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FACTORS AFFECTING THE STOCK PRICES OF MANUFACTURING COMPANIES LISTED ON THE IDX BEFORE AND DURING THE COVID-19 PANDEMIC

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ABSTRACT

The purpose of this study is to examine the factors that affect stock prices as well as to examine the differences in stock prices before and during the COVID-19 period. The research methods used are multiple linear regression analysis and different tests through the IBM SPSS 26 program. The sampling technique used is purposive sampling which resulted in 82 manufacturing companies listed on the IDX. The results of the regression test before COVID-19 period shows that EPS, PER, and WCTO have an effect on stock prices, while DER and IVTO have no effect on stock prices. The results of the regression test during the COVID-19 period showed that EPS has an effect on stock prices, while PER, DER, WCTO, and IVTO had no effect on stock prices. The result of the different test shows that there is no difference in the average stock prices before and during the COVID-19 period.

Keywords: *stock prices, EPS, PER, DER, working capital turnover, inventory turnover.*

1. INTRODUCTION

The world was shocked by the news of a new disease at the end of 2019. Everything started with an increasing number of pneumonia cases in Wuhan, China, which was later identified as a family of coronaviruses, a group of viruses that cause various illnesses ranging from the common cold to more severe diseases such as SARS and MERS. Cases of the spread of this virus increased so fast in China and began to spread to other countries, including Indonesia.

This resulted in the movement of the Composite Stock Price Index (JCI), which experienced a drastic decline in early 2020, and the announcement of the first positive case of COVID-19 in Indonesia. It shows that the condition of world stability is enough to affect stock price movements, so this study takes stock prices as a benchmark to see how far the COVID-19 pandemic has affected stock prices.

Stock prices can change when the world is experiencing a global crisis. Research in 2009 analyzes the effect of financial ratios on abnormal returns of banking stocks in Indonesia in the period around the announcement of the subprime mortgage, which affected the decline in bank profitability [1]. Another research in 2017 shows that stock prices have a significant positive effect on stock returns, meaning that an increase in stock prices will affect the acquisition of increased stock returns [2]. It indicates that the decline in bank profitability due to the subprime mortgage case resulted in a decrease in the ROA ratio and decreased stock returns and prices. This study is different from the previous research [21]. First, this study uses two additional variables in the form of working capital turnover and inventory turnover. This study examines all sub-sectors in manufacturing companies listed on the Indonesia Stock Exchange (IDX), while [21] examines food and beverage sector companies listed on

the IDX. Third, this study compares the factors that affect stock prices before and during the COVID-19 pandemic, while [21] do not compare before and during the COVID-19 period.

Based on the last part, this study analyzes the factors affecting stock prices before and during the COVID-19 pandemic. The factors to be tested for including the following: Earnings per Share (EPS), Price/Earnings Ratio (PER), Debt to Equity Ratio (DER), Working Capital Turnover (WCTO), and Inventory Turnover (IVTO). The objectives of this study are to (a) empirically examine the factors that influence stock prices before and during the COVID-19 pandemic; (b) Testing empirically about the difference in stock prices before the COVID-19 pandemic and stock prices during the COVID-19 pandemic. The results of this study are expected to provide benefits for the company, it is hoped that this research can provide an overview of the factors that affect the company's stock price. For investors, it is hoped that this research can provide insight for investors in making a decision to invest in a company by considering the factors that affect the stock price studied in this study. For the development of science, it is hoped that this research can be a reference for further research on stock prices.

2. LITERATURE REVIEW

Signaling theory explains how a signal can reduce information asymmetry between two parties. The existence of information asymmetry in this illustration makes it difficult for employers to determine prospective employees with high capabilities and prospective employees with low capabilities. The theory explains that companies can evaluate competent candidates from a history of higher education. Thus, information asymmetry between employers and prospective employees can be reduced, and employers can determine prospective employees who are highly capable through employees with higher education [3]. Information asymmetry can occur when the information about the company received by investors is incomplete because some company information is confidential [4]. Companies with good performance and publicly disclosed tend to project better growth, and this may give a positive signal to investors so that the demand for the company's shares increases, which will also be followed by a rise in the share price [5]. Agency theory explains that the agency relationship is considered a contract that occurs between one or more people (principals) who employ other people (agents) to provide services for their benefit by delegating their authority in making a decision to the agent [6]. Information is one way to minimize uncertainty [7]. Thus, a more even distribution of company information to shareholders can help management and shareholders make better decisions.

According to Gitman and Zutter, Earnings Per Share (EPS) is the amount obtained from each share of ordinary shares outstanding in a period [8]. A high value of earnings per share (EPS) indicates that the company has good prospects, so investors have high expectations that they may obtain higher income in the future. High EPS can also provide shareholders with a high level of welfare [9]. Thus, the increase in EPS will attract investors to buy shares and will also be followed by an increase in stock prices when the offer from investors increases [10].
H1. Earnings Per Share (EPS) positively and significantly affect stock prices before and during COVID-19.

According to Gitman and Zutter, the Price/Earnings Ratio (PER) measures the amount investors are willing to pay for each unit of company revenue, where a higher PER value indicates a higher level of investor confidence [8]. The higher PER value indicates that a company has high growth projections in the future, and the market expects profit growth [5]. Investors who invest in stocks with a high PER value have a high level of trust in the

company [8]. Conversely, a low PER value indicates a company's stock price is getting cheaper to buy, but a better performance per share also generates profits. This will undoubtedly attract investors to buy the shares [11].
H2. The Price/Earnings Ratio (PER) positively and significantly affects stock prices before and during the COVID-19 period.

According to Gitman and Zutter, the Debt to Equity Ratio (DER) measures the proportion of the use of total liabilities and common stock equity in financing the company's total assets [8]. A company with a high DER indicates that the company has a higher financial risk because the company has a higher liability value. It is also a high risk for investors to invest in similar companies so that the demand for the company's shares will decrease, followed by a decrease in the share price [12].
H3. Debt to Equity Ratio (DER) negatively and significantly affects stock prices before and during COVID-19.

According to Ross, Westerfield, & Jordan, Working Capital Turnover (WCTO) measures the maximum amount of work that can be generated through working capital. A higher WCTO value indicates a better company performance in utilizing working capital to increase sales [13]. The higher the WCTO value indicates that the company can manage its working capital efficiently and shows that the company's activities are running well, and vice versa [14]. This will certainly affect the interest of investors to invest in companies with a good WCTO level, so that it is followed by an increase in stock prices [15].
H4. Working Capital Turnover (WCTO) positively and significantly affects stock prices before and during the COVID-19 period.

According to Gitman and Zutter, inventory turnover (IVTO) measures the liquidity of a company's inventory [8]. A low IVTO value indicates the longer the process of selling the company's inventory so that more inventory is stored, and vice versa. When the company manages inventory efficiently, this is shown through a higher IVTO value, and the company will make a profit faster [16]. This will undoubtedly attract investors to invest in the company [17]. The increase in investor buying interest will also be followed by an increase in the share price [5].
H5. Inventory Turnover (IVTO) positively and significantly affects stock prices before and during COVID-19.

The COVID-19 pandemic has impacted various sectors, including the economic sector. This is quite evident in the movement of the JCI, which experienced a drastic decline in early 2020, just as COVID-19 began to enter Indonesia. The decline in the JCI indicates a decline in the combined stock price. Thus, the COVID-19 pandemic is predicted to impact the decline in stock prices.
H6. There is a significant difference in the average stock price before and during COVID-19.

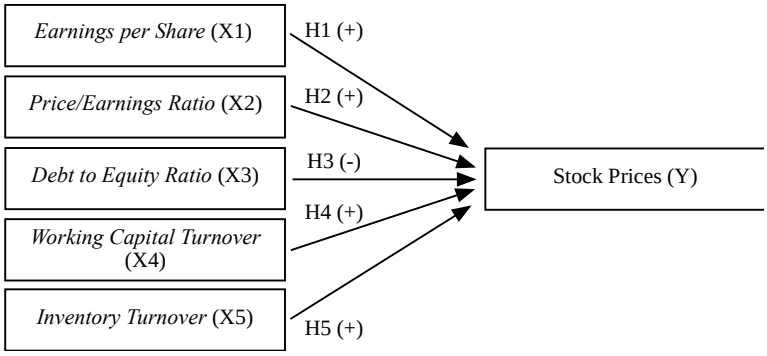

Figure 1. Multiple Linear Regression Analysis

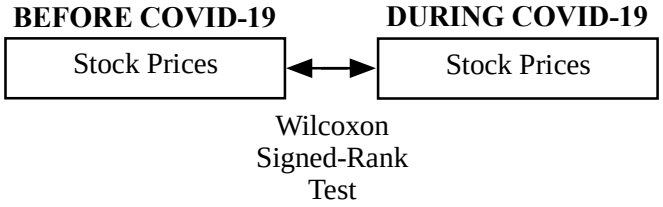

Figure 2. Wilcoxon Signed-Rank Test

4. RESEARCH METHOD

The research method used in this study is quantitative. The population used in this study were all manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2020 period. The population then used a purposive sampling technique as sampling technique. Sugiyono (2015) describes purposive sampling as selecting samples based on predetermined criteria. The sample selection criteria used in this study are as follows:

1. Manufacturing Companies listed on the IDX during the 2019-2020 period, respectively
2. Manufacturing companies that present financial statements ending on December 31
3. Manufacturing companies that earn profits during the 2019-2020 period
4. Manufacturing companies that have the required data according to this research

Based on the purposive sampling method, 82 manufacturing companies listed in IDX fulfill these four criteria, thereby becoming a research sample. The data that became the sample was processed through IBM SPSS 26 software.

Variables and Instrumental Operations

The research variables used in this study are the dependent and independent variables. This study measures the dependent variable by Stock Prices and the independent variables by EPS, PER, DER, WCTO, and IVTO.

1. According to Hung, D. N., Ha, H. T. V., and Binh, D. T. (2018), the stock price used is the closing stock price in the period studied.

$$\textbf{Stock Prices} = \textbf{Closing Stock Price period t}$$

2. Earnings Per Share (EPS), according to Gitman and Zutter (2015), is the amount obtained from each share of ordinary shares outstanding in a period.

$$EPS = \frac{Earnings\ available\ for\ common\ stockholders}{Number\ of\ shares\ of\ common\ stock\ outstanding}$$

3. Price/Earnings Ratio (PER), according to Gitman and Zutter (2015), measures the amount investors are willing to pay for each unit of company revenue, where the higher the PER value indicates a higher level of investor confidence.

$$PER = \frac{Market\ price\ per\ share\ of\ common\ stock}{Earnings\ Per\ Share}$$

4. The Debt-to-Equity Ratio (DER), according to Gitman and Zutter (2015), measures the proportion of the use of total liabilities and common stock equity in financing the company's total assets.

$$DER = \frac{Total\ Liabilities}{Common\ Stock\ Equity}$$

5. Working Capital Turnover (WCTO), according to Ross et al. (2003), measures the maximum amount of work that can be generated through working capital.

$$WCTO = \frac{Sales}{Net\ Working\ Capital}$$

6. Inventory Turnover (IVTO), according to Kieso et al. (2018), is a ratio that measures the company's liquidity through the average number of times the company sells inventory in a period.

$$IVTO = \frac{Cost\ of\ Goods\ Sold}{Average\ Inventory}$$

Empirical Model

The following is the multiple regression equation used for research conducted during the COVID-19 period:

$$Y = \alpha + \beta_1 EPS + \beta_2 PER + \beta_3 DER + \beta_4 WCTO + \beta_5 IVTO + \varepsilon$$

Description:
Y : Stock Price
α : Constant
β1 - β5 : Regression Coefficient
X1 : Earnings Per Share (EPS)
X2 : Price/Earnings Ratio (PER)
X3 : Debt to Equity Ratio (DER)
X4 : Working Capital Turnover (WCTO)
X5 : Inventory Turnover (IVTO)
ε : error term

Data Analysis

In this study, the research method used is quantitative. The data was processed by IBM SPSS 26 program through multiple linear regression analysis, F statistical tests, T-test, coefficient of determination, and Wilcoxon Signed-Rank Test.

5. RESULT AND DISCUSSION

The following are data testing results before and during the COVID-19 period.

Descriptive Test

Table 1. Descriptive Statistics Before COVID-19

	N	Range	Min.	Max.	Mean	Std. Deviation
EPS	82	5653.2762	1.7167	5654.9929	223.971410	656.049582
PER	82	680.469	2.7479	683.2169	34.409350	79.9574098
DER	82	2.789	0.0100	2.7990	0.7739970	0.5980642
WCTO	82	73.6491	0.6728	74.3219	8.769584	13.5287496
IVTO	82	20.549	0.1177	20.6667	5.143615	3.4460012
Stock Price	82	52932	68	53000	2843.520000	6565.361
Valid N (listwise)	82					

Source: SPSS 26 Output

Table 2. Descriptive Statistics During COVID-19

	N	Range	Min.	Max.	Mean	Std. Deviation
EPS	82	3974.6093	0.1200	3974.7293	186.098783	479.565563
PER	82	959.0082	4.2466	963.2548	48.971328	122.4329710
DER	82	16.0261	0.0100	16.0361	0.9196260	1.7907524
WCTO	82	73.5362	0.5259	74.0621	6.947555	11.2748450
IVTO	82	17.7548	0.0932	17.8481	4.836280	3.0575614
Stock Price	82	40948	52	41000	2714.00	5344.851
Valid N (listwise)	82					

Source: SPSS 26 Output

Normality Test

A normality test was conducted to determine if the research data were normally distributed. Research data that meet the assumption of normality is considered that the data can represent the population, so the normality of research data is considered necessary [18].

Table 3. Normality Test Before COVID-19

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		82
Normal Parameters[a,b]	Mean	0.0000000
	Std. Deviation	2202.86728
Most Extreme Differences	Absolute	0.275
	Positive	0.275
	Negative	-0.199
Test Statistics		0.275
Asymp. Sig. (2-tailed)		0.000

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Source: SPSS 26 Output

The normality test results for the model for data before COVID-19 are indicated by a significance value of 0.000. A regression model is said to meet the normality assumption if the significance value exceeds 0.05 [19]. Thus, it can be concluded that the regression model before COVID-19 does not meet the assumption of normality with a 95% confidence level.

Table 4. Normality Test During COVID-19

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		82
Normal Parameters[a,b]	Mean	0.0000000
	Std. Deviation	2030.16481
Most Extreme Differences	Absolute	0.235
	Positive	0.235
	Negative	-0.16
Test Statistics		0.235
Asymp. Sig. (2-tailed)		0.000

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Source: SPSS 26 Output

The normality test results for model 2 for data during COVID-19 indicate a significance value of 0.000. Thus, it can be concluded that regression model 2 or during the COVID-19 period does not meet the assumption of normality with a 95% confidence level.

Multicollinearity Test

A multicollinearity test was conducted to test the existence of a perfect or near-perfect linear relationship between independent variables in a regression model [18].

Table 5. Multicollinearity Test Before COVID-19

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	425.43	550.388		0.773	0.442		
	EPS	9.416	0.389	0.941	24.232	0.000	0.982	1.018
	PER	12.745	3.201	0.155	3.981	0.000	0.975	1.026
	DER	-149.709	462.121	-0.014	-0.324	0.747	0.836	1.196
	WCTO	-47.644	21.482	-0.098	-2.218	0.030	0.756	1.323
	IVTO	78.586	78.631	0.041	0.999	0.321	0.87	1.150

Source: SPSS 26 Output

The tolerance value of the five independent variables is more than 0.10, and the VIF value of the five independent variables is less than 10. Thus, it can be concluded that regression model 1 (before COVID-19) does not have multicollinearity with a 95% confidence level.

Table 6. Multicollinearity Test During COVID-19

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	626.837	485.303		1.292	0.200		
	EPS	10.331	0.491	0.927	21.02	0.000	0.976	1.024
	PER	1.696	1.921	0.039	0.883	0.380	0.981	1.020
	DER	7.353	130.76	0.002	0.056	0.955	0.989	1.011
	WCTO	-12.953	21.098	-0.027	-0.614	0.541	0.958	1.043
	IVTO	34.056	77.776	0.019	0.438	0.663	0.959	1.043

Source: SPSS 26 Output

The tolerance value of the five independent variables is more than 0.10, and the VIF value of the five independent variables is less than 10. Thus, it can be concluded that regression model 2 (in the COVID-19 period) does not have multicollinearity with a 95% confidence level.

Autocorrelation Test

The autocorrelation test is used to test whether, in a linear regression model, there was a correlation between the confounding error in the period being studied and the confounding error in the previous period [20].

Table 7. Autocorrelation Test Before COVID-19

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.942[a]	0.887	0.880	2274.176	1.889

a. Predictors: (Constant), IVTO, PER, EPS, DER, WCTO
b. Dependent Variable: Stock Price

Source: SPSS 26 Output

The Durbin Watson value is 1.8890, and the dU value is 1.7724 with 82 samples (n) and five independent variables (k). Because the Durbin Watson value of 1.8890 is greater than the lower limit of 1.7724 and smaller than the upper limit of 2.2276 (obtained from 4-1.7724), it can be concluded that there is no autocorrelation in regression model 1 (before COVID-19). 19) with a 95% confidence level.

Table 8. Autocorrelation Test During COVID-19

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.925[a]	0.856	0.846	2095.883	1.791

a. Predictors: (Constant), IVTO, PER, EPS, DER, WCTO
b. Dependent Variable: Stock Price

Source: SPSS 26 Output

The Durbin Watson value is 1.7910, and the dU value is 1.7724 with 82 samples (n) and five independent variables (k). Because the Durbin Watson value of 1.7910 is greater than the lower limit of 1.7724 and smaller than the upper limit of 2.2276 (obtained from 4-1.7724), it can be concluded that there is no autocorrelation in regression model 2 (during the COVID-19 period). -19) with a 95% confidence level.

Heteroscedasticity Test

The heteroscedasticity test is used to test the existence of variance inequality from the residuals of observation with other observations in a regression model [20]. This study conducted a heteroscedasticity test with the White Test.

Table 9. Heteroscedasticity Test Before COVID-19

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.188[a]	0.035	-0.028	20673698.2	2.108

a. Predictors: (Constant), IVTO, PER, EPS, DER, WCTO
b. Dependent Variable: Res2

Source: SPSS 26 Output

The value of R^2 in the regression results is 0.035, so the value of c^2 is 2.870 by multiplying 0.035 by the number of samples of 82 (n x R^2). The value of table c^2 is 9.4880 using df = k-1 (k = 5) with a significance level of 5%. Thus, it can be concluded that the calculated c^2 value < c^2 table, which is 2.870 < 9.4880, there is no heteroscedasticity in regression model 1 (before COVID-19).

Table 10. Heteroscedasticity Test During COVID-19

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.205[a]	0.042	-0.021	12199815.1	2.107

a. Predictors: (Constant), IVTO, PER, EPS, DER, WCTO
b. Dependent Variable: Res2

Source: SPSS 26 Output

The value of R^2 in the regression results is 0.042, so the value of c^2 is 3.444 by multiplying 0.042 by the number of samples of 82 (n x R^2). The value of table c^2 is 9.4880 using df = k-1 (k = 5) with a significance level of 5%. Thus, it can be concluded that the value of calculated $c^2 < c^2$ table, which is 3.444 < 9.4880, there is no heteroscedasticity in regression model 2 (during COVID-19).

Multiple Linear Regression Analysis

After testing the classical assumptions on regression model 1 (before COVID-19) and regression model 2 (during COVID-19), it can be concluded that the two regression models can be continued with multiple linear regression analysis.

Table 11. Multiple Linear Regression Analysis Before COVID-19

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	425.430	550.388		0.773	0.442		
	EPS	9.416	0.389	0.941	24.232	0.000	0.982	1.018
	PER	12.745	3.201	0.155	3.981	0.000	0.975	1.026
	DER	-149.709	462.121	-0.014	-0.324	0.747	0.836	1.196
	WCTO	-47.644	21.482	-0.098	-2.218	0.030	0.756	1.323
	IVTO	78.586	78.631	0.041	0.999	0.321	0.870	1.150

a. Dependent Variable: Stock Price

Source: SPSS 26 Output

From the table above, the regression equation is obtained as follow:

Stock Price = 425.430 + 9.416 EPS + 12.745 PER – 149.709 DER – 47.644 WCTO + 78.586 IVTO

The regression equation above shows the constant value (α) obtained at 425.430. That is, when the value of the independent variables EPS, PER, DER, WCTO, and IVTO is equal to zero, the value of the dependent variable of stock prices is 425.430.

Table 12. Multiple Linear Regression Analysis During COVID-19

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	626.837	485.303		1.292	0.200		
	EPS	10.331	0.491	0.927	21.020	0.000	0.976	1.024
	PER	1.696	1.921	0.039	0.883	0.380	0.981	1.020
	DER	-12.953	130.760	0.002	0.056	0.955	0.989	1.011
	WCTO	-47.644	21.098	-0.027	-0.614	0.541	0.958	1.043
	IVTO	34.056	77.776	0.019	0.438	0.663	0.959	1.043

a. Dependent Variable: Stock Price

Source: SPSS 26 Output

From the table above, the regression equation is obtained as follow:

Stock Price = 626.837 + 10.331 EPS + 1.696 PER - 12.953 DER – 47.644 WCTO + 34.056 IVTO

The regression equation above shows that the constant value (α) is 626.837. That is, when the value of the independent variables EPS, PER, DER, WCTO, and IVTO is equal to zero, the value of the dependent variable of stock prices is 626.837.

F-Statistics Test

The F test was conducted to see whether all the independent variables in the regression model had a combined effect on the dependent variable [20]. This study uses a 95% confidence level.

Table 13. F-Statistics Test Before COVID-19

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.098E+9	5	619671686	119.816	0.000
	Residual	393062563	76	5171875.83		
	Total	3.491E+9	81			

a. Dependent Variable: Stock Price
b. Predictors: (Constant), IVTO, PER, EPS, DER, WCTO

Source: SPSS 26 Output

The significance value is 0.000, less than 0.05. This shows that all independent variables consisting of EPS, PER, DER, WCTO, and IVTO together significantly affect stock prices before COVID-19 with a 95% confidence level.

Table 14. F-Statistics Test During COVID-19

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.98E+09	5	396023026	90.154	0.000
	Residual	333847101	76	4392725.01		
	Total	2.31E+09	81			

a. Dependent Variable: Stock Price
b. Predictors: (Constant), IVTO, PER, EPS, DER, WCTO

Source: SPSS 26 Output

The significance value is 0.000, less than 0.05. This shows that all independent variables consisting of EPS, PER, DER, WCTO, and IVTO together significantly affect stock prices before COVID-19 with a 95% confidence level.

T-test

The t-test was conducted to see the effect of one independent variable individually in explaining the dependent variable [20].

Table 15. T-test Before COVID-19

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	425.430	550.388		0.773	0.442		
	EPS	9.416	0.389	0.941	24.232	0.000	0.982	1.018
	PER	12.745	3.201	0.155	3.981	0.000	0.975	1.026
	DER	-149.709	462.121	-0.014	-0.324	0.747	0.836	1.196
	WCTO	-47.644	21.482	-0.098	-2.218	0.030	0.756	1.323
	IVTO	78.586	78.631	0.041	0.999	0.321	0.870	1.150

a. Dependent Variable: Stock Price

Source: SPSS 26 Output

The significance value for the EPS variable is 0.000, smaller than 0.05. This shows that the EPS variable significantly influences stock prices before COVID-19 with a 95% confidence level.

The significance value for the PER variable is 0.000, smaller than 0.05. This shows that the PER variable significantly influences stock prices before COVID-19 with a 95% confidence level.

The significance value of the DER variable is 0.747, greater than 0.05. This shows no significant effect of the DER variable on stock prices before COVID-19 with a 95% confidence level.

The significance value of the WCTO variable is 0.030, smaller than 0.05. This shows that the WCTO variable significantly influences stock prices before COVID-19 with a 95% confidence level.

The significance value for the IVTO variable is 0.321, which is greater than 0.05. This shows no significant effect of the IVTO variable on stock prices before COVID-19 with a 95% confidence level.

Table 16. T-test During COVID-19

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	626.837	485.303		1.292	0.200		
	EPS	10.331	0.491	0.927	21.020	0.000	0.976	1.024
	PER	1.696	1.921	0.039	0.883	0.380	0.981	1.020
	DER	-12.953	130.760	0.002	0.056	0.955	0.989	1.011
	WCTO	-47.644	21.098	-0.027	-0.614	0.541	0.958	1.043
	IVTO	34.056	77.776	0.019	0.438	0.663	0.959	1.043

a. Dependent Variable: Stock Price

Source: SPSS 26 Output

The significance value for the EPS variable is 0.000, smaller than 0.05. This shows that the EPS variable significantly influences stock prices before COVID-19 with a 95% confidence level.

The significance value for the PER variable is 0.380, which is greater than 0.05. This shows no significant effect of the PER variable on stock prices before COVID-19 with a 95% confidence level.

The significance value for the DER variable is 0.955, which is greater than 0.05. This shows no significant effect of the DER variable on stock prices before COVID-19 with a 95% confidence level.

The significance value for the WCTO variable is 0.541, which is greater than 0.05. This shows no significant effect of the WCTO variable on stock prices before COVID-19 with a 95% confidence level.

The significance value for the IVTO variable is 0.663, which is greater than 0.05. This shows no significant effect of the IVTO variable on stock prices before COVID-19 with a 95% confidence level.

Adjusted R^2

The coefficient of determination (R^2) measures how far the model's ability to explain the variation of the independent variable is described in values 0 to 1 [20].

Table 17. Adjusted R^2 Before COVID-19

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.942[a]	0.887	0.880	2274.176	1.889

a. Predictors: (Constant), IVTO, PER, EPS, DER, WCTO
b. Dependent Variable: Stock Price
Source: SPSS 26 Output

The adjusted R^2 value is 0.880. Thus, it can be concluded that 88.0% of the variation in stock prices before COVID-19 can be explained by the independent variables EPS, PER, DER, WCTO, and IVTO, and the remaining 12.0% are explained by other variables.

Table 18. Adjusted R^2 During COVID-19

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.925[a]	0.856	0.846	2095.883	1.791

a. Predictors: (Constant), IVTO, PER, EPS, DER, WCTO
b. Dependent Variable: Stock Price

Source: SPSS 26 Output

The adjusted R^2 value is 0.846. Thus, it can be concluded that 84.6% of the variation in stock prices before COVID-19 can be explained by the independent variables EPS, PER, DER, WCTO, and IVTO, and the remaining 15.4% are explained by other variables.

Wilcoxon Signed-Rank Test

The following will present the results of Wilcoxon's Signed-Rank Test on stick prices before and during COVID-19.

Table 19. Wilcoxon Signed-Rank Test I

Ranks

		N	Mean Rank	Sum of Ranks
Stock Price During Covid-19 - Stock Price Before Covid-19	Negative Ranks	41	40.90	1677.00
	Positive Ranks	41	42.10	1726.00
	Ties	0		
	Total	82		

a. Stock Price During Covid-19 < Stock Price Before Covid-19
b. Stock Price During Covid-19 > Stock Price Before Covid-19
c. Stock Price During Covid-19 = Stock Price Before Covid-19

Source: SPSS 26 Output

The N value in Negative Ranks is 41. This shows that 41 companies experienced a decline in stock prices during COVID-19. Furthermore, the N value in Positive Ranks obtained is 41, so it can be concluded that 41 companies experienced and increase in stock prices during

COVID-19. Then, the value of N on Ties is 0, meaning that there are no companies with the same stock prices level before and during COVID-19.

Table 20. Wilcoxon Signed-Rank Test II

Test Statistics[a]

	Stock Price During Covid-19 - Stock Price Before Covid-19
Z	-113
Asymp. Sig (2-tailed)	0.91

Source: SPSS 26 Output

The significance value is 0.910, greater than 0.05. Thus, it can be concluded that there is no difference in the average stock prices before and during the COVID-19 period.

6. CONCLUSIONS

The research method used in this study is quantitative. The population used in this study were all manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2020 period. The population then used a purposive sampling technique as sampling technique. Sugiyono (2015) describes purposive sampling as selecting samples based on predetermined criteria. In this study, the research method used is quantitative. The data was processed by IBM SPSS 26 program through multiple linear regression analysis, F statistical tests, T-test, coefficient of determination, and Wilcoxon Signed-Rank Test.

Based on the discussion above, the conclusions that can be drawn from this research are as follows:

1. Earnings Per Share (EPS) positively and significantly affect stock prices before and during COVID-19.
2. Price/Earnings Ratio (PER) positively and significantly affect stock prices before COVID-19, and does not significantly affect stock prices during COVID-19.
3. Debt to Equity Ratio (DER) does not significantly affect stock prices before and during COVID-19.
4. WCTO negatively and significantly affect stock prices before COVID-19, and does not significantly affect stock prices during COVID-19.
5. IVTO does not significantly affect stock prices before and during COVID-19.

7. LIMITATIONS & SUGGESTIONS

This study has several limitations that can still be improved, including (a) Only conducted on manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the 2019-2020 period; (b) Only using independent variables and not using control variables; (c) The data studied are not normally distributed.

Suggestions for this research are as follows: (a) For further research, it can add other independent variables or add control variables, (b) For the companies studied, it is expected that the company will be able to maintain or increase EPS and PER, especially during the COVID-19 period; (c) For investors, this research is expected to help in making decisions to

invest, especially during the COVID-19 period by considering the factors that affect stock prices.

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