

## Firm Size on IDX BUMN 20 Stock Prices: The Role of Mediating Activity and Profitability

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### ABSTRACT

This study investigates if firm size increases stock prices using activity and profitability as mediating variables. It employs a quantitative causality method using secondary data from financial reports on firm websites and the IDX. The sample includes companies listed in the IDX BUMN 20 index from 2018-2021, using non-probability sampling and unbalanced panel data estimated with a random effects model. Data analysis involves descriptive statistics, mediation regression, and path analysis with Eviews 12 software. Results indicate firm size and profitability positively impact stock price, firm size positively impacts profitability, activity does not impact stock price, and activity and profitability do not mediate the firm size-stock price relationship

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## INTRODUCTION

Indonesia is currently in a period of digital transformation, which has drastically changed all aspects of business using digital technology. one of which is Fintech (financial technology). Fintech is a combination of the financial system and technology. Fintech allows us to carry out financial transaction activities such as buying Stocks online anytime and anywhere. This is a good thing for issuers because the number of investors who will buy their Stocks increases.

Stocks are proof of partial ownership of the company. Stocks are one of the most profitable investments; stock investors benefit from dividends or capital gains obtained by buying and selling Stocks. The Stock price is determined by the results of supply and demand for the stock itself. Stock price is an indication that is often used to assess the level of success of a company.

Stocks on the idx BUMN 20 Index are blue-chip stocks that have an average large market capitalization. In addition, the BUMN sector is also the main sector driving the economy in Indonesia, which can be seen from its net profit income in 2021, which is Rp. 126 trillion, which has increased rapidly from the previous year, which was only Rp. 13 trillion (Binekasri, 2022). However in reality, the idx BUMN 20 index has a problem, which is experiencing a significant decline in Stock prices, so this is an interesting area to study. The following presents an overview of the development of the Stocks of companies (in thousand) that are still holding on to idx BUMN 20 index for the 2018–2021 period.

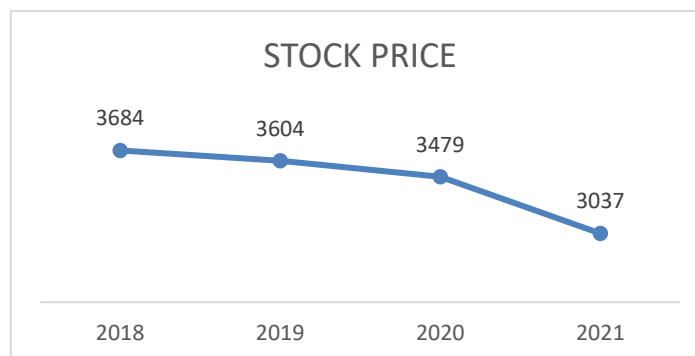


Figure 1. Stock Price Movements in Companies That Survive in The IDX BUMN 20 Index

Based on Figure 1, it can be seen that the average decline in Stock prices that occurred in the idx BUMN 20 index from 2018 to 2019 fell from 3,684 to 3,604, then in 2020 the average Stock price fell again to 3,479, and finally in 2021 the average Stock price fell significantly to 3,037. According to Welan, there are several factors that affect stock prices. According to Welan et al., (2019), Firm Size is one of the strongest factors that can affect stock prices because the larger the size of a company, the more superior the corporation is in terms of wealth and performance, so investors are encouraged to believe and want to invest by buying Stocks, which causes the Stock price to increase. The following is a graph of the development of firm size (in billions) for corporations that are registered and still survive in the idx BUMN 20 index for the 2018–2021 period.

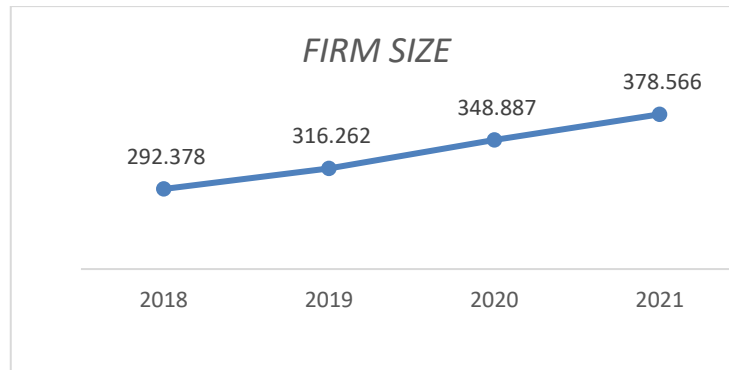


Figure 2. Firm Size Movement in Corporations That Survive in The IDX BUMN 20 Index

Based on Figure 2, it can be seen that firm size from 2018 to 2021 has increased significantly from 2018, namely from 292,378 to 316,262 in 2019, increased again in 2020 to 348,887, and increased again in 2021 to 378,566. This is inversely proportional to the Stock price, which fell significantly from 2018 to 2021.

The phenomenon of stock prices that continue to decline while firm size continues to increase is not in align with signaling theory. Referring to signaling theory, an increase in firm size should also be accompanied by an increase in stock prices. There are several previous studies that are in align with signaling theory, one of which is a study conducted by (Welan et al., 2019) which revealed that stock price is positively and significantly impacted by firm size. These results are also the same as the results of (Ridha, 2019) study (Alamsyah, 2019) and (Lombogia et al., 2020). However, there are also several studies that are different from signaling theory, one of which is a study conducted by (Pradanimas & Sucipto, 2022) which revealed that stock price is negatively and significantly impacted by firm size. But (Fristinaningrum & Arisyahidin, 2018), (Pabunna et al., 2021) and (Cornelius & Hanna, 2019). revealed that stock price is insignificantly impacted by firm size.

With the research gap that has been described, it shows inconsistent results in the relationship between firm size and stock price. In theory, firm size signals can be considered positive information that will increase stock prices, but this is still doubtful due to differences in the results of firm size studies on stock prices. Therefore, we need other variables that are able to mediate firm size on stock prices. Profitability and activity are thought to be able to mediate firm size because a large firm managed by good management will increase corporate sales activity, and high corporate sales activity will increase the return on corporate assets, which is a positive signal for investors to acquire company Stocks.

Based on this, the formulation of this problem is how to build a model of increasing stock prices through activity and profitability. And this study aims to create a model that can overcome research gaps and overcome gaps in the results of previous studies by finding answers or solutions to one or several of the problems studied. In this model, the researcher seeks to provide a new explanation regarding whether firm size can increase stock prices by using activity and profitability as mediating variables. So it is hoped that it can make a

new contribution to signaling theory regarding the mediating role of activity and profitability on the impact of firm size on stock prices.

## **LITERATURE REVIEW**

### **Signalling Theory**

According to Morris in 1987, signaling theory is a theory that addresses the problem of information asymmetry in the market. This theory discusses how the delivery of information from one party to another can reduce information asymmetry (Hayat et al., 2021:22). And (Ross, 1977) states that corporate executives who have superior information about their company will be encouraged to share this information with potential investors in order for the stock price of the company to rise.

### **Critical Resource Theory**

Critical Resources Theory is a relevant theory for linking firm size, activity, and profitability. According to Kumar et al., (2001) the larger the corporation, the greater its capacity to generate profits. Critical resource theory is a theory that emphasizes the control of business owners over company resources such as assets, intellectual property, and technology as determinants of firm size. Based on this, with the existence of large resources in the form of assets, management can manage these resources into assets that sell and make a profit.

### **Stock Price**

The stock price, according to Hartono (2019), is the price of a stock that is determined by market participants on the stock exchange. Changes in Stock prices occur when many investors want to acquire stock and the stock price rises. Conversely, when many people sell stock, the price of the stock goes down. Stock prices are determined by demand and supply in the capital market, reflecting investors' desire for indications of income and cash flow and the level of investors needed (Jabar & Cahyadi, 2020).

### **Firm Size**

Firm size is a scale that can classify a corporation's size in a variety of categories, including total corporate assets, stock market valuation, log size, and others. Ekinanda et al., (2021). According to Yohana et al., (2021) firm size is a company's total assets, which might be an indication of influencing profits.

### **Activity**

Kasmir (2019) states that the activity ratio is the ratio used to assess the efficiency or impactiveness of corporations in utilizing their assets. The activity ratio is how impactively the organization uses its assets to generate revenue. In this study, the measurement used for activity is total asset turnover (TATO). The higher the activity ratio of a corporation, the better its management manages its assets so that it can generate a lot of income. sale of its corporate assets So that this is a positive signal for investors towards the corporation and that investors are interested in buying these Stocks.

### **Profitability**

Kasmir (2019) states that the profitability is the ratio used to calculate a corporation's ability to earn profits. This ratio also shows the level of managerial impactiveness of a corporation. This is reflected in the profits generated from sales and investment income. In this study, the measurement used for activity is

return on assets (ROA), because corporations with large sizes can obtain higher returns on assets than small corporations. Large corporations can generate greater returns, which is a positive signal for investors to look at firm size before buying Stocks.

#### **Impact of Firm Size on Stock Price**

Larger companies are easier to accept loans because the value of assets used as collateral is greater, which increases the level of bank trust. Furthermore, business size is said to be able to influence stock prices because the bigger the company, the more attention investors will give to the company by investing in it, it will change the movement of the stock. This is based on the signaling theory, which states that good quality corporations actively signal their quality to the market through various indicators. This is supported by several previous studies conducted by Winata et al., (2021), Lombogia et al., (2020), and Welan et al., (2019), which revealed that stock price is positively and significantly impacted by firm size

*H1: Firm size has a significant positive impact on stock prices.*

#### **Impact of Firm Size on Activity**

The relationship between firm size and activity can theoretically be explained by critical resource theory. Critical Resource Theory explains that managers absorb a lot of profit from the assets they own, and one of the ways managers get profits is by managing their assets into assets that sell as efficiently as possible. So based on this, it can be concluded that the larger the firm size, the more assets managed by management become selling assets.

*H2: Firm size has a significant positive impact on Activity.*

#### **Impact of Firm Size on Profitability**

The relationship between firm size and profitability can theoretically be explained by critical resource theory. The critical resource theory explains that management absorbs a lot of profit from the assets it owns. Large-scale corporations have large resources and large operational activities as well; this shows that these corporations have high profit potential. This is supported by several previous studies conducted by Sukesti et al., (2021), Sudiyatno et al., (2020), and Cherril et al., (2019), which also found that firm size has a significant positive impact on profitability.

*H3: Firm size has a significant positive impact on profitability.*

#### **Impact of Activity on Profitability**

The relationship between activity and profitability can theoretically be explained by critical resource theory. The critical resource theory explains that management absorbs a lot of profit from the assets it owns. One way managers benefit from assets that can be managed by management is to create sales. which means the higher the level of asset turnover, the greater the profit generated by the corporation. This is supported by several previous studies conducted by Khasanah & Suwarti (2022), Sunaryo et al., (2022), and Vania & Tarmizi (2022), which revealed that profitability is positively and significantly impacted by Activity.

*H4: Activity has a significant positive impact on profitability.*

### **Impact of Activity on Stock Price**

According to signaling theory, good quality corporations actively signal their quality to the market through various indicators. One such indicator is activity. The higher the activity (TATO), the more efficiently all assets are used to generate sales. The greater the turnover, the better the management of the company's overall assets may be managed into assets that sell efficiently. As a result, investors will begin to invest in corporations, altering the movement of the corporation's stock. This is supported by several previous studies conducted by Khasanah & Suwarti (2022) Herawati & Putra (2018), and Jiang et al., (2020), which revealed that stock price is positively and significantly impacted by activity.

*H5: Activity has a significant positive impact on stock price.*

### **Impact of Profitability on Stock Price**

According to signaling theory, good quality corporations actively signal their quality to the market through various indicators. One such indicator is profitability, as a higher return on assets (ROA) indicates greater profits earned by the corporation. This increased profit can attract investor attention and drive changes in the corporation stock movement. This is supported by several previous studies conducted by Inggarwati Rahayu et al., (2020) Herawati & Putra (2018), and Sukesti et al., (2021), which revealed that stock price is positively and significantly impacted by profitability.

*H6: Profitability has a significant positive impact on stock price.*

### **The impact of Firm Size on stock prices through activity**

In theory, the firm size signal cannot be expressed as a positive signal. Firm size can be stated as a positive signal if it can encourage activity. The larger the firm size, the more assets managed by corporate management become selling assets. So that this is a positive signal for investors towards the corporation and that investors are interested in buying these Stocks. Stocks sold by corporations and purchased by investors will cause a demand and supply process, and this is one of the factors in the formation of stock prices.

*H7: Activity can mediate the relationship between firm size and stock price.*

### **The impact of Firm Size on stock prices through Profitability**

In theory, firm-size signals cannot be expressed as positive signals. Firm size can be stated as a positive signal if it can drive profitability. The larger the firm size, the higher the profitability, because large corporations can obtain a higher return on assets compared to small corporations. Large corporations can generate greater returns, which is a positive signal for investors to buy these Stocks.

*H8: Profitability can mediate the relationship between firm size and stock price.*

### **The impact of Firm Size on stock prices through activity and Profitability**

The relationship between firm size and stock price through activity and profitability can be explained through signal theory. Firm size cannot be expressed as a positive signal. Firm size can be stated as a positive signal if it can encourage activity and profitability. The higher the activity, the more efficient the company's management is in creating sales from its assets, and the profit that will be obtained by the corporation will also be high. The increase in profits generated

by corporations will trigger the attention of investors to invest in them, which will change the movement of their stocks.

*H9: Activity and profitability can mediate the relationship between firm size and stock price.*

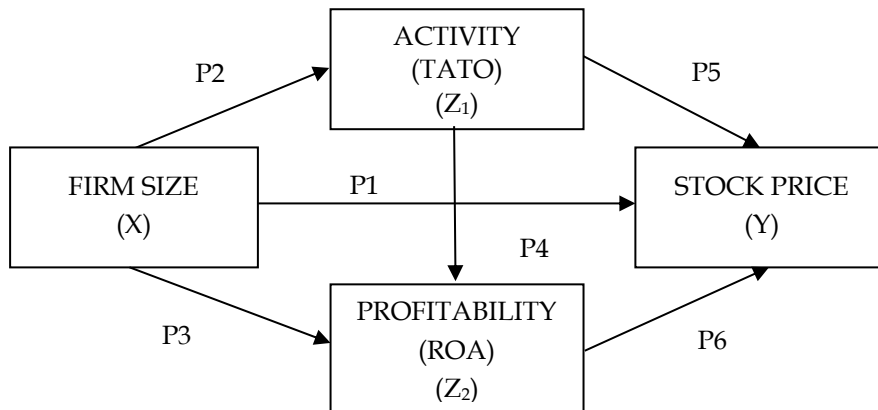


Figure 3. Conceptual Framework

## METHODOLOGY

The type of study used in this study, according to the nature of scientific explanation, is a type of causality study. According to Ferdinand, (2014) causality studies are management studies that seek explanations in the form of causal relationships between various concepts, variables, or management techniques.

To elucidate and corroborate causal relationships, the causal connection between the independent variable (firm size) and the dependent variable (stock price) is incorporated into this investigation. The study utilizes secondary data taken from official financial and annual reports found on the firm's website as well as the IDX.

The population in this study is made up of corporations that are registered and still survive in the idx BUMN 20 index for the 2018–2021 period totaling 15 companies. The sampling method employed in this study is non-probability with a saturation sampling strategy, which means that all members of the population are utilized as samples. And in this research uses unbalance data panel estimated by random impact model. In this study descriptive statistics, regression analysis of mediating variables, and path analysis were used for data analysis, and the calculation process for each variable is calculated using Eviews 12 software. This research model is divided into three substructures, including:

- 1) Activity =  $\alpha + p_2 \text{ firm size} + \varepsilon$
- 2) Profitability =  $\alpha + p_3 \text{ firm size} + p_4 \text{ Activity} + \varepsilon$
- 3) Stock Price =  $\alpha + p_1 \text{ firm size} + p_4 \text{ activity} + p_6 \text{ profitability} + \varepsilon$

## RESEARCH RESULTS

### Descriptive Stastic

Descriptive statistics are used to examine data by summarizing or describing the information acquired without drawing broad conclusions or generalization (Digdowiseiso, 2017).

Table 1. Descriptive Statistic

Variable	n	Minimum	Maximum	Mean	Std. Deviation
LN_SIZE	60	15.5458	21,2688	18,5310	1,5540
TATO	60	0.0386	2,5841	0,5125	0,5979
ROA	60	-0.0697	0,2189	0,0317	0,0485
LN_CP	60	5.6204	9,4275	7,7776	0,9211

Source: Processed Data (2023)

From the descriptive statistical table, it can be seen the maximum minimum mean and standard deviation data of each variable, and it can be seen that the mean value of the TATO and ROA variables is greater than the standard deviation, which indicates that there is a data deviation in the ROA and TATO variables. This is due to the extreme data on these variables. Because the extreme data contained in the study cannot be excluded because it is still a study subject phenomenon that should still be used, the data treatment carried out in this study is to transform the data into natural logarithmic form. The transformation changes in the form of natural logarithms aim to reduce the impacts of these extreme data.

After the natural logarithm is done, there is some missing data that needs to be deleted. Because firm size and stock prices are already in the form of natural logarithms, in this treatment only the activity and profitability variables are transformed into natural logarithms. The study data that needs to be deleted includes PT Timah Tbk from 2019 to 2022 and PT Waskita Karya Tbk from 2019 to 2021. This deletion causes the data in this study to become unstructured panel data.

### Normality Test

The normality test analyzes whether the residuals in a regression model follow a normal distribution. Eviews employs the Jarque-Bera (JB) test to determine normality. In this study, the Jarque-Bera statistical value serves as the tool for assessing normality. If the p-value JB calculated is greater than the alpha level ( $\alpha = 0.05$ ), then  $H_0$  is accepted, and the regression model is considered normally distributed. Conversely, if the p-value JB is less than 0.05, the regression model is not normally distributing (Ghozali & Ratmono, 2017).



Table 2. Result of Statistical Jarque-Bera Normality Test

	Probability	Significance level	Conslusion
Substructural 1	0,2436	0.05	Normal
Substructural 2	0.7407	0.05	Normal
Substructural 3	0.1696	0,05	Normal

Source: Processed data (2023)

### Multicollinearity Test

The multicollinearity test analyze whether there is a relationship between independent variables in a regression model. By analyzing the correlation matrix of the criterion, the test measures the correlation value between variables. If the correlation value is less than 0.90, it indicates that the independent variables in the regression model are not multicollinear. However, if the correlation value exceeds 90, then it is concluded that the independent variables are indeed multicollinear in the regression model. (Ghozali & Ratmono, 2017).

Table 3. Result of Multicollinearity Test

Variabel	Substructural 2		Substructural 3			
	LN_SIZE	LN_TATO	LN_SIZE	LN_TATO	LN_ROA	
LN_SIZE	1.0000	-0.8372	LN_SIZE	1.0000	-0.8372	-0.2849
LN_TATO	-0.8372	1.0000	LN_TATO	-0.8372	1.0000	0.5850
			LN_ROA	-0.2818	0.5850	1.0000

Source: Processed data (2023)

In this multicollinearity test, only substructural 2 and 3 are tested because substructural 1 only has 1 independent variable, and it can be seen from table 3 that there are no symptoms of multicollinearity in substructural models 2 and 3 because the correlation value between variables  $\leq 0.90$ .

Table 4. Panel Data Regression Analysis

Variabel	Substructural 1				Substructural 2			
	Coefficient	Std. error	T-statistic	Prob	Coefficient	Std. error	T-statistic	Prob
C	10,9400	2,0258	5,4002	0,0000	-13,1773	3,3137	-3,9765	0,0002
LN_SIZE	-0,6605	0,1088	-6,0692	0,0000	0,5923	0,1917	3,0890	0,0032
LN_TATO					1,2132	0,2344	5,1756	0,0000
LN_ROA								
R-Squared	0,4186				0,3624			

Variabel	Substructural 3			
	Coefficient	Std. error	T-statistic	Prob
C	2,4465	2,7416	0,8923	0,3764
LN_SIZE	0,3190	0,1528	2,0873	0,0419
LN_TATO	-0,0334	0,1770	-0,1889	0,8509
LN_ROA	0,1591	0,0552	2,8815	0,0058
R-Squared	0,2569			

Source: Processed Data (2023)

**Regression Analysis**

Table 4 shows that the constant value in substructural 1 is 10.9400, implying that the TATO value is 10.94006 if all size variables are believed to be zero (0). And the constant size of -0.6605 means that if the size value grows by 1%, TATO reduces by 0.6605; conversely, if the size value decreases by 1%, TATO increases by 0.6605. The following is the sub-structural regression equation 1:  $TATO = 10.9400 - 0.6605 \text{ Size} + e$ .

In substructural 2, the constant value is -13.1773, The constant value in substructural 2 is -13.1773, which suggests that if the SIZE and TATO variables are set to zero (0), the ROA will fall by 13.1779. The size constant of 0.5923 means that if the size value rises by 1%, the ROA rises by 0.5923, and vice versa, if the size value falls by 1%, the ROA falls by 0.5923. And the TATO constant of 1.2132 is equivalent to a TATO value of 1%. ROA will rise by 1.2132, and vice versa. If the TATO value falls by 1%, the ROA falls by 1.2132. The following is the sub-structural regression agreement 2:  $ROA = -13.1773 + 0.5923 \text{ Size} + 1.2132 \text{ TATO} + e$ .

The constant value in substructural 3 is 2.4465. It can be deduced that if the variables SIZE, TATO, and ROA are considered to be zero (0), the stock price is 2.4465. The constant size of 0.3190 means that if the size value increases by 1%, so will the stock price, and vice versa. If the size value falls by 1%, the stock price falls by 0.3190. The TATO constant of -0.0334 is equivalent to a TATO value of 1%. The stock price will then drop by 0.0334, and vice versa. If the TATO value rises by 1%, the stock price rises by 0.0334 points. And the ROA constant of 0.1591 means that if the ROA value rises by 1%, so will the stock price, and vice versa. If the ROA value falls by 1%, the stock price falls by 0.1591. The following is the sub-structural regression equation 3:  $STOCK \text{ PRICE} = 2.4465 + 0.3190 \text{ SIZE} - 0.0334 \text{ TATO} + ROA \text{ } 0.1591 + e$ .

**Hypotesis Testing (T-test)**

A t test, according to Ghozali and Ratmono (2017), is used to discover how much the influence of one explanatory or independent variable explains the variation in the dependent variable. The t count findings are then compared to the t table value for an alpha level of 5% (0.05) with  $df = n + k$ .  $t_{count} < t_{table}$ , it is determined that there is no Impact and the hypothesis is rejected, and vice versa. If  $t_{count} > t_{table}$ , it is determined that there is an Impact, and the hypothesis can be accepted.

And the independent variable's impact on the dependent variable is examined with a 95% confidence level or significance = 5%. If the significance of t sig is less than 0.05, the independent variable is determined to be significant to the dependent variable, and vice versa. If the significance of t sig > 0.05, it is decided that the independent variable is not significant to the dependent variable, and the findings of hypothesis testing (T-test) are as follows:

Table 5. Hypotesis Testing Result

Hypotesis	Hypotesis Testing Result	Conclusion
Impact of Firm Size on Stock Price	Positive significant	Accepted
Impact of Firm Size on Activity	Negative Significant	Rejected
Impact of Firm Size on Profitability	Positive significant	Accepted
Impact of Activity on Profitability	Positive significant	Accepted
Impact of Activity on Stock Price	Negative and insignificant	Rejected
Impact of Profitability on Stock Price	Positive significant	Accepted

**Path Analysis**

In principle, path diagrams provide clear, quality relationships between variables. Path diagrams can be used to measure the direct Impact of the dependent variable on the independent variable. The Impact is shown in what is known as the path coefficient, which mathematically follows a structural mode. Based on the results of the panel data regression analysis in Table 4, the following path analysis is shown in this study:

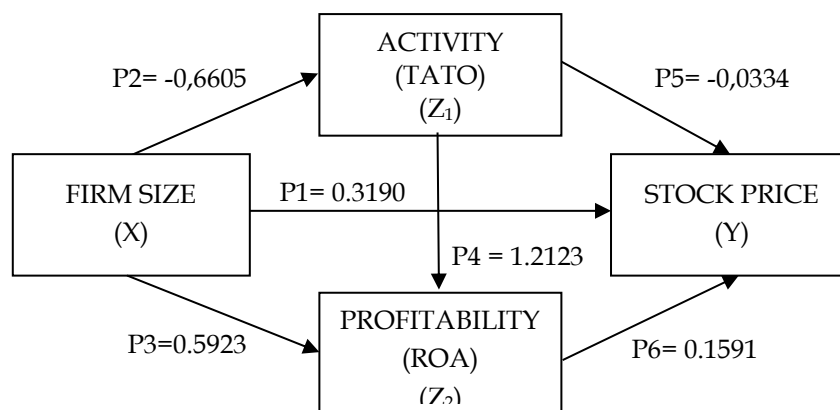


Figure 4. Path Analysis

Based on Figure 4, it explicitly shows the causal relationship between the variables represented by arrows, and each P describes the path and the path coefficient. By using the diagram above, direct and indirect influence tests can be carried out to answer the intervention hypothesis. If the indirect impact value exceeds the direct impact value, then a mediating impact occurs; if the value of indirect influence exceeds the value of direct influence, then there is no mediating impact; and path analysis yields the following results:

Table 6. Path Analysis Result

	Direct Impact	Indirect Impact	Total Impact	Conclusion
The impact of Firm Size on stock prices through activity	0.3185	-0.6605 X - 0.0334 = 0.0220	0.3185 + 0.020 = 0.3405	Cannot mediate
The impact of Firm Size on stock prices through profitability	0.3185	0.5923 X 0.1591 = 0.0942	0.3185 + 0.0852 = 0.4127	Cannot mediate
The impact of Firm Size on stock prices through activity and profitability	0.3185	-0.6605 X 1.2123 X 0.1591 = -0.1273	0.3185 - 0.1165 = 0.0405	Can't mediate

## DISCUSSION

### Impact of Firm Size on Stock Price

According to the findings the results of the hypothesis testing research revealed that stock price is positively and significantly impacted by firm size. This explains that investors, as owners of funds, see the profitability obtained from asset productivity in generating net income as a reference in buying stocks. The larger the firm size, the more superior the wealth and performance of the corporation. This creates an attraction for investors to buy the corporation's stocks, resulting in an increase in demand for the corporation's stocks, which leads to a higher share price.

The study findings align with signal theory, which suggests that good quality corporations actively signal their quality to the market through various indicators; these indicators allow the market to distinguish between good-quality corporations and poor-quality corporations. One of these indicators is firm size. Corporations with larger assets are in great demand by investors because the larger the firm size, the greater the corporate assets, so the potential to increase profits is also greater.

In addition, companies that have a larger size tend to give more trust to investors. A large size can be considered an indicator of the stability and success of the company in the long term. This can attract investors who are looking for investments that are safe and have the potential to provide good returns. High trust from investors can increase demand for the company's stocks, and this is a

positive signal for investors to buy the company's stocks. The more demand for a stock, the higher the stock price. And this result is consistent with past studies by Alamsyah (2019) and Lombogia et al. (2020). Winata et al. (2021), Welan et al. (2019), and Ridha (2019), which revealed that stock price is positively and significantly impacted by firm size.

#### **Impact of Firm Size on Activity**

According to the findings the results of the hypothesis testing research revealed that activity is negatively and significantly impacted by firm size. In general, larger companies tend to have larger total assets. However, the larger the size of the company, the more difficult it is to manage all these assets efficiently. The decision-making process and coordination between departments and branches of the company can become more complex, requiring more time and money.

When a company has difficulty managing its assets, it can affect the company's ability to turn these assets into sales. This can be seen from the low TATO ratio of larger companies, even though they have larger assets.

The results of this study are not align with the critical resource theory, which states that managers absorb a lot of profit from the assets they own. One way managers benefit is by managing their assets into assets that sell as efficiently as possible.

#### **Impact of Firm Size on Profitability**

According to the findings the results of the hypothesis testing research revealed that profitability is positively and significantly impacted by firm size. This is explaining companies that have larger total assets can utilize their resources more effectively. With more assets, the company can carry out more business activities such as production, marketing, and distribution. This, in turn, can increase the revenue and profit generated. The results of this study also show that firm size, which has a significant positive impact on profitability, also indicates that corporate management has managed its assets to maximize profits.

The study findings align with the critical resource theory, which explains that management absorbs a lot of profit from the assets it owns. And this results is consistent with past studies by Octaviany et al. (2019) and Sukesti et al. (2021). Cherril et al. (2019), Ulfa & Wahyu W. (2020), which revealed that profitability is positively and significantly impacted by firm size.

#### **Impact of Activity on Profitability**

According to the findings the results of the hypothesis testing research revealed that profitability is positively and significantly impacted by activity. This explains that even though the company experiences low asset turnover, the larger the company, the more difficult it is to manage all these assets efficiently, which is caused by the fact that the decision-making process and coordination between departments and branches of the company can become more complex, thus requiring more time and costs. But with the low asset turnover, the company management can still streamline the sales obtained to get profits. This is because a high firm size makes the company's activity low. But the sales made by the company will still make a profit. And the higher the sales, the greater the profit that will be received by the company, even though the profit is not optimal.

The study findings align with the critical resource theory, which explains that management absorbs many benefits from the assets it owns. One-way managers benefit from assets that can be managed by management is to create sales. The results is consistent with past studies by Khasanah & Suwarti (2022), Sunaryo et al. (2022), Vania & Tarmizi (2022), Jenni et al. (2019), and Cahya et al. (2021), which explain that activity has a positive impact on profitability.

#### **Impact of Activity on Stock Price**

According to the findings the results of the hypothesis testing research revealed that stock price is negatively and insignificantly impacted by activity. This is because high asset turnover, if it is not accompanied by an optimal increase in profits, makes it difficult for the company to streamline its assets to become the assets that sell. The decision-making process and coordination between departments and branches of the company can become more complex, thus requiring greater time and costs, which cause low turnover in selling assets. But with the low asset turnover, the company management can still streamline the sales obtained to get profits, even though it is not optimal. And although the higher the sales, the greater the profit that will be received by the company, even if the profit is not optimal.

And therefore, high asset turnover, if not accompanied by optimal profit income, causes a decrease in stock prices. Optimally, it will be responded to by some investors as a negative signal that makes them not interested in investing in corporations, thus changing the movement of the corporation's shares to decline.

Although The study findings align are not in align with the hypothesis, they are in align with signal theory, which suggests that good quality corporations actively signal their quality to the market through various indicators. These indicators allow the market to distinguish between good-quality corporations and poor-quality corporations. And the results in this study are not in line with the results of previous studies conducted by Siringoringo et al. (2022), Octafilia & Oktavianus (2019), Khasanah & Suwarti (2022), Jiang et al. (2020), and Herawati & Putra (2018), which revealed that stock price is positively and significantly impacted by activity.

#### **Impact of Profitability on Stock Price**

According to the findings the results of the hypothesis testing research revealed that stock price is positively and significantly impacted by profitability. This explains why investors, as fund owners, see the profitability obtained from asset productivity in generating net income as a reference in buying stocks. This is because investors believe that the corporation will be a promising one because corporate management can manage its assets for profit. This creates an attraction for investors to buy the corporation's stocks, resulting in an increase in demand for the corporation's stocks, which leads to a higher share price.

The study findings align with signaling theory, which suggests that good quality corporations actively signal their quality to the market through various indicators; these indicators allow the market to distinguish between good-quality corporations and poor-quality corporations. One such indicator is profitability. The greater the profitability (ROA), the greater the profit earned by the corporation. The increased profit generated by the corporation will trigger the

attention of investors to invest in the corporation, which will change the movement of the corporation's stocks.

The results is inconsistent with past studies by Octafilia & Oktavianus (2019), Sukesti et al. (2021), Khasanah & Suwarti (2022), Inggawati Rahayu et al. (2020), and Herawati & Putra (2018), which revealed that stock price is positively and significantly impacted by profitability.

#### **The Impact of Firm Size on Stock Prices Through Activity**

According to the findings of the partial hypothesis testing using mediation analysis with a path analysis approach, the results show that activity cannot mediate the relationship between firm size and stock price. In theory, larger corporations tend to have large assets, which can be managed into assets that can be sold. The higher the activity (TATO), the more efficient the use of all assets in generating sales, and the higher the turnover, the more company management can manage its total assets into assets that sell efficiently. And this will trigger investors to invest in the corporation, thus changing the movement of the corporation's stocks.

But in reality, this study found that the larger the firm, the lower the activity. This is because it is increasingly difficult for management to manage all these assets efficiently. The decision-making process and coordination between departments and branches of the company can become more complex, requiring more time and costs. The total asset turnover shows that the efficiency carried out by the company's management is poor or ineffective in utilizing the company's assets, and that causes activity to be unable to mediate the relationship between firm size and stock price.

In addition, companies that have a larger size tend to give more trust to investors. A large size can be considered an indicator of the stability and success of the company in the long term. This makes investors prefer large firms, regardless of their activity.

The study findings no align with critical resource theory, which states that managers absorb a lot of profit from the assets they own. One way managers benefit is by managing their assets into assets that sell as efficiently as possible. But the results of this study are in align with signal theory, which suggests that good quality corporations actively signal their quality to the market through various indicators. One of these indicators is activity. In this study, the efficiency of the efficiency carried out by the company's management is poor or ineffective in utilizing the company's assets. This makes investors not interested in investing in corporations, thus causing the movement of the corporation's stocks to decline.

#### **The Impact of Firm Size on Stock Prices Through Profitability**

According to the findings of the partial hypothesis testing using mediation analysis with a path analysis approach, it is found that profitability cannot mediate the relationship between firm size and stock price. In theory, larger corporations tend to have large assets that can be managed into net income. The higher the firm size, the higher the profitability, because corporations with large sizes can get a higher return on assets than small corporations. Large corporations can generate greater returns, which is a positive signal for investors to buy these stocks.

But in reality, in this study, the net profit generated by the company is not optimal; this can be seen from the average ROA obtained from this object of only

3%, which is smaller than the deposit interest rate issued by Bank Indonesia of 5%. And this causes profitability to be unable to mediate the relationship between firm size and stock price.

In addition, companies that have a larger size tend to give more trust to investors. A large size can be considered an indicator of the stability and success of the company in the long term. This makes investors prefer large firms, regardless of their activities.

The study findings no align with critical resource theory. In critical resource theory, it is explained that management absorbs a lot of profit from the assets it owns, but the results of this study are in align with signal theory, which suggests that good quality corporations actively signal their quality to the market through various indicators. These indicators allow the market to distinguish between good-quality corporations and poor-quality corporations. One of these indicators is profitability. In this study, profitability is smaller than the BI 7-day repo rate, so investors are not interested in buying stock prices and choose to invest in deposits, which is what causes a decrease in stock prices.

### **The Impact of Firm Size on Stock Prices Through Activity and Profitability**

According to the findings of the partial hypothesis testing using mediation analysis with a path analysis approach, the results show that activity and profitability cannot mediate the relationship between firm size and stock price.

In theory, larger corporations tend to have large assets, which can be managed into assets that can be sold. The higher the activity, the more efficient the use of all assets in generating sales, and the more turnover, the more company management can manage its total assets into assets that sell efficiently. The higher the activity, the more efficient the company's management is in creating sales from its assets, and the profit the corporation will earn will also be high. The increased profits generated by the corporation will trigger the attention of investors to invest in the corporation, which will change the movement of the corporation's stocks.

However, in reality, this study found that the higher the firm size, the lower the activity because it is increasingly difficult for management to manage all these assets efficiently. The decision-making process and coordination between departments and branches of the company can become more complex, requiring more time and costs. But with the low asset turnover, the company's management can still streamline the sales obtained to get profits. This is because a high firm size makes the company's activity low. But the sales made by the company will still make a profit. Even so, the profit obtained is not optimal because it can be seen that the average ROA obtained from this object is only 3%; this figure is smaller than the deposit interest rate issued by Bank Indonesia of 5%. And this causes profitability to be unable to mediate the relationship between firm size and stock price.

In addition, companies that have a larger size tend to give more trust to investors. A large size can be considered an indicator of the stability and success of the company in the long term. This makes investors prefer large firms, regardless of their activities.

The study findings no align with critical resource theory. Critical resource theory explains that management absorbs a lot of profit from the assets it owns,



but the results of this study are in align with But in align with the theory, the results of this study are in align with the signal theory, which explains that corporations will actively send signals to the market through certain indicators; these indicators allow the market to distinguish between good-quality corporations and poor-quality corporations.

These indicators include activity and profitability; the lower the activity, the management cannot use all assets efficiently to generate sales. And this will make investors less interested in investing in the corporation, thus changing the movement of the corporation's stocks to decline. And profitability is smaller than the BI 7-day repo rate, so investors are not interested in buying stock prices and choose to invest in deposits, which is what causes the decline in stock prices.

## CONCLUSIONS AND RECOMMENDATIONS

After analyzing and discussing the data presented in this study, several conclusions can be drawn:

- 1) Stock Price is positively and significantly impacted by firm size in corporations that are listed and still survive in the idx BUMN20 index for the 2018–2021 period. This illustrates that the larger the firm size, the higher the Stock price.
- 2) Activity is negatively and significantly impacted by firm size in corporations that are listed and still survive in the idx BUMN20 index for the 2018–2021 period. This illustrates that the many or few assets owned by the corporation have no impact on its sales.
- 3) Profitability is positively and significantly impacted by firm size in corporations that are listed and still survive in the idx BUMN20 index for the 2018–2021 period. This illustrates that the large size of the firm size owned by the corporation will increase its profitability.
- 4) Profitability is positively and significantly impacted by activity in corporations that are listed and still survive in the idx BUMN20 index for the 2018–2021 period. This illustrates that the more activity carried out by the corporation, the greater its profitability.
- 5) Stock Price is negatively and insignificantly impacted by activity on the Stock price of companies listed and still surviving in the idx BUMN20 index for the 2018–2021 period. This illustrates that the level of asset turnover owned by the corporation does not have much impact on changes in stock prices.
- 6) Stock Price is positively and significantly impacted by profitability in corporations that are listed and still survive in the idx BUMN20 index for the 2018–2021 period. This illustrates that the greater the profitability created by the corporation, the higher the Stock price.
- 7) Activity cannot mediate the relationship between firm size and Stock price in corporations that are listed and still survive in the idx BUMN20 index for the 2018–2021 period. This illustrates that activity does not help investors buy Stocks by looking at firm size.
- 8) Profitability cannot mediate the relationship between firm size and Stock price in corporations that are listed and still survive in the idx BUMN20 index for the 2018–2021 period. This illustrates that profitability does not help investors buy Stocks by looking at firm size.

- 9) Activity and profitability cannot mediate the relationship between firm size and Stock price in corporations that are listed and still survive in the idx BUMN20 index for the 2018–2021 period. This illustrates that activity and profitability do not help investors buy Stocks by looking at firm size.

According to the findings of the study for the corporate and managerial side, it can pay attention to further improving the performance of corporate management to manage its assets impactively and efficiently. Based on the results of this study, firm size, as proxied by total assets, has a significant Impact on stock prices. and corporations must also pay attention to the profits generated because if the profit created is in accordance with market expectations, it is a positive signal for the market that can trigger the attention of investors to invest in a corporation, which will change the movement of the corporation's Stocks.

In addition, the results of this study can also be taken into consideration by investors when making decisions about acquiring Stocks of a corporation. According to the findings of the study, investors should pay attention to the assets of the corporation and whether they are managed impactively and efficiently by the management of the corporation. Because if these assets can be managed by management impactively and efficiently, they will generate a profit for the corporation that can be distributed to investors in the form of dividends, or investors can benefit from selling these Stocks because if the profit earned from corporate assets increases, it will increase the stock price as well because many investors acquire the Stocks of the corporation.

## **FUTURE RESEARCH**

Future researchers should re-examine the relationship between firm size and activity with different objects to strengthen critical resource theory. They should also investigate the relationship between activity and stock price further to support signalling theory. In addition, since activity and profitability do not mediate the relationship between firm size and stock price, researchers should explore other potential mediators such as liquidity, capital structure, and firm value.

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## REFERENCES

- Alamsyah, M. F. (2019). Pengaruh Profitabilitas, Ukuran Perusahaan Dan Nilai Pasar Terhadap Harga Saham Pada Sub Sektor Pertambangan Logam Dan Mineral Di Bursa Efek Indonesia (Bei). *Jurnal Manajemen*, 11, 170` - 178.
- Binekasri, R. (2022, September 29). *Laba Bersih Bumh Meroket 838,2% Jadi Rp 124,7 T Di 2021*. Cnbc Indonesia.
- Cherril, G., Lontoh, I., Rate, P. Van, & Saerang, I. S. (2019). *Pengaruh Struktur Modal, Kepemilikan Institusional Dan Ukuran Perusahaan Terhadap Profitabilitas Pada Industri Keuangan Non-Bank Yang Terdaftar Di Bursa Efek Indonesia The Impact Of Capital Structure, Institutional Ownership And Firm Size On Profitability Of Non Bank Financial Industry Listed In Indonesia Stock Exchange* (Vol. 7, Issue 3).
- Cornelius, A., & Hanna. (2019). Pengaruh Informasi Arus Kas, Laba Akuntansi, Dan Ukuran Perusahaan Terhadap Harga Saham Pada Persusahaan Property Dan Real Estate. *Jurakunman*, 1.
- Digdowiseiso, K. (2017). *Metode Penelitian Ekonomi Dan Bisnis*. Lpu-Unas.
- Ekinanda, F., Wijayanti, A., & Siddi, P. (2021). Pengaruh Profitabilitas, Ukuran Perusahaan, Pertumbuhan Penjualan, Struktur Aktiva Dan Pajak Terhadap Struktur Modal. *Jurnal Akuntansi & Keuangan*, 12, 45-62.
- Ferdinand, A. (2014). *Metode Penelitian Manajemen* (5th Ed.). Undip.
- Fristinaningrum, L., & Arisyahidin. (2018). Pengaruh Current Ratio, Firm Size, Dan Earning Per Share Terhadap Harga Saham Pada Perusahaan Property Dan Real Estate Yang Terdaftar Di Bei Tahun 2014-2016. In *Jurnal Revitalisasi Jurnal Ilmu Manajemen* (Vol. 07).
- Ghozali, I., & Ratmono, D. (2017). *Analisis Multibariat Dan Ekonometrika Teori Konsep Dan Aplikasi Dengan Eviews 10* (2nd Ed.). Badan Penerbit Universitas Diponegoro.
- Hartono, B. (2019). Knowledge Management Maturity And Performance In A Project Environment: Moderating Roles Of Firm Size And Project Complexity. *Journal Of Management In Engineering*, 35(6). [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000705](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000705)

- Hayat, A., Hamdani, Azhar, I., Yahya, M. N., Hasrina, C. D., Ardiany, Y., Rinanda, Y., Nurlaila, Ikhsan, A., & Noch, M. Y. (2021). *Manajemen Keuangan* (1st Ed.). Madenatera.
- Herawati, A., & Putra, A. S. (2018). The Influence Of Fundamental Analysis On Stock Prices: The Case Of Food And Beverage Industries. *European Research Studies Journal*, Xxi(3), 316–326. [Www.Idx.Co.Id](http://www.idx.co.id)
- Inggarwati Rahayu, D., Ulum, B., Syafii, M., Ayu Prमितasari, D., & Indrajaya Tuharea, F. (2020). Fundamental Impact On Share Prices: Evidence From Indonesia. *Pjæe*, 17(6). [Www.Bi.Go.Id](http://www.bi.go.id)
- Jabar, A. K. A., & Cahyadi, I. F. (2020). ) *Pengaruh Exchange Rate, Inflasi, Risiko Sistematis Dan Bi Rate Terhadap Return Saham Syariah Di Jakarta Islamic Index (Jii) Periode. 4(1)*.
- Jiang, Q., Wang, X., Li, Y., Wang, D., & Huang, Q. (2020). Financial Indicators And Stock Price Movements: The Evidence From The Finance Of China. *Advances In Intelligent Systems And Computing*, 1002, 743–758. [Https://Doi.Org/10.1007/978-3-030-21255-1\\_57](https://doi.org/10.1007/978-3-030-21255-1_57)
- Kasmir. (2019). *Analisis Laporan Keuangan* (Revisi Cetakan 12). Rajagrafindo Persada.
- Khasanah, U., & Suwarti, T. (2022). Analisis Pengaruh Der, Roa, Ldr Dan Tato Terhadap Harga Saham Pada Perusahaan Perbankan. *Fair Value : Jurnal Ilmiah Akuntansi Dan Keuangan*, 4. [Www.Bi.Go.Id](http://www.bi.go.id)
- Kumar, K. B., Rajan, R. G., & Zingales, L. (2001). *What Determines Firm Size?* [Http://Papers.Ssrn.Com/Abstract\\_Id=204889](http://papers.ssrn.com/abstract_id=204889)[http://Www.Marshall.Usc.Edu/Web/Fbe.Cfm?Doc\\_Id=1491](http://www.marshall.usc.edu/web/fbe.cfm?doc_id=1491)[http://Gsbwww.Uchicago.Edu/Fac/Finance/Papers/](http://gsbwww.uchicago.edu/fac/finance/papers/)
- Lombogia, A. J. G., Vista, C., & Dini, S. (2020). Pengaruh Current Ratio, Debt To Equity Ratio, Net Profit Margin, Dan Ukuran Perusahaan Terhadap Harga Saham Pada Perusahaan Otomotif Dan Komponen Yang Terdaftar Di Bei Tahun 2013-2017. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 3(1), 158–173. [Https://Doi.Org/10.36778/Jesya.V3i1.138](https://doi.org/10.36778/jesya.v3i1.138)

- Pabunna, A., Karamoy, H., Pabunna, A. N., Karamoy, H., & Afandi, D. (2021). *The Influence Of Net Profit And Company Size On Stock Prices In Lq45 Companies Listed In Indonesia Stock Exchange Period 2016-2018*. 9(1), 256-265. [Www.Idx.Co.Id](http://www.idx.co.id)
- Pradanimas, A., & Sucipto, A. (2022). Pengaruh Ukuran Perusahaan, Profitabilitas Dan Leverage Terhadap Harga Saham Dengan Nilai Perusahaan Sebagai Variabel Intervening. *Briliant: Jurnal Riset Dan Konseptual*, 7, 93-104.
- Ridha, M. A. (2019). Pengaruh Rasio Keuangan, Ukuran Perusahaan, Dan Arus Kas Operasi Terhadap Harga Saham Syariah. In *Jurnal Ilmiah Akuntansi* • (Vol. 4, Issue 2).
- Ross, S. A. (1977). *The Determination Of Financial Structure: The Incentive-Signalling Approach*.
- Sudiyatno, B., Puspitasari, E., Suwarti, T., & Asyif, M. M. (2020). Determinants Of Firm Value And Profitability: Evidence From Indonesia. *Journal Of Asian Finance, Economics And Business*, 7(11), 769-778. <https://doi.org/10.13106/jafeb.2020.vol7.no11.769>
- Sukesti, F., Ghozali, I., Fuad, F., Almasyhari, A. K., & Nurcahyono, N. (2021). Factors Affecting The Stock Price: The Role Of Firm Performance. *Journal Of Asian Finance, Economics And Business*, 8(2), 165-173. <https://doi.org/10.13106/jafeb.2021.vol8.no2.0165>
- Sunaryo, D., Nafiuddin, Gentari, R. E., & Adiyanto, Y. (2022). Using Current Ratio Indicator And Total Asset Turnover Approach In Solving Return On Assets Problems With Debt-To-Equity Ratio Moderated. *Quality - Access To Success*, 23(189), 199-209. <https://doi.org/10.47750/qas/23.189.23>
- Vania, & Tarmizi, R. (2022). Pengaruh Likuiditas, Leverage, Aktivitas Dan Pertumbuhan Penjualan Terhadap Profitabilitas. *Jurnal Ilmiah Akuntansi Kesatuan*, 10, 321-330. <https://doi.org/10.37641/jiakes.v10i1.1327>
- Welan, G., Rate, P. Van, & Tulung, J. E. (2019). Pengaruh Profitabilitas, Leverage Dan Ukuran Perusahaan Terhadap Harga Saham Pada Perusahaan Manufaktur Sektor Industri Barang Konsumsi Yang Terdaftar Di Bei Periode 2015-2017. *Jurnal Emba*, 7.

- Winata, J., Yuniur, K., Olivia, O., & Sinaga, S. P. (2021). Pengaruh Struktur Modal, Ukuran Perusahaan, Dan Profitabilitas Terhadap Harga Saham (Studi Kasus Pada Sub Sektor Makanan Dan Minuman Yang Terdaftar Di Bursa Efek Indonesia. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 4(1), 696-706. <https://doi.org/10.36778/Jesya.V4i1.372>
- Yohana, Intan Bp, A., Kalbuana, N., & Indra Cahyadi, C. (2021). Pengaruh Ukuran Perusahaan, Kebijakan Hutang, Profitabilitas Terhadap Nilai Perusahaan (Studi Kasus Perusahaan Properti Yang Terdaftar Di Bursa Efek Indonesia Tahun 2016-2020). In *Jurnal Riset Akuntansi Politala* (Vol. 4, Issue 2). <http://jra.politala.ac.id/index.php/jra/index>