the impact on each company varies, there are differences in the

amount of information disclosed regarding the Covid-19 impact. Each company must provide adequate and informative disclosures in its way. Research has indicated that the presence of Covid-19 has a detrimental effect on the overall worth of firms. The ongoing epidemic has imposed limitations on economic operations, leading to shortened manufacturing cycles, diminished consumer demand, business closures, and heightened levels of unemployment. According to recent studies conducted by Bose et al., (2022), Yang et al., (2023), and Poretti & Heo, (2022), it has been observed that countries facing more severe challenges arising from the pandemic tend to exert a stronger negative influence on capital markets.

The concept of corporate value is an essential component of a corporation's existence. The firm value of a corporation encompasses various dimensions, including management, decision-making, performance, and prospects (Muren & Pangaribuan, 2022). This value is subject to evaluation both internally and outside. In order to augment the worth of a corporation, it is imperative for proprietors and managers to establish a shared set of objectives and possess the capacity to make prudent financial choices, all the while adopting effective corporate governance. The development of corporate governance and managerial control is influenced by the ownership structure (AlQadasi & Abidin, 2018).

As the primary goal of a company is to enhance firm value by increasing the wealth of its owners or shareholders (Oktari et al., 2018), achieving this objective requires the effective management of the company's financial activities, known as financial management. According to the concept of Corporate Governance, a company can attain maximum firm value when the functions and responsibilities of each actor within the modern business organization can be separated. This separation allows the company to achieve optimal firm value (Biçer & Şit, 2023).

This study investigates the impact of company size and the board of commissioners' role on firm value, with Covid-19 as a moderating factor, in manufacturing firms listed on the Indonesia Stock Exchange. The data utilized for this analysis spans the period from 2020 to 2021. The theoretical/conceptual framework of this research is depicted in Figure 1, as described in the preceding explanations.

Based on the descriptions presented above, the research hypotheses proposed for this study are as follows:

- H1: Company size (proxied by total assets) has a significant impact on firm value.
- H2: Company size (proxied by total sales) has a significant impact on firm value.
- H3: Board of Commissioners' size has a significant impact on firm value.
- H4: Independent Board of Commissioners has a significant impact on firm value.
- H5: Covid-19 has a significant impact on firm value.
- H6: Covid-19 can significantly moderate the impact of company size (proxied by total assets) on firm value.
- H7: Covid-19 can significantly moderate the impact of company size (proxied by total sales) on firm value.
- H8: Covid-19 can significantly moderate the impact of board of commissioners' size on firm value.
- H9: Covid-19 can significantly moderate the impact of independent board of commissioners on firm value.

METHODS

The researcher employed secondary data as the foundation for the research findings. This study employs a quantitative approach to investigate the association between independent and dependent factors. It adopts a causal perspective, aiming to ascertain the extent of the impact exerted by the independent variables on the dependent variable. The present study utilized data extracted from the

annual reports of manufacturing firms registered on the Indonesia Stock Exchange. This research uses a purposive sampling technique, the data spanned the period from 2020 to 2021 and encompassed a total of 159 organizations. The study was conducted for a duration of two years, yielding a total of 318 data points for analysis.

Corporate Size

The determination of a company's size is contingent upon the magnitude of its assets and is evaluated in conjunction with the company's overall financial state. The present study used the theoretical framework established by Faisal et al., (2020) to assess the size of the organization. This framework utilizes the natural logarithm of total assets, which is computed using the following Excel formula:

$$Firm\ size = \text{Logarithm natural (Ln) of Total Assets}$$

Subsequently, the researcher aims to determine the firm's value based on the total sales for the current period. For this purpose, the second formula is employed, which uses the natural logarithm of total sales, as follows:

$$Firm\ size = \text{Logarithm natural (Ln) of Total Sales}$$

Board of Commissioner

The Board of Commissioners is an institution responsible for overseeing and advising the board of directors in line with the company's interests. If the board performs well, the company's value can increase. When the number of commissioners increases, the effectiveness in improving performance and company value will also increase. According to (Chow et al., 2018), the Board of Commissioners variable is calculated as the ratio of Independent Commissioners to the total number of Commissioners in the composition of the Board of Commissioners. Moreover, according to A.A Zaid et al., (2020), the Board of Commissioners variable is calculated as the total number of commissioners in the composition.

Covid-19

Covid-19, as a proxy for disrupted economics, is measured using content analysis method to categorize statements/words related to Covid-19 in the annual reports. This method is done to assess the extent of awareness and concern of each company regarding the Covid-19 pandemic (García-Sánchez & García-Sánchez, 2020).

Corporate Value

Tobin's Q, a metric created by Tobin, (1969), is employed to evaluate the worth of the company. Various approaches and formulas have been developed to calculate Tobin's Q, including those proposed by Wernerfelt & Montgomery, (1988), Lindenberg & Ross, (1981), and Chung & Pruitt, (1994). The abbreviation BV, which stands for book value, denotes the value recorded in the books of an entity, while MV, which stands for market value, refers to the value determined by the market. When Tobin's Q exceeds 1, it signifies that the market value of a firm surpasses the book value of its assets, suggesting a potential overvaluation of the company by the market. In contrast, a Tobin's Q ratio below 1 indicates that the market value of a company is lower than its book value of assets, implying a potential undervaluation of the company by the market. The utilization of Tobin's Q has been observed in several scholarly investigations undertaken by Bose et al., (2022), Behl et al., (2022), Qiu et al., (2021), Wong et al., (2021), Al-Slehat, (2019), Behl et al., (2022), and Ahmad et al., (2023). The formula for Tobin's Q is as follow:

$$Tobin's\ Q = \frac{BV\ total\ assets - BV\ common\ equity + MV\ common\ equity}{BV\ total\ assets}$$

Based on the variables that have been presented, a more detailed description of the research operational variables and additional information about the measurement of the research variables is provided in Table 1. Operational Research Variables.

Table 1. Operational Research Variables.

Variables	Measurement	Scale
Corporate Size (Total Assets)	Natural logarithm (Ln) of Total assetv (Al-Slehat, 2019; Mule et al., 2015).	Ratio
Corporate Size (Total Sales)	Natural logarithm (Ln) of Total sales (Mule et al., 2015)	Ratio
Board of Commissioners Size	Number of Board of Commissioners: Presented in the annual reports. (Chow et al., 2018; Eklemet et al., 2023)	Ratio
Independent of board of commissioners	Number of Independent Board of Commissioners: Presented in the annual reports. (Zaid et al., 2020)	Ratio
Covid-19	Counting each statement or word "Covid-19" found in the annual reports. (García-Sánchez & García-Sánchez, 2020; Yang et al., 2023)	Ratio
Corporate Value	Tobin's Q = (BV total asset - BV common equity + MV common equity) / BV total asset (Nisar et al., 2023; Tobin, 1969)	Ratio

Source: several sources as stated in the table

Analysis Method

The analytical approach used is the associative method, which examines the impact of company size variables, the board of commissioners, and the Covid-19 pandemic on company value. Simultaneously, the model developed also tests the potential moderating effect of Covid-19 on the relationship between company size, board of commissioners and company value. This research also assessed data quality and used Linear Regression statistical techniques and determination tests. Data analysis steps include data suitability testing, descriptive data description, correlation testing, regression analysis and determination test.

RESULTS AND DISCUSSION

According to the data presented in Table 2, the descriptive statistics indicate that the lowest recorded value for the variable representing company size, as measured by total assets, is 25. Conversely, the highest recorded value for this variable is 33. The mean value of the company size variable, as determined by total assets in this study, is 28.40, accompanied by a standard deviation of 1.626, indicating a positive variation from the mean. The company size variable, as determined by total sales, has a minimum value of 22 and a maximum value of 32. The average value of the company size variable based on total sales in this research is 28.08, with a positive standard deviation of 1.833.

Table 2. Descriptive Data

	N	Min.	Max.	Mean	Std. Deviation
Ln of total asset	318	25	33	28,40	1,626
Ln of total sales	318	22	32	28,08	1,833
Board of Comm. size	318	1	10	3,90	1,709
Board of Comm. Indep.	318	1	4	1,57	0,749
Covid-19	318	8	262	69,19	46,819
Tobin's Q	318	0	14	1,61	1,486
Valid N (listwise)	318				

Source: processed data (2023)

The average natural logarithm of total assets increased by Rp 833,740,228,174 billion from 2020 to 2021, representing a percentage increase of up to 83%. Similarly, the natural logarithm of total sales also increased by Rp 730,604,761,612, indicating that manufacturing companies in the 2020-2021 period remained relatively stable and capable of generating significant profits and sales.

The total board of commissioners variable has a range from a minimum value of 1 to a maximum value of 10. The research findings indicate that the mean value of the whole board of commissioners variable is 3.90, accompanied by a standard deviation of 1.709, which is positively skewed. The variable representing the independent board of commissioners has a minimum value of 1 and a maximum value of 4. The average value of the independent board of commissioners variable in this research is 1.57, with a positive standard deviation of 0.749. Table 2 also shows that the average values of both the total board of commissioners and independent board of commissioners variables increased from 2020 to 2021. This condition indicates that the effectiveness in improving performance and firm value also improved in manufacturing companies during the 2020-2021 period, which remained relatively stable and capable of generating significant profits and sales.

The minimum value of the Covid-19 variable is 8, while the maximum is 262. The average value of the Covid-19 variable in this research is 69.19, with a positive standard deviation of 46.819. The number of occurrences of the word "Covid-19" indicates the level of awareness and concern of each company regarding the Covid-19 pandemic. Therefore, the higher the frequency of the terminology "Covid-19" in a company's reports, the more it signifies that the company is aware of and concerned about the ongoing pandemic. With an average Covid-19 variable value of 69.19, it means that approximately 69.19% of manufacturing companies in 2020 and 2021 had awareness and concerns about the Covid-19 pandemic, allowing them to adapt effectively.

Normality

The normality test for the data was conducted using a One-Sample Kolmogorov-Smirnov (K-S) Test. When the value of Asymp. Sig. (2-tailed) > 0.05, it is considered normal. As observed in the table above, the result of Asymp. Sig. (2-tailed) is 0.154, which is greater than 0.05. This indicates that the data is normally distributed.

Tabel 3. One-Sample K-S Test

		Unstandardized Residual
N		318
Normal Parameters ^{a,b}	Mean	0,0000000
	Std. Deviation	1,43093653
Most Extreme Differences	Absolute	0,207
	Positive	0,207
	Negative	-0,166
Test Statistic		0,207
Asymp. Sig. (2-tailed)		,154 ^c

Source: processed data (2023)

Correlations

The correlation coefficient is a statistical measure that quantifies the covariance or relationship between two variables. The coefficient of correlation provides a measure of the degree and direction

of the linear link between two random variables. A positive linear link between two variables can be inferred when the correlation coefficient is positive.

Based on the Table 4. Correlations: The variables measuring company size based on total assets and sales have a reasonable correlation because the significance values are more significant than 0.05. Specifically, the correlation coefficient for the company size variable based on total assets is 0.072, and for the company size variable based on total sales, it is 0.102. Similarly, the total board of commissioners variable has a correlation coefficient of 0.073, and the independent board of commissioners has a coefficient of 0.078. Additionally, Covid-19 is indicated to have a strong correlation with a correlation coefficient of 0.187.

Table 4. Correlations

		Ln_TA	Ln_TS	Board size	Board Independ.	Covid-19	Tobin's Q
Ln_TA	Pearson Correlation	1	,891**	,600**	,533**	,191**	0,072
	Sig. (2-tailed)		0,000	0,000	0,000	0,001	0,197
	N	318	318	318	318	318	318
Ln_TS	Pearson Correlation	,891**	1	,578**	,503**	,187**	0,102
	Sig. (2-tailed)	0,000		0,000	0,000	0,001	0,068
	N	318	318	318	318	318	318
Board size	Pearson Correlation	,600**	,578**	1	,835**	,176**	0,073
	Sig. (2-tailed)	0,000	0,000		0,000	0,002	0,195
	N	318	318	318	318	318	318
Board Independ.	Pearson Correlation	,533**	,503**	,835**	1	,204**	0,078
	Sig. (2-tailed)	0,000	0,000	0,000		0,000	0,163
	N	318	318	318	318	318	318
Covid-19	Pearson Correlation	,191**	,187**	,176**	,204**	1	-0,187**
	Sig. (2-tailed)	0,001	0,001	0,002	0,000		0,001
	N	318	318	318	318	318	318
Tobin's Q	Pearson Correlation	0,072	0,102	0,073	0,078	,187**	1
	Sig. (2-tailed)	0,197	0,068	0,195	0,163	0,001	
	N	318	318	318	318	318	318

** . The correlation demonstrates statistical significance at the 0.01 level, using a two-tailed test.

* . The correlation exhibits statistical significance at the 0.05 level, using a two-tailed test.

Source: processed data (2023)

Regressions

Based on Table 5, F-test results reveal that the computed F-value is 2.677. Referring to the F-table with a significance level (alpha) at 5% and degrees of freedom (df1) equal to $(k-1) = 4-1 = 3$, and df2 equal to $(n-k) = 318-1 = 317$, the critical F-value is 2.64. Therefore, the computed F-value (2.677) exceeds the critical F-value (2.64).

Furthermore, considering the probability value from the data, which is 0.005 (less than 0.05). The findings suggest that the size of a company, the composition of its board of commissioners, and the impact of the Covid-19 pandemic are statistically significant factors that influence the value of manufacturing firms listed on the Indonesia Stock Exchange over the year of 2020-2021. The findings of this study indicate that the developed model has a strong level of appropriateness. Moreover, it is evident that variables such as company size, board of commissioners, and the presence of the Covid-19 pandemic all exert a considerable influence on firm value. Hence, the

dimensions of firm size, board of commissioners, and the impact of the Covid-19 pandemic are pivotal factors in ascertaining the valuation of manufacturing enterprises inside the Indonesian sector.

Table 5. F-test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	50,768	9	5,641	2,677	,005 ^b
Residual	649,083	308	2,107		
Total	699,851	317			

Dependent Variable: Tobin Q

Predictors: (Constant), DKI*Covid-19, LN_TS, TDK, DKI, LN_TA, Covid-19, LN_TS*Covid-19, TDK*Covid-19, LN_TA*Covid-19

Source: processed data (2023)

From Table 6. T-test. The significance level for the t-tests used in this study is < 0.05. From the table above, we can observe that the variables measuring company size based on total assets (0.197) and total sales (0.068) do not significantly impact firm value when not moderated by Covid-19. The total board of commissioners variable (0.195) and the independent board of commissioners variable (0.163) are relatively low on firm value when not moderated by Covid-19. However, when Covid-19 moderates the variables, company size and board of commissioners significantly impact firm value. The Covid-19 variable (0.001) significantly impacts firm value, indicating that, in the constructed model, Covid-19 strengthens the relationship with the firm value. The study concludes that Covid-19 enhances the relationship between company size, board of commissioners, and firm value.

Tabel 6. T-test

	Variabel	Adj. R'	Beta	t	Sig.
Ln_TA	X1 → Y	0,002	0,066	1,292	0,197
	X1 → Y moderated by Covid-19	0,026	-0,000	2,961	0,003
Ln_TS	X2 → Y	0,007	0,083	1,831	0,068
	X2 → Y moderated by Covid-19	0,031	-0,000	2,943	0,003
	X3 → Y	0,002	0,063	1,300	0,195
Board size	X3 → Y moderated by Covid-19	0,023	-0,002	2,779	0,006
	X4 → Y	0,003	0,155	1,397	0,163
Board Independ.	X4 → Y moderated by Covid-19	0,020	-0,002	2,543	0,011
	Covid-19	X5 → Y	0,032	-0,006	3,383

Source: processed data (2023)

Discussions

According to the conclusions of the research, it has been ascertained that the magnitude of a company, as measured by its total assets and total revenues, overall, it does not have a significant influence on company value. The results of the t-test reveal that the p-values for the natural logarithm of total assets (0.197) and the natural logarithm of total sales (0.068) exceed the threshold of 0.05. This implies that there is no significant impact of company size on firm value. The t-test result indicates that the computed t-value is 1.652. The regression coefficient in a positive direction suggests that there is a positive relationship between company size and firm value, indicating that

when the former increases, the latter tends to increase as well. This research does not align with previous findings, which stated that company size is an important determining variable in influencing company value and stock market prices (Al-Slehat, 2019; Oktaviani, 2020). The result of this study shows that in dire economic conditions (such as during Covid-19), company size cannot be a determinant of increasing company value.

Additionally, the findings of the study indicate that Covid-19, when considered as a moderating variable, exerts statistically significant influence on the value of firms. The regression analysis reveals a statistically significant relationship between company size and firm value. Specifically, the variables evaluating company size based on total assets and total revenues have substantial partial effects on firm value ($0.003 < 0.05$). Hence, it may be argued that Covid-19 acts as a moderating variable, enhancing the association between the size of a company and its overall worth. These findings support the statement that Covid-19 has negatively influenced the economy, corporate governance practices and company value (Bose et al., 2022).

The research findings also suggest that both the entire board of commissioners and independent board of commissioners exert a detrimental influence on business value. The findings of the t-test indicate that both the total board of commissioners ($p = 0.195$) and the independent board of commissioners ($p = 0.163$) exhibit p-values over the threshold of 0.05. This suggests that the board of commissioners does not have a statistically significant impact on company value. The t-test analysis further indicates that the obtained t-value is 1.652. The positive sign of the regression coefficient indicates a positive relationship between the number of board of commissioners and the firm's worth, implying that an increase in the former tends to result in an increase in the latter. This finding contrasts the statement that the board of commissioners, as the highest supervisor, significantly increases company value (Malini et al., 2021; Oktari et al., 2018). In conditions where Covid-19 is spreading, the board of commissioners, which functions as the highest supervisor of the company (as measured by the size of its members and the independence of the members of the board of commissioners), cannot function effectively. This finding means that conditions during the highly disrupted economy during Covid-19, even the board's supervisory function, have been greatly disrupted.

Additionally, the findings of the study indicate that Covid-19, when considered as a moderating variable, exerts a favorable and statistically significant influence on the value of firms. The regression analysis reveals the impact of the board of commissioners on firm value, with statistically significant findings for both the total board of commissioners ($0.006 < 0.05$) and the independent board of commissioners ($0.011 < 0.05$) in relation to firm value. Hence, the presence of Covid-19 acts as a moderating factor, enhancing the association between the board of commissioners and the value of the enterprise. The last, it is found that Covid-19 positively impacts firm value. The t-test results show a result of 0.001, which is less than 0.05, indicating that Covid-19 significantly affects firm value. The t-test result also reveals that the calculated t-value is 3.383. The positive direction of the regression coefficient suggests that as the level of Covid-19 increases, the firm's value tends to increase. The past condition of Covid-19 has greatly disrupted the economy, disrupted manufacturing operations in Indonesia, had a normal impact on company size concerning company value, and impacted the supervisory role of the board of commissioners in carrying out its function to increase company value. For this reason, it is necessary to build a strong foundation in corporate governance so that the company's operational pillars become strong or are not too disturbed by unfavorable circumstances due to future global factors.

CONCLUSION

While previous research has demonstrated that total assets and total sales (as measures of company size) significantly influence firm value, this study reveals that during the Covid-19 period, this significant influence cannot be found. Moreover, the findings of this study indicate that the board of commissioners, serving as the company's top supervisory entity (represented by the number of board members), faces challenges in efficiently carrying out its responsibilities within the Covid-19 pandemic. This phenomenon indicates that in times of economic disruption, like as the ongoing Covid-19 pandemic, the influence of the board of commissioners, as measured by the size of its members, does not have a substantial effect on the value of the enterprise. Nevertheless, the efficacy of assessing the worth of manufacturing enterprises in Indonesia can still be achieved through the establishment of an autonomous panel of commissioners.

The previous Covid-19 epidemic is perceived as having the capacity to disrupt the systematic corporate governance because of the inadequate performance of the board of commissioners, as indicated by the composition of board members. Consequently, this disruption does not have a substantial impact on firm value. An additional noteworthy and stimulating dimension of the study's results pertains to the role of Covid-19 as a moderating factor in the association between company size and the efficacy of the board of commissioners, as indicated by the composition of board members and the presence of independent board members, in influencing firm value.

REFERENCES

- Abdalmuttaleb Musleh Al-Sartawi, A., & Reyad, S. (2018). Signaling theory and the determinants of online financial disclosure. *Journal of Economic and Administrative Sciences*, 34(3), 237–247. <https://doi.org/10.1108/JEAS-10-2017-0103>
- Adiputra, I. G., & Hermawan, A. (2020). The effect of corporate social responsibility, firm size, dividend policy and liquidity on firm value: Evidence from manufacturing companies in Indonesia. *International Journal of Innovation, Creativity and Change*, 11(6), 325–338.
- Al-Slehat, Z. A. F. (2019). Impact of Financial Leverage, Size and Assets Structure on Firm Value: Evidence from Industrial Sector, Jordan. *International Business Research*, 13(1), 109. <https://doi.org/10.5539/ibr.v13n1p109>
- AlQadasi, A., & Abidin, S. (2018). The effectiveness of internal corporate governance and audit quality: the role of ownership concentration – Malaysian evidence. *Corporate Governance: The International Journal of Business in Society*, 18(2), 233–253. <https://doi.org/10.1108/CG-02-2017-0043>
- Behl, A., Kumari, P. S. R., Makhija, H., & Sharma, D. (2022). Exploring the relationship of ESG score and firm value using cross-lagged panel analyses: case of the Indian energy sector. *Annals of Operations Research*, 313(1), 231–256. <https://doi.org/10.1007/s10479-021-04189-8>
- Bhat, K. U., Chen, Y., Jebran, K., & Bhutto, N. A. (2018). Corporate governance and firm value: a comparative analysis of state and non-state owned companies in the context of Pakistan. *Corporate Governance: The International Journal of Business in Society*, 18(6), 1196–1206. <https://doi.org/10.1108/CG-09-2017-0208>
- Biçer, M., & Şit, A. (2023). The Impact of Corporate Governance Quality on Firm Value: A Case Study on Corporate Governance Index of Borsa Istanbul. *Central European Business Review*, 12(3), 1–19. <https://doi.org/10.18267/j.cebr.324>
- Bose, S., Shams, S., Ali, M. J., & Mihret, D. (2022). COVID-19 impact, sustainability performance and firm value: international evidence. *Accounting & Finance*, 62(1), 597–643. <https://doi.org/10.1111/acfi.12801>
- Buallay, A., Hamdan, A., & Zureigat, Q. (2017). Corporate Governance and Firm Performance: Evidence from Saudi Arabia. *Australasian Accounting, Business and Finance Journal*, 11(1), 78–98. <https://doi.org/10.14453/aabfj.v11i1.6>
- CCAF, World Bank, & Economic, W. (2020). *COVID-19 to Plunge Global Economy into Worst*

- Recession since World War II*. World Economic Forum. <https://www.worldbank.org/en/news/press-release/2020/06/08/covid-19-to-plunge-global-economy-into-worst-recession-since-world-war-ii>
- Chow, Y. P., Muhammad, J., Bany-Arifin, A. N., & Cheng, F. F. (2018). Macroeconomic uncertainty, corporate governance and corporate capital structure. *International Journal of Managerial Finance*, 14(3), 301–321. <https://doi.org/10.1108/IJMF-08-2017-0156>
- Chung, K. H., & Pruitt, S. W. (1994). A Simple Approximation of Tobin's q. *Financial Management*, 23(3), 70. <https://doi.org/10.2307/3665623>
- CNN Indonesia. (n.d.). *Imbas Corona, Utilitas Manufaktur Anjlok Hampir Separuh*. Trans Media. Retrieved September 20, 2023, from <https://www.cnnindonesia.com/ekonomi/20200402183754-92-489761/imbas-corona-utilitas-manufaktur-anjlok-hampir-separuh>
- Daily, C. M., & Dalton, D. R. (1994). Corporate governance and the bankrupt firm: An empirical assessment. *Strategic Management Journal*, 15(8), 643–654. <https://doi.org/10.1002/smj.4250150806>
- Doku, J. N., Abdul-Razak Borowa, H., Mohammed, I., & Attah-Botchwey, E. (2023). Impact of corporate board size and board independence on stock returns volatility in Ghana. *Cogent Business & Management*, 10(2). <https://doi.org/10.1080/23311975.2023.2204597>
- Eklemet, I., Mohammed, I., Gyamera, E., & Twumwaah, D. A. (2023). Moderating Role of Board Size between the Board Characteristics and the Bank's Performance: Application of GMM. *International Journal of Economics and Financial Issues*, 13(3), 145–157. <https://doi.org/10.32479/ijefi.14495>
- Faisal, F., Situmorang, L. S., Achmad, T., & Prastiwi, A. (2020). The Role of Government Regulations in Enhancing Corporate Social Responsibility Disclosure and Firm Value. *The Journal of Asian Finance, Economics and Business*, 7(8), 509–518. <https://doi.org/10.13106/jafeb.2020.vol7.no8.509>
- García-Sánchez, I.-M., & García-Sánchez, A. (2020). Corporate Social Responsibility during COVID-19 Pandemic. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 126. <https://doi.org/10.3390/joitmc6040126>
- Goodell, J. W. (2020). COVID-19 and finance: Agendas for future research. *Finance Research Letters*, 35, 101512. <https://doi.org/10.1016/j.frl.2020.101512>
- Ichev, R., & Marinč, M. (2018). Stock prices and geographic proximity of information: Evidence from the Ebola outbreak. *International Review of Financial Analysis*, 56, 153–166. <https://doi.org/10.1016/j.irfa.2017.12.004>
- Johnston, C. (2020). *Ebola, Sars Covid-19: How Global Diseases Impact The Markets*. TraderLife. <https://traderlife.co.uk/features/trading-history/ebola-sars-Covid-19-how-global-diseases-impact-the-markets/>
- Kufo, A., & Shtembari, E. (2023). How Board Size and Board Independence Affect Insurance Companies' Performance. *European Journal of Interdisciplinary Studies*, 15(1), 68–80. <https://doi.org/10.24818/ejis.2023.05>
- Kusuma, A. (2019). *Covid-19 dan Industri Manufaktur di Indonesia: Sebuah catatan Ringan*. Universitas Muammadiyah Riau. <https://feb.umri.ac.id/Covid-19-dan-industri-manufaktur-di-indonesia-sebuah-catatan-ringan/>
- Larcker, B. D. F., Tayan, B., & Taylor, D. J. (2020). *The Spread of COVID-19 Disclosure*. 1–15.
- Lidyah, R., Amir, A., Yacob, S., & Rahayu, S. (2019). The Effect of Board of Director, Board of Commissioner and Audit Committee on Value of Firm to Islamic Social Reporting as a Mediating Variable. *Journal of Business and Management Review*, 2(2), 82–87. <https://doi.org/10.22437/jb.v2i2.7214>
- Lindenberg, E. B., & Ross, S. A. (1981). Tobin's q Ratio and Industrial Organization. *The Journal of Business*, 54(1), 1. <https://doi.org/10.1086/296120>
- Machali, M., & Setiadharna, S. (2017). The Effect of Asset Structure and Firm Size on Firm Value with Capital Structure as Intervening Variable. *Journal of Business & Financial Affairs*, 06(04). <https://doi.org/10.4172/2167-0234.1000298>

- Malini, H., Natalia, D., & Giriati, G. (2021). Corporate Governance and Company Value: A Manufacturing Industry Case Study. *INOBIIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, 4(4), 450–461. <https://doi.org/10.31842/jurnalinobis.v4i4.196>
- Mule, R. K., Mukras, M. S., & Mutunga, N. O. (2015). Corporate size, profitability and market value: an econometric panel analysis of listed firms in Kenya. *European Scientific Journal*, 11(13), 376–396.
- Muren, L. A., & Pangaribuan, H. (2022). Pengaruh Reputasi Auditor dan Komite Audit Terhadap Nilai Perusahaan Basic Materials yang Terdaftar Di BEI Periode 2018-2021. *Accountthink : Journal of Accounting and Finance*, 7(2). <https://doi.org/10.35706/acc.v7i2.7225>
- Nisar, A., Shah, F. N., Ijaz, F., & Ghouri, M. N. (2023). Corporate income tax, asset turnover and Tobin's Q as firm performance in Pakistan: Moderating role of liquidity ratio. *Cogent Business & Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2167287>
- Oktari, V., Fito, N., & Arumega, Z. (2018). The Influence of Good Corporate Governance on Company Value in Jakarta Islamic Index Companies. *Jurnal Akuntansi Keuangan Dan Bisnis*, 11(1), 69–78. <http://jurnal.pcr.ac.id>
- Oktaviani, R. F. (2020). Effect of Firm Growth and Firm Size on Company Value with Earning Per Share As Moderation. *EAJ (Economics and Accounting Journal)*, 3(3), 219. <https://doi.org/10.32493/eaj.v3i3.y2020.p221-229>
- Pangaribuan, B. A., & Pangaribuan, H. (2020). Intellectual capital disclosure: Kaitannya dengan ukuran perusahaan, pertumbuhan laba dan nilai perusahaan. *Jurnal Ekonomi Dan Bisnis*, 13(3), 26–40.
- Poretti, C., & Heo, C. Y. (2022). COVID-19 and firm value drivers in the tourism industry. *Annals of Tourism Research*, 95, 103433. <https://doi.org/10.1016/j.annals.2022.103433>
- Qiu, S. (Charles), Jiang, J., Liu, X., Chen, M.-H., & Yuan, X. (2021). Can corporate social responsibility protect firm value during the COVID-19 pandemic? *International Journal of Hospitality Management*, 93, 102759. <https://doi.org/10.1016/j.ijhm.2020.102759>
- Souther, M. E. (2021). Does Board Independence Increase Firm Value? Evidence from Closed-End Funds. *Journal of Financial and Quantitative Analysis*, 56(1), 313–336. <https://doi.org/10.1017/S0022109019000929>
- Statistik, B. P. (2020). *Analisis Hasil Survei Dampak Covid-19 Terhadap Pelaku Usaha*. <https://www.bps.go.id/publication/2020/09/15/9efe2fbda7d674c09ffd0978/analisis-hasil-survei-dampak-covid-19-terhadap-pelaku-usaha.html>
- Sudirman, W. F. R., Pratiwi, A., & Adams, R. (2022). Effect of Board Characteristics, Capital Structure on Firm Performance and Value. *MEC-J (Management and Economics Journal)*, 6(2), 91–108. <https://doi.org/10.18860/mec-j.v6i2.11819>
- Tobin, J. (1969). A General Equilibrium Approach To Monetary Theory. *Journal of Money, Credit and Banking*, 1(1), 15. <https://doi.org/10.2307/1991374>
- Wernerfelt, B., & Montgomery, C. A. (1988). Tobin's q and the Importance of Focus in Firm Performance. *The American Economic Review*, 78(1), 246–250.
- Wong, W. C., Batten, J. A., Ahmad, A. H., Mohamed-Arshad, S. B., Nordin, S., & Adzis, A. A. (2021). Does ESG certification add firm value? *Finance Research Letters*, 39, 101593. <https://doi.org/10.1016/j.frl.2020.101593>
- Yang, Y.-C., Liu, W.-P., & Shih, K.-H. (2023). The COVID-19 pandemic and firm value: the mediating effect of FinTech applications. *Review of Quantitative Finance and Accounting*, 60(1), 329–344. <https://doi.org/10.1007/s11156-022-01112-5>
- Zaid, M., Wang, M., T.F. Abuhijleh, S., Issa, A., W.A. Saleh, M., & Ali, F. (2020). Corporate governance practices and capital structure decisions: the moderating effect of gender diversity. *Corporate Governance: The International Journal of Business in Society*, 20(5), 939–964. <https://doi.org/10.1108/CG-11-2019-0343>
- Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance Research Letters*, 36, 101528. <https://doi.org/10.1016/j.frl.2020.101528>