

A Study On Internal And External Factors Influencing Manufacturing Company Share Price

Richie Alessandro Piero¹ and Khairina Natsir^{2*}

^{1,2}Faculty of Economics and Business, Tarumanagara University, Jakarta, Indonesia

Email Address:

*richie.115190403@stu.untar.ac.id, khairinan@fe.untar.ac.id**

**Corresponding author*

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Abstract. The Intention of the study is to discover academic proof associated with the role of internal factors such as Profitability, financial Leverage, and market value in driving a company's stock price. At the same time, this study wanted to evaluate the position of external factors, namely interest rates on stock price movements. The research population are companies in the manufacturing industry group, Indonesia Stock Exchange. By using a purposive-sampling its obtained a total of 280 company data from 56 manufacturing companies in the 2017 to 2021 time period. Data was analyzed using fixed effect regression model. The finding of the study show that Profitability is able to bring positive and significant movement to stock prices, financial leverage has a positive and insignificant impact on stock prices, while market value has a negative and significant influence on stock prices, while interest rates significantly move stock prices in the opposite direction.

Keywords: Stock Prices; Profitability; Financial Leverage; Market Value; Interest Rates.

Abstrak. Melalui studi ini ingin dilakukan investigasi guna mendapatkan bukti akademis mengenai peranan faktor internal perusahaan seperti profitabilitas, financial leverage, dan nilai pasar dalam menggerakkan harga saham perusahaan. Selain itu ingin diinvestigasi pula peranan faktor eksternal yaitu tingkat suku bunga terhadap gerakan harga saham. Populasi penelitian meliputi semua perusahaan tercatat dalam kelompok industri manufaktur di Pasar Modal Indonesia. Dengan menggunakan teknik purposive sampling diperoleh sejumlah 280 sampel dari 56 perusahaan manufaktur pada periode waktu 2017 sampai 2021. Pemodelan regresi ganda digunakan untuk menganalisa data. Hasil pemilihan model regresi merekomendasikan fixed effect model lebih tepat digunakan untuk menganalisis data penelitian yang berbentuk data panel. Dari pengolahan data diperoleh hasil penelitian yang memperlihatkan bahwa profitabilitas secara signifikan akan mendorong harga saham kearah positif, financial leverage berdampak positif tetapi tidak signifikan kepada harga saham, sementara itu nilai pasar mempengaruhi secara negatif pada harga saham. Disisi lain tingkat suku bunga berdampak negatif terhadap harga saham.

Kata Kunci: Harga Saham; Profitabilitas; Financial Leverage; Nilai Pasar; Tingkat Suku Bunga.

INTRODUCTION

A manufacturing company is a company that controls a machine, processes basic materials or raw materials into finished goods, and produces goods that have a sale value. This manufacturing company comprises several main sectors registered in Indonesia's capital market: the basic materials and chemical industry sector, the miscellaneous industry group, and finally, the consumer goods industry group. Of the many manufacturing companies divided into several sectors within each industry, they are still divided into several types of groups, and each company competes with each other to be the best compared to similar companies. Many companies develop faster than others because they are rapidly growing companies with more enthusiasts, especially in



Indonesia. Of course, every company has goals, both short and long-term goals. The goal for a short time, such as the company being able to generate profits in each period, and the plan for the long range is that the company wants to make its investors prosperous. Firm value is an important focus always observed by investors, where an overview of the company's financial performance can be obtained through company value. If the price of a stock increases, the probability of prosperity that investors will get will also increase. If more and more investors invest in a company, the stock price will tend to rise, and by itself, the value of the company will be lifted (Dewi and Susanto, 2022)

The era of globalization that is developing rapidly today has a significant effect on the capital market. The Indonesian capital market has experienced very considerable progress both in terms of technology and investors. Today's people have a great desire to invest their funds either in stocks, deposits or otherwise, and technological advances make it easier for people to make investment decisions anywhere. Investment is placing a certain amount of funds now, hoping for a return later. Investors must be precise in obtaining an appropriate stock return because stock investment has a reasonably high risk. In this modern economic era, additional capital is needed by companies to boost their operational performance. Companies obtain capital by offering company ownership to the Public (Go Public) in the capital market.

Stock or share is one of the capital market instruments investors are interested in. According to (Brigham Houston, 2010), shares are legal proof that a person is registered as the owner of a limited liability company. Share is a piece of paper on which a statement is written that the owner of the article is the owner of the form and the legal owner of the company issuing the securities. In the world of stocks, internal and external factors cause an increase or decrease in stock prices. Based on (Effendi and Harahap, 2020), Internal factors cause fluctuations in share prices caused by the conditions of the company itself, such as the company's financial performance, board changes, and legal issues between managers or employees. External factors cause high and low stock prices beyond the company's control, such as systemic risk, changes in interest rates on savings accounts, government policies, and macroeconomic conditions.

According to (Rahmadewi Abundanti, 2018), stock price assessment benefits prospective shareholders before investing. The price of this stock constantly changes over time, and the price of this share is determined by various supply and demand factors between investors and the company that issues the shares. If the stock price continually crawls up, more and more people are making purchase demands for the company's shares. If the share price tends to decrease, it can be caused by many investors making sales transactions in relatively large numbers of the company's shares.

Amid a pandemic like what is happening now, many companies are starting to think about adopting a strategy so that they can continue to be successful. Nevertheless, for the manufacturing companies themselves, the shares of the manufacturing sector recorded a strengthening and are still considered quite good.

Figure 1 represents the movement fluctuation of five years from 2017 to 2021, which fluctuated with the lowest share price by PT Waskita Beton Precast Tbk (WSBP) of IDR 112.000. WSBP must suffer a net loss of IDR 4.860 trillion in 2021. PT Gudang Garam Tbk (GGRM) obtained the highest share price at IDR 83,800.000. Based on the financial reports published on the Indonesia Stock Exchange, the net profit of PT Gudang Garam Tbk (GGRM) in 2018 reached IDR 7.760 trillion, an increase of 16.860 per cent,



compared to 2017, which was only IDR 6.590 trillion. GGRM also managed to record revenue of IDR 83.300 trillion compared to 2017 of IDR 76.27 trillion

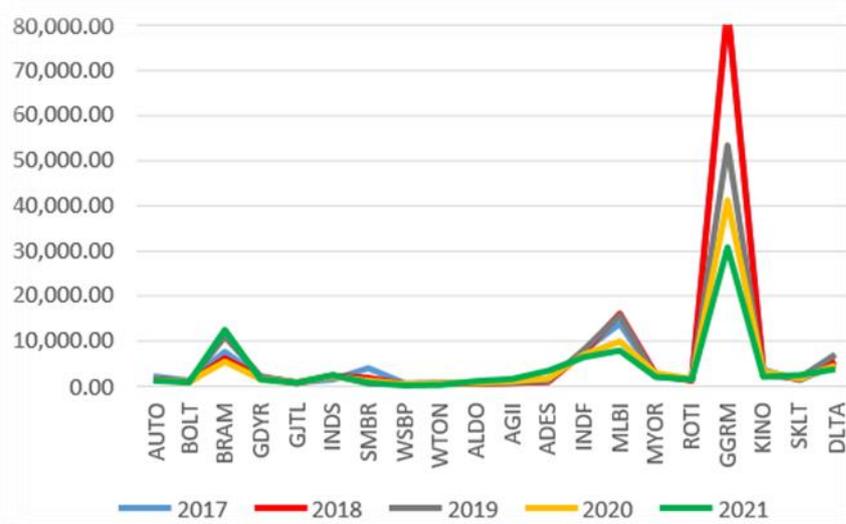


Figure 1. Stock price fluctuations of several manufacturing in 2017 to 2021

Source: Data processed by the researcher

The performance of market technical analysis in a company could be observed directly from the company's shares performance in the Indonesian capital market. Not only that, but the performance of a company's stock can also be followed based on the movement of the company share price traded on the capital market. At this time, the company needs a market that we know as the capital market in Indonesia because with the company issuing each share, it will be able to increase interest for shareholders to buy these shares for the company, which can later be used in the company's overall operational activities and able to increase the value of the company itself (Astikawati and Relita, 2017).

Several factors arrive from the internal side of the manufacturing company environment that can affect stock prices, including company financial performance that can be used to analyze a stock price such as Profitability, Financial Leverage, market value and interest rates. This economic and environmental condition makes the environment capable of influencing the company's operational and financial activities. The ability of a shareholder to understand and foresee the state of affairs of a company's performance in the future will be beneficial for shareholders in making investment decisions with profitable share prices.

Companies that display high-profit reports will get much attention from investors, so investors have become very willing to invest in the company. Companies that focus on generating profits can be associated with variable Profitability, where this Profitability explains the company's ability to generate profits in a specific range of time. This Profitability can also be seen in the ratio numbers in the financial statements. The right ratio to use in measuring a company's proficiency to lead to profits is Return on Assets (Aldini and Andarini, 2017)

Financial Leverage explains a company's ability to meet its financial obligations and see how far it can finance its operational activities using loan funds. Financial Leverage can also be seen in the ratio figures in the financial statements. The proper ratio to use in



measuring a company's ability to fulfil its obligations is the Debt to Equity Ratio (Lapian and Dewi, 2018)

This market value measures the level of profit that will be received by shareholders so that shareholders can have more interest in investing in a company. This market value can also be considered the ratio in the financial statements. This market value can be proxied by Earnings per Share (Yulianti et al., 2019).

The interest rate is essential to stock prices and is an economic measurement tool that links the real and monetary sectors. Interest rate values can be considered at the BI Rate. The reason why the interest rate is used as a measuring tool is that the interest rate can explain and describe the benefits that investors will get from assets owned without having to have a high enough risk, or it can be said the company's ability to regulate the cost of capital owned for the company's operational activities. The funds come from the wealth of the shareholders. The interest rate is a form of reciprocity for loans that have been given. This interest rate has an unfavourable effect on stock prices. If the value of interest rates increases, shareholders tend not to place their capital in shares.

Results from previous researchers. Based on research conducted by (Wulandari, 2019) that PER, EPS and ROA have a significant effect on stock prices. There is a difference with researchers (Anwar and Lia, 2019) who say that EPS and PER have no effect on stock prices and ROE has an effect on stock prices. Contrary to research by (Egam et al., 2017) which said that ROA and ROE have no effect on stock prices. Researchers (Ramadhani and Fenty, 2019) show that partially ROA has a significant positive effect and interest rates have an insignificant positive effect on stock prices. This is not in line with the research conducted by (Malau, 2018) partially, exchange rates and interest rates do not have a significant effect on stock prices. Previous research that tested the effect of inflation on stock prices conducted by (Maulana, 2017) stated that the inflation rate had no effect on stock prices. These results differ from research conducted by (Meyliana and Djazuli, 2018) which states that the inflation rate affects stock prices.

Previous studies have indeed shown different results. Therefore, several of these factors create special interest for researchers themselves to be able to do this research again.

THEORETICAL REVIEW

Signaling Theory. Signalling theory explains a management view of the company's development in the future, where this view can influence prospective shareholders of the company that issues its shares. The company conveys the information provided by management to shareholders, which has been implemented and analyzed beforehand so that this information can be considered a reference for good signals or signals containing bad news. If the information conveyed includes good news, the company will get a good response from shareholders, share prices will increase, and the company value will also increase. However, if the information provided contains unfavourable signals, investors' desire will also decrease, so the company's value will also decrease (Alexander and Kadafi, 2018).

Signalling Theory can be observed from various views of business risk, where business risk tends to increase and will be perceived negatively by prospective shareholders so that it can affect shareholders' interest in investing. High investment opportunities will be a good signal that will affect the shareholders' assessment of the



company's performance. The company's high ROI will show it can improve its future financial performance and value. Companies with good performance will convey information to potential investors regarding market conditions to attract investors and increase stock prices.

(Liang and Natsir, 2019) state that the Signaling theory is an action taken by company management and helps guide investors regarding how a company's management sees the company's prospects. This signalling theory signals to investors that higher returns will emerge.

This signal theory also tells that the information presented by a company can be classified into two types of information: information containing good news and information containing bad news. This signal theory is commonly used in describing the attitude of parties related to the existence of information even though they have different access to information. Management tries to communicate to the market that the strategy being pursued is in the best interest of the prospective owner of the company. In addition, the principle used also has importance for signal theory regarding dividend distribution (Setiawanta and Hakim, 2019).

Pecking Order Theory. The pecking order theory is generated based on the selection of funding sources based on order funding put forward by Myers in 1984. The pecking order theory does not base assumptions on adjusting debt levels to optimal levels (Epong and Anom, 2019).

The pecking order theory suggests companies prefer choosing funding sources by considering the cheapest costs and least risk. Based on the pecking order theory, there is no optimal capital structure. This theory states that companies prefer the use of internal rather than external funds in financing their business development, so the order or hierarchy of funding based on the pecking order theory is as follows: a) Internal funding originating from retained earnings, b) Use of debt by issuing bonds c) Issuance of shares. This theory assumes that profitable companies use less debt. (Brealey et al., 2001) explain why most profitable companies use less debt, not because the target debt ratio is low but because new companies use external funds (issuing debt or shares) after insufficient internal funds. This pecking order theory also does not rule out that taxes and financial distress are essential in choosing a capital structure. This theory originates from the existence of asymmetric information between external shareholders and company insiders who have better information about the actual condition of the company and market imperfections that influence the supply side of funding, such as the availability and different costs of various sources of funding (Myers and Majluf, 1984). This causes investors to be unable to know the intrinsic value of new shares issued by the company. Shareholders also will not like the issuance of new shares because it will reduce earnings per share. The solution for managers is to fund investments with retained earnings, and if external funding is needed, the company will use debt with the lowest issuance costs.

The Pecking Order theory predicts a negative relation between debt and profit ratios; besides, this theory is convinced that observed capital structure has a positive relationship with growth. The company's size and wealth or assets (Oktavina et al., 2018). The pecking order theory shows companies prefer using retained earnings to shell out dividends and finance new investments. Then they mention that the factors that determine the pecking order theory perspective are when companies profit using debt as a source of company funds, not the main one. Based on the Pecking Order Theory, the profit or Profitability of companies with debt levels has a negative direction (Oktavina et al., 2018).



Refers to (Kartikayanti and Ardini, 2021) in the pecking order theory, it is also explained that many companies that can generate high profits only have small debt. These companies are more likely to utilize internal funding, leading to lower company debt. (Yudhatama and Wibowo, 2016),

The pecking order theory explains how it is best to use a hierarchy of funding sources to minimize debt risk, prioritizing internal funds first. After that, you can use debt from external funding sources or by utilizing your capital. This theory recommends that companies prioritize internal funding, namely funding generated from company operations. For example, financing is obtained from retained earnings. The company can issue the safest securities if external funding is still needed. For example, starting with the issuance of bonds, it can be continued with the distribution of option securities. If the company still feels that more than the funding it has received is needed, then the option is to issue new shares. (Wikartika and Fitriyah, 2018).

Stock Price. Experts give several definitions of stock prices. Definition of stock prices according to (Simbolon and Purwanto, 2018):

“The stock price is defined as the closing price of each type of share in the stock market during an observation period whose movements are continuously observed by investors, besides that, the stock price is an indicator that is widely used by investors to find out about changing trends in the capital market”.

From the definition above, the stock price can be explained as a closing price for each type of stock in the capital market during the observation period whose movements are continuously observed by investors. in the capital market.

Definition of Stock Price according to (Velankar et al., 2017):

“Stock price is the cost of purchasing a security on an exchange. Stock price of the share depends upon many factors, such as earning per share, dividend per share, payout ratio, size of the firm and dividend yield, management, diversification, etc. The investors are always careful when purchasing stock in the company, as the stock price is known to fluctuate greatly in this specific market.”

Referring to the definition above, it can be interpreted that the stock price is the cost of securities on the stock market. The share price of a stock can be determined through many factors, such as dividends per share, earnings per share, company size, payout ratio, management, dividend yield, diversification, etc. Investors must be careful in determining the purchase of a company's shares because the movement of stock prices fluctuates wildly.

(Mangeta et al., 2019) stated that stock prices are the focus of investor considerations before investing in stocks. The stock price that investors want is stable and tends to increase over time. However, stock prices tend to fluctuate significantly because stock prices are determined based on demand and supply in the capital market. If the order or purchase of shares is high, the share price will rise. Still, if the sale or supply of shares is high, the share price will decrease. Therefore, investors need to analyze investment decisions because stock prices have dynamic movements, so no stock prices will continue to decrease or increase.

Referred to the theoretical statement above, it can be explained that the stock price is a predetermined cost for a security in the capital market. Market participants determine the stock price and only happen on the stock market at a certain time. In addition, stock price movements can be determined through many factors, especially the demand and supply on the stock market. Other factors, such as company performance, management,



diversification, dividend yields, etc., can also drive the movement of stock prices. Therefore, stock prices have very fluctuating price movements.

Profitability. According to (Christine and Apriliana, 2021), Profitability is a company's ability to generate profits by utilizing the resources owned by the company, such as assets, capital or sales. If the condition of a company can promise future profits, more investors will be interested in investing their funds in buying shares in the company; with many investors investing, the stock price will be higher.

(Deitiana and Robin, 2016) explained Profitability as a relationship between income and costs generated using current and fixed assets from productive activities. Companies can increase Profitability by reducing costs or increase revenue by sales.

The definition of Profitability according to (Kartikasari and Merianti, 2016)) is:

“Profitability is the company’s ability to generate profits for a certain period. The higher the profitability ratio, the higher the profits that a company generates in that period”.

From the explanation above, Profitability is a company's ability to generate profits and profits in a certain period. The higher the profitability ratio of a company, the higher the gains and profits provided by the company in the related period. Based on the theory above, Profitability is a company's ability to utilize its resources, such as assets, capital or sales, to achieve company goals, namely maximizing profits and profits. In addition, the effectiveness and efficiency of Profitability are measured using the profitability ratio; the higher the company's profitability ratio, the higher the profit that the company can generate. In other words, if the profitability ratio of a company is high, it will reflect a high stock price, and vice versa. A low company profitability ratio will reflect a declining stock price.

Financial Leverage. (Ross et al., 2021) stated that financial Leverage measures a company's dependence on using debt. So, financial Leverage describes the proportion of company asset financing using debt. The growing corporate debt story will cause the level of Leverage to be even higher. At the same time, (Weidman et al., 2018) stated that DER is a measuring tool for financial Leverage. DER is the ratio of debt to equity. DER shows a significant proportion of companies using debt to finance the company.

Market Value. Market value, which in this research is measured by the Earning Per Share (EPS) ratio, is a very crucial component that can be used and must be given special attention in analyzing a company. According to Suryana and Widjaja (2019), EPS is the net profit generated by the company, which is ready to be distributed to shareholders at that time. This EPS also explains the profit investors will get per share. A significant enough market value shows that the company has achieved its goal: maximize profits for investors so that its stock price increases and can attract investors. On the other hand, if the market value is low, it can be concluded that the company has yet to maximize profits due to insufficient stock prices, so investors will not be interested in investing.

(Aziza and Kosasih, 2021). state that the market value of a company is a reflection of the value of profits obtained by a company. EPS is one of the financial ratios that investors can use to analyze a company's capability to earn returns. EPS can describe the form of profit that can be given to shareholders from each share held or owned. Suppose the ratio of the company's market value is large. In that case, it can be interpreted that the company's ability to earn profits is very profitable, so it is convinced that the earnings per share that will be obtained satisfactorily can lead to high stock prices. On the other hand,



if the company's market value ratio is low, the company's ability to earn profits could be more profitable, so that investors will choose companies with good company value.

Market value is the value used to describe the value of assets or company value in financial markets. The company's market value can be useful information for investors as a reflection of the profits achieved by the company. Market value can be measured using a ratio that can describe the current conditions in the stock market. This ratio can provide an understanding of the implementation conditions that will be carried out and their impact in the future. According to (Darmadji and Fakhruddin, 2012) and (Budiarti, 2019), EPS is one of the market value ratios that explains the amount of profit that will be obtained by a shareholder or an investor in each share of investment.

From the abovementioned theory, market value reflects a company's capability to generate a profit. The greater the market value denotes that the corporation can generate profits and vice versa. So if the company's ability is good in obtaining profits, then the stock price is sure to have a high value and can attract more investors to invest and can maximize investors' profits through earnings per share.

Bank Indonesia Interest Rate. The BI Interest Rate is a policy determining the interest rate set and issued by the Central Bank of Indonesia. This Interest Rate has a very close relationship with the monetary policy that will later be applied to the Indonesian people. The BI Interest Rate will usually be determined and change every month. The BI Rate is determined through a meeting of all members of the board of governors, considering the conditions of the Indonesian economy and global economic markets. Later, the results of the forum will be included in a monetary policy that will be used as a reference in determining interest rates for all banks in Indonesia.

The Relationship of Profitability to Stock Prices. The profitability ratio is a ratio that shows the achievement of income by the company. This profitability ratio is often used as an indicator to evaluate a company's growth, success, and control. When Profitability experiences good change, it will also be followed by increased share prices. This will attract investors to invest their funds in the company.

Conversely, investors are only interested in investing their capital in certain company shares if the profitability ratio is high. As a result, the demand for company shares will decrease. Thus, low Profitability indicates the company's poor ability to achieve profits (Dwidjosumarno, 2019).

A company's stock price influences profitability; if the performance of a company's management is effective, the profitability ratio will be high, indicating that stock prices will experience growth and tend to be high. Conversely, if management performance is poor, the profitability ratio will be small, it can cause stock prices to grow to decrease, and the profits the company gets are small and ineffective. It is in line with research by (Subing et al., 2017), which proves that Profitability proxied by ROA has a positive and significant influence on stock prices.

Relationship of Financial Leverage on Stock Prices. The concept of financial Leverage is fundamental to show financial analysis in seeing the trade-off between risk and profit levels from various angles for the best decision. If the company uses financial Leverage or debt, changes in the company's EBIT will result in more significant changes in the company's EPS or earnings per share. Financial Leverage is a funding policy through debt by bearing a fixed burden to increase earnings per share. Financial Leverage can be measured using the debt to equity ratio and the total debt to total assets ratio—debt to equity ratio, namely the ratio to measure total liabilities with total equity. The higher the



debt-to-equity ratio, the larger the company is financed by debt; conversely, the lower the debt-to-equity ratio, the lower the company is financed by debt. The total debt to total assets ratio is the ratio for measuring total liabilities to total assets. The lower the total debt to total assets ratio, the better the company's performance.

The Linkage of Market Value to Stock Prices. The market value can be measured using Earnings per Share. According to (Suryana and Widjaja, 2019), EPS is an essential component that can be used and must be considered when analyzing a company. This EPS information shows the company's net profit ready to be distributed to all shareholders. This EPS also indicates the amount of profit that will be obtained by shareholders or investors per share. With a significant market value, the company achieves its goal, namely to maximize profits for investors so that the company's stock price will be high and can attract investors. Still, conversely, if the market value is low, it can be concluded that the company has yet to achieve the goal of maximizing profits because the stock price is low, so investors will not be interested in investing in the company. A study conducted by (Ariesa et al., 2020) propped it, which shows that the market value proxied by EPS has a positive and significant effect on stock prices.

The Linkage Interest Rates to Stock Prices. Interest rates hurt stock prices. This can be seen in the capital market activity. The high-interest rate will cause the stock price to fall. This happens because investors tend to sell their shares and transfer their funds in deposits to obtain higher profits with a safer level of risk. Conversely, the stock price will rise when the interest rate is low. This happens because investors buy shares for a more significant profit than the interest rate for investment deposits. This is in line with the opinion expressed by experts. (Zulfikar, 2016), says that: If interest rates rise, investment returns related to interest rates, for example, interest rates on Bank Indonesia Certificates (SBI) will rise, this can attract stock investors who transfer funds to Indonesian bank certificates, so many who will sell shares and share prices will fall therefore changes in interest rates will affect the variability of returns on investment.

Research Models and Hypotheses. Refers to the theory described above, previous research, and the interrelationships between the variables described above, the research model is illustrated in **Figure 2** below:

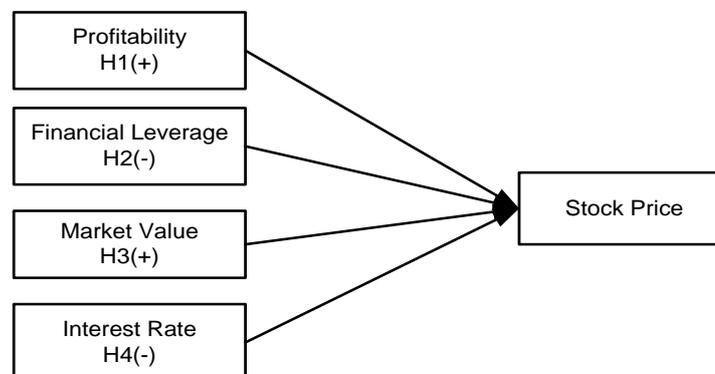


Figure 2. Research Model

The hypothesis of the research could be arranged as follows:

- H₁:** Profitability has a positive influence on stock prices
- H₂:** Financial Leverage provide a negative impact on stock prices
- H₃:** Market Value Brings Positive Influence on Share Prices
- H₄:** Interest Rates Hurt Stock Prices

METHODS

Research Subjects. The subjects in this investigation are manufacturing companies of the Indonesia Stock Exchange from 2017 to 2021. The data sample that has been collected is re-selected using a purposive sampling technique for analysis. The selected sample consisted of 280 observations from 56 manufacturing companies. The criteria researchers used in purposive sampling are presented in the table.

Table 1. Provisions in determining the sample

No.	Sample Selection Criteria	2017	2018	2019	2020	2021	Companies
	Total Manufact. Companies in IDX	158	168	183	196	214	
	IPO in 2017	10	10	10	10	10	
	IPO in 2018		10	10	10	10	
	IPO in 2019			15	15	15	
	IPO in 2020				13	13	
	IPO in 2021					18	
1	Manufact. companies listed in the 2017 to 2021 period on the IDX	148	148	148	148	148	740
2	Did not present financial statements during the 2017 to 2021 period	(8)	(8)	(8)	(8)	(8)	(40)
3	Did not use the IDR currency during the 2017 to 2021 period	(26)	(26)	(26)	(26)	(26)	(130)
4	Did not generate profit during the 2017 to 2021 period	(58)	(58)	(58)	(58)	(58)	(290)
	Total Research Sample	56	56	56	56	56	280

Source: data processed by author

Research Object. The object of this research consists of the stock price as the dependent variable, while Profitability, Financial Leverage, Market Value, and Interest Rates are the independent variables.

Variable Operationalization. The operationalization or measurement of variables is summarized in **Table 2**.

Table 2. Variable Operationalization

No.	Object	Quantifying	Scale	Source
1	Stock price	Using the closing price on stock prices issued a few days after the publication date of the financial statements.	Ratio	Yahoo Finance
2	Profitability	$ROA = \frac{Net\ Income}{Total\ Assets}$	Ratio	(Deitiana and Robin, 2016)
3	Financial Leverage	$DER = \frac{Earning\ after\ tax}{Jumlah\ lembar\ Saham}$	Ratio	(Lapian and Dewi, 2018)
4	Market value	$EPS = \frac{Earning\ after\ tax}{Jumlah\ lembar\ Saham}$	Ratio	(Faizal and Budiarti, 2019)
5	Interest Rate	Refers to the reference rate of Bank Indonesia's monetary policy	Ratio	www.bps.go.id

Source: Results of data processing by the author

RESULTS AND DISCUSSION

Multicollinearity Test Results. Several methods for detecting multicollinearity problems include the Pairwise Scatterplot, Pearson's Correlation Coefficients, Variance Inflation Factor (VIF), and Eigenvalue Method. The Pearson Correlation Coefficient method states that if the absolute value of the Pearson correlation coefficient is less than 0.800, there is minimal possibility of multicollinearity problems. (Shrestha, 2020).

Multicollinearity testing in this study used Pearson's Correlation Coefficients method, with the results in the following table.

Table 3. Multicollinearity Test output

	ROA	DER	EPS	INT-RATE
ROA	1.000	-0.040	0.308	0.073
DER	-0.040	1.000	-0.042	0.018
EPS	0.308	-0.042	1.000	0.052
INT-RATE	0.073	0.018	0.052	1.000

Source: Results of data processing by the author

The information obtained from the output of the Multicollinearity Test, which is presented in the table above, shows that all the regression coefficients between the independent variables are more minor than 0.800, so it means that there is no multicollinearity problem (Shrestha, 2020).

Panel Data Estimation. PanelData Estimation aims to select the most representative model between the three existing models, specifically the Fixed Effect (FEM), Common Effect (CEM), and Random Effect Model (REM). Tests carried out to select the model that best meets the three models include the Chow, Hausman and Lagrange tests (Wooldridge, 2016).

Chow Test Results. The Chow test is conducted by selecting a more appropriate model amongst the Common Effect Model or the Fixed Effect Model. From the results of the Chow test, the probability value of the cross-section-Chi Square is 0.000. This value is less than 0.050, indicating that the FEM Chow test is more suitable than the CEM and REM models (Widarjono, 2018). The next step is the Hausman Test.

Hausman test Result. Hausman test was conducted to select a more fit model among FEM and REM. If the probability value on the Hausman test variable is more minor than 0.050, then the FEM is more appropriate. The REM is more suitable if the variable probability value exceeds 0.050 (Widarjono, 2018). The statistical test results on the research data generate a probability value on a random cross-section 0.000. This probability value is smaller than 0.050, so the more representative model based on the output of the Hausman test is the Fixed Effects Model.

The best model was obtained from the two tests they carried out using Chow and Hausman, namely FEM, so the Lagrange Multiplier test did not need to be repeated. For further analysis, a Fixed Effect Model will be implemented.

Multiple Linear Regression Analysis. The impact of Profitability, Financial Leverage, market value, and interest rates on stock values was analyzed using multiple linear regression with the Fixed Effect Model. The regression results are shown in **Table 4.**



Table 4. The Regression Analysis Test Results on Stock Prices (STOCKPRICE)

Variable	Coefficient	Probability
C	7.082	0.000
ROA	2.346	0.000
DER	0.011	0.888
EPS	-0.000	0.019
INT_RATE	-4.182	0.004

Source: processed research data

$$\text{STOCK PRICE} = 7.082 + 2.346\text{ROA} + 0.011\text{DER} - 0.000\text{EPS} - 4.182 \text{INT_RATE} \dots (1)$$

Refers to the multiple regression model, the constant value resulting from the stock price above is 7.082. In case the Return on Assets (ROA), Debt to Equity Ratio (DER) and Earning per Share (EPS) is in the zero value, then the resulting stock price is 7.082.

From the multiple linear regression model explained before, the coefficient worth of the first independent variable, Profitability proxied by Return on Assets, has a coefficient value of 2.346, which shows that Return on Assets positively influences stock prices. Suppose the return on assets increases in value by one unit, assuming the other independent variables do not change. In that case, it will follow the increase of the stock price value by 2.346 units. Conversely, if the return on assets has decreased by one team, it also will follow by reducing 2.346 units weight of the stock price.

The second independent variable, financial Leverage, the market value proxied by the debtor equity ratio, has a coefficient of 0.011. This shows that financial Leverage has a positive influence on stock prices. If financial leverage increases in value by one unit, assuming the other independent variables do not change, then the stock price will increase by 0.011 units. Conversely, if financial Leverage decreases by one unit, the stock price value will also decrease by 0.011 units.

As the third independent variable, the market value proxied by earnings per share has a coefficient value of --0.000. It can be seen that earnings per share have no negative or positive effect on stock prices (the product is 0.000). This means that if there is a change in earnings per share of one unit, either in the form of an increase or decrease, it will not affect the stock price.

The last independent variable is the interest rate (INT-RATE). The analysis provides a coefficient of interest rate of -4.182. It can be interpreted that the BI Rate negatively influences stock prices. If the BI Rate increases in value by one unit, assuming the other independent variables do not change, then the value of the stock price decreases by 4,182. Conversely, if earnings per share decrease by one unit, the stock price value will increase by 4,182.

Determination Coefficient Test (Adjusted R²). This is carried out to predict the magnitude of the contribution of the influence exerted by the independent variables jointly on the dependent variable. The value of R² lies from zero to one. The value of R² which is close to zero indicates that the contribution of the independent variables in predicting the variation of the dependent variable is very limited. The value of R² which is close to one indicates that the independent variables fully contribute in providing almost all the information needed to predict the variation of the dependent variable (Deitiana and Robin, 2016). The R² test (adjusted R²) in a study aims to determine the



contribution of the independent variables which are Profitability, financial Leverage and market value to predict the variation of stock prices.

From the results of statistical processing of the research data, adjusted R^2 was obtained at 0.983 or 98.300 percent. The results of this determination test explain that the contribution of Profitability, financial Leverage, and market value to predict the variation of stock prices is 98.300 per cent. This adjusted R^2 value of the share price is in a good category because it is close to number one. While the remaining 1.700 per cent can be explained by other variables outside of this study.

Partial Test (t statistic). The t-statistical Test, according to (Ghozali and Ratmono, 2020), aims to explain the magnitude of the contribution of an independent variable in predicting the dependent variable partially, in the sense that all other independent variables are constant. A partial test (t-test) was carried out in this study to identify the effect of Profitability quantified with return on assets (ROA), financial Leverage measured by debt to equity ratio, market value quantified with earnings per share and interest rates partially dependent variable stock prices. The following is the form of hypothesis formulation to conduct the t-test:

H_0 : The independent variable does not affect the dependent variable

H_a : The independent variable significantly affects the dependent variable.

If the probability value is greater than a significance level of 0.050, then it can be explained that the independent variable has a partially insignificant effect on the dependent variable. Conversely, if the probability value is less than the significance level of 0.050, it can be considered that the independent variable has a partially significant influence on the dependent variable. The following is a table of partial test results (t-test):

Table 5. t-Test Output on Stock Prices

Variable	Coefficient	Probability.
C	7.082	0.000
ROA	2.346	0.000
DER	0.011	0.888
EPS	0.001	0.019
INT_RATE	-4.182	0.004

(Source: processed research data)

H1: Profitability positively affects stock prices.

The probability of return on assets is 0.000, meaning that the significance value of return on assets is less than 0.050. Referring to the result above, the profitability coefficient proxied by return on assets (ROA) is 2.346. These results denote that the variable return on investments positively influences the stock price variable. Profitability affects stock prices in a significant positive way.

H2: Movements that occur in Financial Leverage do not have a significant influence on share prices in a positive direction

The probability of the debt-equity ratio has a value of 0.888 or more significant than 0.050. Referring to the results above, the value of the financial leverage coefficient proxied by the debt-to-equity ratio is 0.011. These results indicate that the debt-to-equity ratio variable

positively influences the stock price variable. This can be concluded if the financial Leverage is positive and does not significantly affect stock prices.

H3: Market Value positively has a significant effect on stock prices.

The probability of earnings per share is 0.019, meaning the significance value of earnings per share is less than 0.050. Based on the above results, the market value coefficient measured using earnings per share (EPS) is 0.000. These results show that the earnings per share does not affect the stock price variable.

H4: Interest rates have a negative and significant effect on stock prices.

The probability of the Interest rates has a value of 0.004, meaning that the significance value of the INT-RATE is more minor than 0.050. From information obtained from the above results, the market value coefficient proxied by the BI Rate has a value of -4.182. These results show symptoms that the BI Rate influences stock price negatively. It can be interpreted that interest rates significantly affect stock prices. When interest rates increase, investors prefer to divert their investments into deposits. This phenomenon will hurt stock prices. The reason is that investors are reluctant to invest their money in the capital market because the returns received are smaller than those from deposit interest.

DISCUSSION

The results of data processing in this study show that Profitability (ROA) has a significant positive influence on Stock Prices. Thus, hypothesis 1 (H_1) in this study can be accepted. This result means that the higher the profitability value will have an effect on increasing stock prices. The higher the ROA, the higher the company's ability to generate profits. The greater the profits generated by the company will make investors interested in investing in stocks. Higher ROA means assets have good productivity in building net profit. This will further increase the attractiveness of the company to investors as investors see a strong potential for large returns. This condition will have an impact on increasing stock prices in the Capital Market. So, a conscientious investor will pay attention to the high return on assets to make his investment. The series that occurs between return on assets and stock prices is in line with the signal theory which states that if the company's performance goes well, the company's stock price will follow suit to rise. Therefore, the decision that must be taken by the owner of the company is that the owner of the company must try to increase profits by utilizing assets as much as possible so that ROA increases so that the share price also increases. This research is in line with previous research conducted by (Damayanti and Valianti, 2016), (Mukhtasyam, 2020), Sugiarto et al. (2019), Welan et al. (2019), and (Arrizqi, 2021 who found that Profitability has a positive and significant effect on Stock Prices.

The statistical test results show that financial Leverage proxied by DER does not affect stock prices. Thus, hypothesis 2 (H_2) in this study can be rejected. This means that the Leverage of a manufacturing company does not affect its stock price. This may be because the companies used in the sample tested can still carry out operational activities and generate profits without relying on debt funds. This is supported by the results of (Saprudin and Hasyim, 2020), which state that the Leverage proxied by DER has no



significant effect on the stock prices of manufacturing companies. A high DER indicates the company's ability to carry out its operational activities using more funds from debt. Investors choose companies with a low DER to avoid risk. In other words, investors prefer short-term profits from capital gains to long-term profits in dividends. Even though the results of this study showed no effect of Leverage on stock prices, it does not mean that DER can be ignored in influencing stock prices because, according to (2020), from the point of view of shareholders, debt is the preferred source of funding for two reasons, (1) The interest on most debt is fixed, and if the interest is less than the return on net operating assets, the difference in return will be a profit for the equity investor, and (2) interest is a tax-deductible expense, while dividends are not. Companies or issuers still have to maintain financial leverage conditions so that their financial performance looks good. At least to show that even in the worst conditions or If liquidation occurs, the company can still fulfil its obligations. So, it is still possible for investors to remain interested in the company's shares despite the results. The study shows that Leverage does not affect stock prices. However, showing good financial condition is one way to attract investors. This research is in line with (Arrizqi's, 2021) and (Hasyim's, 2020), which states that Leverage does not affect stock prices.

From the statistical results of the hypothesis testing that has been done, it can be seen that the market value proxied by earnings per share (EPS) has a significant and positive effect on stock prices. So, hypothesis 3 (H_3) is accepted. The implication is that investors' knowledge of EPS is very important for assessing the estimated potential income that can be received when buying a stock. EPS shows the amount of profit earned in one period per share. EPS is also an illustration of the company's ability to generate net profits in each share. Increased EPS indicates that the company is able to increase the level of investor prosperity. This encourages investors to increase their investment in the company's shares. An increase in the number of requests for shares will drive the increase in shares up. Thus if EPS increases, the market will give a positive response followed by an increase in stock prices. The results of previous research conducted by (Agustami and Syahida, 2019), (Labiba et al., 2021), and (Susanti, 2019) had results that were support to this study. Previous research stated that earnings per share has a positive and significant influence on stock prices. The implication for the company is that the company is expected to be able to increase efforts so that share profits can continue to be increased so that share prices can increase continuously.

The results of statistical tests in this study indicate that interest rates have a significant and negative effect on stock prices. So, hypothesis 4 (H_4) is accepted. This means that interest rates cannot be a factor that can affect the acquisition of stock prices in real terms. Because this high-interest rate will make shareholders re-evaluate their assessment of interest rates as one of the critical factors affecting share prices, it will result in shareholders diverting their investment capital to banks that apply high interest rates. High interest rates will encourage capital owners to invest their money in banks because of the expected profit rate. If deposit rates continue to rise, there will be a tendency for capital owners to divert their funds to deposits compared to investing in the capital market for higher profit rates and low-risk factors. This condition will hurt stock prices, where stock prices in the capital market will experience a significant decline. The results of the research support research conducted by (Mayasari, 2019), (Renaldi, 2016) and (Alvian et al., 2019), which found that interest rates hurt stock prices.



CONCLUSION

Research and analysis have been carried out on the factors that influence the stock prices of manufacturing companies listed on the IDX during the 2017 to 2021 period. With research objects consisting of Profitability, Financial Leverage, Market Value, and Interest Rates and a sample of 56 companies, the results show that: Profitability has a significant positive effect on stock prices, Leverage has no significant effect on stock prices, Market Value has a positive effect on stock prices, and Bank Indonesia's interest rate has a significant negative effect on stock prices. The results of this study can be used as a reference by investors and companies. For investors, for example, if the BI Rate is high, it will certainly be more profitable to invest in risk-free investments. For the company, of course, want a high share price. Therefore, it must strive to improve the company's ROA and DER performance.

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