

## Conference Paper

# Analysis Stock Return on Manufacture Sector Post-Covid-19 Pandemic

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**Abstract.**

Manufacturing companies in Indonesia support the government's role in the development of the economic growth in the country. However, the Covid-19 pandemic has caused problems in making a profit. Therefore, the main problem of this study is to find out and analyze how net profit margin and earning per share affect stock return. Second, knowing and analyzing capital structure as an intervening variable that relates the effect of net profit margin and earning per share to stock return. This study explores the theoretical model and empirical results of how net profit margin and earning per share affects stock return through capital structure. The sampling method was carried out using the purposive sampling method, a data source collection technique that determines the sample with certain considerations. There were 25 companies that were sampled in this study. The data processing was done by multiple linear regression analysis. From various empirical results, there is still little research on the ability of capital structure as a intervening variable to analyze manufacturing companies listed on the Indonesia Stock Exchange. This research is expected to contribute to further research and facilitate the government to approach the development of manufacturing companies to encourage the economy. Meanwhile, investors can be informed about the company's stock return. The importance of this research can be useful for companies in providing solutions on how to increase net profit margin and earning per share by increasing stock return through capital structure factors.

**Keywords:** net profit margin, earning per share, capital structure, stock return

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## 1. Introduction

Pandemics arise and change the dynamics of the people; Coronavirus (Covid-19) is also among these pandemics that transform the lifestyles of a common man and the decision-making criteria of policymakers. Due to the outbreak of Covid-19, the year 2020 will be remembered in history [1]. Covid-19 brought countless challenges across the globe. It has affected the lives of the common man and shakes the foundations of various countries' economic and financial systems. In June 2020, The World Economic Outlook forecasted the global economic growth would drop by 4.9 percent 2020. The

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worldwide trade was also affected in 2020 and decreased by 32 percent compared to the postCovid-19 year (World Trade Organization) [2].

Supporting a company's activities to maintain business sustainability not only requires a good business strategy, but the company can also attract investors to invest through the purchase of shares in the company [3]. An investment is an investor's commitment to a range of funds or other resources with the goal of achieving a range of profits or returns in the future [1]. This investment transaction can be made on the capital market, which provides various information related to the company's financial statements. Through this report, he can give investors the answer to predict the amount of return they will get from their investment [4]. The return on a stock is one of the motivators for investors to invest and rewards them for halving the courage of investors to take risks in the investments [2].

The development of manufacturing industry in Indonesia is very fast, as evidenced by the year-on-year development of the manufacturing companies listed in the BEI, so it can be inferred that the manufacturing industry is and will continue to be profitable now and for the future. In the beginning, the SARS-Cov-2 Coronavirus was identified in Wuhan, China in December 2019. Then, the pandemic issue in Indonesia, in which the first case of transmission, was revealed in March 2020. This issue has an impact on several companies, especially the manufacturing sector. The Covid-19 pandemic caused economic losses, which were reflected in stock price movements [5]. Stock trading conditions on the Indonesian stock exchange have been under heavy pressure since early 2020, as evidenced by the 18.46% drop in the Composite Stock Index (JCI) [6]. The Composite Stock Index (JCI) plummeted to an all-time low, especially in March 2020, due to the spread of the Covid-19 virus. When the WHO announced the pandemic on March 12, the JCI fell 4.2% from 5,361 to 4,937, a level that has not occurred in the last four years [7]. On March 13, stock trading was halted for the first time since 2008 due to the Covid-19 pandemic. Of course, this directly affects the company's shareholder returns. Additionally, many investors are hesitant to invest because they fear that the company will not be able to generate returns that meet their expectations. Therefore, the significance of this study lies in analyzing the factors that influence the stock returns of manufacturing companies after the Covid-19 pandemic, including net profit margins, earnings per share and capital structure.

The economic turbulence associated with the coronavirus pandemic in 2019-2020 has serious repercussions on financial markets, notably on the stock, bond and commodity markets [8]. Financial instability is a very important factor for society since a financial crisis or a stock market crash can directly or indirectly affect the level

of economic well-being of the inhabitants of a country. If a given stock market is strongly linked to the stock market of another country, the financial stability of the former depends in part on the financial stability of the second. Thus, the occurrence of significant causation between markets may question the diversification of portfolios.

Here are some reasons as to why investors use net profit margin, leverage and earning per share ratios in investment analysis: First, net profit margin indicates the stability and valuation of a company's operational efficiency to measure how much profit the company generates [9]. The NPM of a company will perform and attract investors. Good NPM also increases the value of a company's stock price. This leads to increased stock returns [10]. Research by Pauziantara et al. [10] described NPM, EPS, and ROA as one of the variables affecting stock returns, and showed that NPM has a positive impact on stock returns. Moreover, research by Yuningsih [8] shows that NPM variables have a positive impact on stock returns.

Second, earnings per share is a ratio to analyze a company's past performance and help make decisions about the company's potential future performance [11]. EPS reflects the earnings per share earned by investors. For investors, EPS information is considered basic and useful information because it describes the company's prospects for future earnings. A high EPS value indicates that the company is in good standing and increasing in terms of company sales and profits, increasing investors' desire to buy shares in the company [12]. A high earnings per share indicates that the company's ability to generate net earnings per share is also high, influencing the return investors receive in the capital markets. Research by Lulita and Yanni [13] shows that earnings per share has a positive impact on stock returns.

Third, the capital structure explains how the proper composition of the company's capital can be achieved through internal funding, namely retained earnings, and external funding through the issuance of corporate bonds, preferred shares, or new shares [14]. However, the use of large external funds may increase the risk of the company's risk to pay its debts [15]. Failure to pay debts will result in bankruptcy and diminished returns for shareholders. Based on the 2020 COVID-19 pandemic, the value of JCI continues to decline, almost companies to borrow fund from external parties to sustain their operations [16]. Research by Yuningsih [8], Amri and Ramdani [17] shows that capital structure as an intervening variable has a positive impact on stock returns.

Based on the description of the phenomenon and several different previous research above, so the objective of this study is to analyze the effect of net profit margin dan earning per share post covid 19 of manufacture companies listed on the Indonesia Stock Exchange with capital structure as intervening variable.

The purpose of this model study provides a proposal to determine the effect of NPM and EPS on stock return and capital structure as well as DER as an intervening variable between NPM and EPS which will be used to determine important aspect of stock return. This model became the starting point for further discussion to develop a convincing model that could be further tested at the empirical research followed by a discussion of the theoretical review that built it.

## 2. Literature Review

### 2.1. Signaling theory

Signaling theory is the theory that explains the signal transmitted from the traffic light to the receiver [18]. Signaling theory studies that every action or act contains information. Signal theory is a measure taken by a company's management that provides investors with clues as to how management views the company's prospects. An announcement of benefits is an example of confirming the transmission of information through signaling [19]. Based on this research, the signal theory explains the phenomenon of the Covid-19 pandemic, that stock returns are associated with unsystematic or idiosyncratic risks. Signaling theory explains that information published as announcements provides signals for investors to make investment decisions [20]. When an event occurs that sends a negative signal to an investor, it can be expected to result in a stock price decline, a decline in trading volume, or an abnormal stock return. Information is an important consideration for investors and businessmen as it provides clues and explanations for the past, present and future of a company's survival [21]. Investors who signal their investment decisions in the capital markets need complete, relevant, accurate and timely information. If the announcement contains values that are not yet known to investors, the information is analyzed to determine whether it has good or bad signals. This can be seen by changes in the level of stock sales, as the market is expected to react upon the announcement if the information gives a good signal [22].

### 2.2. Capital market

The Capital markets an important role in the economic development of developed and developing countries as they are one of the indicators of a country's development [23]. Capital markets are activities related to the public offering and trading of securities, public companies related to issued securities, and securities as well as institutions and

professions. So that, the capital market cannot be separated from various environmental influences that include economic factors such as internal and external factors of the company, and non-economic factors such as social, political factors and those that disrupt the national stability of a country [24].

### 2.3. Stock return

Stock return is the result of an investment divided into two parts: the realized return (realized return) and the expected return (expected return) [25]. Realized returns are returns calculated using historical data. Expected return is the return an investor expects in the future. Expected returns can be calculated based on future expected values of past return values and existing expected return models. Stock returns affect the level of investment risk, the higher level of the stock return, the higher the risk an investor faces, and conversely, the lower of the stock return, will be the lower of the risk [26].

### 2.4. Net profit margin

Net Profit Margin (NPM) is a firm measure by comparing profit after interest and tax to sales [9]. The profit margin level for each sales transaction is determined by two factors: net sales and operating income. The level of operating profit or net operating profit depends on the level of income from sales (sales) and operating expenses. As the financial performance of companies generating net income from sales increases, this has implications for the increased returns received from shareholders [10].

### 2.5. Earnings per share

The ratio per share, also called book-to-value ratio, is a ratio used to measure that management has succeeded in achieving returns for shareholders [11]. Earnings per share is calculated as earnings after tax (EAT) divided by the number of shares of common stock outstanding. Earnings per share is a measure of how much profit (return) an investor or shareholder makes per his share. Of course, the higher the value of earnings per share, the better off the stockholders are because the more profit they provide [13].

## 2.6. Capital structure

The capital structure considers the amount of perpetual short-term debt, long-term debt, preferred stock, or common stock [14]. The optimal capital structure is the ratio of debt to equity that maximizes the company's stock price. One of the ratios used to measure capital structure is the debt to equity ratio (DER). It provides an overview of the company's capital structure and allows the risk of nonpayment of debt to be identified [16]. The Debt to Equity Ratio (DER) also indicates the level of debt, and highly indebted companies can become a burden for companies and reduce investor confidence [17].

## 3. Result and Discussion

### 3.1. The effect of net profit margin on capital structure

Net Profit Margin (NPM) is a profitability ratio that indicates the percentage of net profit you earn from each sale. The higher this ratio, the higher the ability of the company to generate profits. NPM increases when net profit after tax increases relatively faster than sales increase. Increased sales require additional capital that can be obtained from internal and external sources [27]. The impact of net profit margin on capital structure can show negative or positive results, depending on the economic profitability policy. Therefore, the hypotheses of this study is:

H1: Net profit margin (NPM) has a positive effect on capital structure (DER).

### 3.2. The effect of earning per share on capital structure

Companies generally prefer to use the income they receive as their primary source of funding for their investments. Another alternative, if internal sources of funds are not sufficient, is to borrow new money and then issue new equity as a last resort to raise capital [28]. The company's debt to equity ratio reflects its cumulative need for external funding. Companies that can generate high returns at lower growth rates have lower leverage ratios compared to the industry average. Increasing the company's earnings per share (EPS) makes the company prefer to use equity capital, or retained earnings, to reduce the company's debt value [16]. Therefore, the hypotheses of this study is:

H2: Earning Per Share (EPS) has negatively effect on capital structure (DER).

### 3.3. The effect of net profit margin on stock return

The NPM ratio is the part of the rate of return used to measure a company's ability to generate profit in order to calculate the company's net profit from sale [20]. These conditions can attract investors to invest in companies because good companies and the returns that investors receive also increase [26].

The result of research by Yuningsih [8] show that NPM variables have a positive impact on stock returns. Similar research by Pauziantara [10] results were conducted by it was proven that there is a positive relationship between net profit margin with stock return. Other relevant research concluded that net profit margin has a positive effect on stock return. In this case, proposition 1 is formulated:

H3: Net Profit Margin (NPM) has positive effect on Stock Return.

### 3.4. The effect of earning per share on stock return

In signal theory, earnings per share information is one of the information asymmetries that companies provide in the form of financial statements. Earnings Per Share (EPS) is the profit of a company that is typically distributed to shareholders. In practice, however, not all of these profits can be distributed and a portion is retained as retained earnings. The higher the value of the earnings per share, the greater the benefits given to shareholders. That is, high earnings per share are attractive to investors investing capital in a company, so it is positive for potential investors to increase their ownership of the company [29]. Based on that research by Lailita and Yanni [13] proves that earning per share ratio has a positive and significant effect on stock return. In this case, proposition 4 is formulated:

H4: Earning Per Share (EPS) has positive effect on Stock Return.

### 3.5. The effect of capital structure on stock return

The ratio used in the capital structure is debt-to-equity (DER), which is the ratio of debt to equity [17]. DER ratio is provide coverage to the extent that a company's debt is backed by equity capital used as a funding source, affecting company performance and driving share price appreciation [15]. If DER ratio increase will be indicates that a company is paying too much interest and eating into its profits, so high debt (DER) tends to reduce equity returns and worsen company performance. there is. Companies that develop and grow will almost certainly need a source of capital to fund their operations, which

cannot be covered by equity capital alone, so companies will use foreign capital, which will affect their ROE increase [30]. As shareholder returns increase, so does the price per share, which impacts the increase in stock earnings

H5: Capital Structure (DER) has positive effect on Stock Return.

### 4. The Theoretical Concept

This theoretical concept examines this study to estimate analyze the effect of net profit margin and earning per share on stock return by using capital structure as an intervening variable as presented in Fig. 1, as follows:

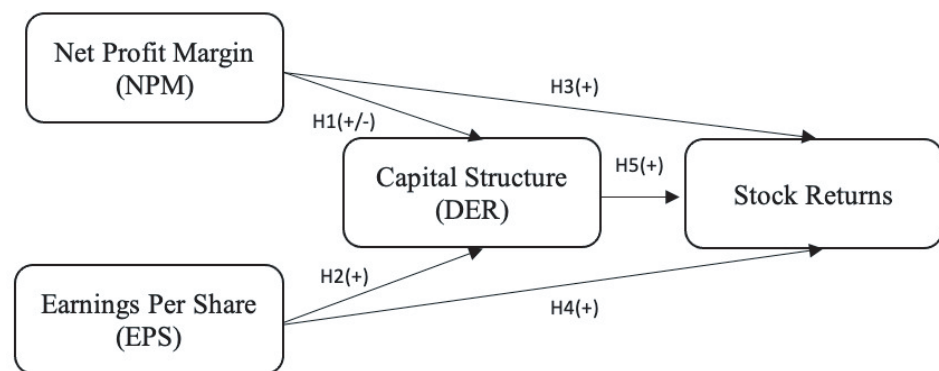


Figure 1: Thinking framework.

### 5. Conclusion

The overall conclusion to be withheld and sustained in the result obtained, through test carried out with econophysical models, shows that the global pandemic has a significant impact on the adjustment of the financial market of Indonesia. The concept of this theoretical model will be empirically tested using evIEWS analysis which uses secondary types of data obtained from each audited financial statement recorded on the Indonesia Stock Exchange during the observation year. This research will be able to facilitate the government to approach the development of manufacturing companies to drive the economy. In the meantime, investors can provide information regarding the company’s stock return. As for the company, it can provide solutions on how to increase stock return by increasing NPM and EPS factors. Academically, this research can be further analyzed in many ways for developing countries that need attention to improve financial performance specially stock return in supporting the success of company business activities. Therefore, the main objective of this empirical study and practical activities



is a national framework to encourage manufacture companies in Indonesia as well as the economic growth and development of the country. In conclusion, we consider that investors should diversify their portfolios, and invest in least risky market, with the purpose of mitigating risk and improving the efficiency of their portfolios.

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