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FACTORS THAT AFFECT FIRM VALUE IN MANUFACTURING FIRMS

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ABSTRACT

This research aims to obtain empirical evidence from the effect of profitability, leverage, liquidity, firm size, and activity ratio on firm value. Totals of 198 observational data originated from 66 manufacturing companies listed on Indonesia Stock Exchange (IDX) throughout 2018-2020. The sampling technique used in this research is purposive sampling. The hypothesis testing method in this research uses the multiple linear regression model. The multiple linear regression model estimation that suits this research is Fixed Effect Model (FEM). The statistical tool used for data processing in this research is EViews 12. This research uses Tobin's Q as a parameter to measure firm value. Based on the outcome of the processed data, profitability, leverage, and firm size all have significant effects on firm value, while liquidity and activity ratio both have insignificant effect on firm value.

Keywords: *Profitability, Leverage, Liquidity, Firm Size, Activity Ratio, Firm Value, Tobin's Q*

1. INTRODUCTION

The attendant of pandemic covid-19 affects the investment world in Indonesia. Since 2019, there have been significant increases in the total population of investors in the stock exchange market in Indonesia. Especially in 2020, the increase is 92,99% from the latest position at the end of 2019. People are getting awake by chance to increase their source of income from the investment. Besides that, this improvement also brings a lousy effect. People are getting too excited about the chance of getting more and more money but forget that there are also risks in the investment world. Understanding financial statements are critical; by that, the investor will be able to understand the condition of a firm and choose the correct enterprise at the right moment to buy and sell stock on the stock exchange market.

By the time speaking, newcomer investors tend to choose a stock by what people say or by what they feel about the firm intuitively. Then, the quality of a stock depends on what the influencer said about it and neither on the information stated on the financial statement, fundamental, or technical analysis. The trust newcomer investors have in the influencer is significant capital that brings them to loss. Because what they chose is not based on the data or the analysis but only depends on what they feel about what the influencer said earlier. This phenomenon ends up making newcomer investors lose much money. The chance to get more income becomes a more regretful loss after investing in a stock they know nothing about.

Understanding the financial statement that presents the firm's current condition becomes critical to generating income in the investment world. Otherwise, it only becomes a place to lose money. Including the ratio of the firm value gives the investor the bigger picture of the actual condition of a firm—the firm's real value and what the market thinks about this investment stock. By knowing the stock's value, the investor can now decide whether this is the right time to buy or sell this stock or if it is profitable enough to generate future money.

After understanding the big picture of a stock firm, investors can analyze by looking into financial or nonfinancial ratios to know the firm's performance in the year. Because each ratio directly or indirectly influences the firm value, some are profitability, leverage, liquidity, firm size, activity ratio, and many more.

This research is expected to become an adviser to the firm's management to increase the value and the quality of the financial statement. Besides, that also the investors be able to understand the financial statement even more, have the perspective of a fundamental investor, and generate more money by investing.

2. THEORETICAL REVIEW

Signaling Theory

Signaling Theory is a theory that states that there are two parties which are the sender and receiver. The sender signals about the firm's condition, and the receiver uses the information to decide what to do depending on the information from the earlier sender by Spence [1]. Besides that signaling theory can be a perception from the firm management about the firm condition in the future. This perception can impact the response from the receiver party. This signal given by the sender can be in the form of a financial statement. Based on the signal, investors can define their position on the stock enterprise and adjust based on their risk appetite by Brigham and Houston [2].

Agency Theory

Agency Theory is a theory that states that there are two parties in a firm they are the principal party and also the agent party. The principal party used to be the stock holder of a firm that had more sense of belonging to the firm's performance. They always hope for the best in the firm because they have given their money to invest in it, so their profitability depends solely on the firm performance. Besides that, the agent party, the firm management, does the actual work and manages the firm's performance based on their decision and work [3]. By actualy being aware of the phenomenon, there is a conflict of interest between these two parties. The agency party will only care about their achievements. They will not care about anything else if their goals are set, even if they have to fake their achievement report that is not an actual result of their performance, which sometimes causes the down of the firm performance overall. The principal parties will not care about the individual management performance, and they will only care about the firm overall performance so that more investors are interested in the firm stock so they can generate more money from the enhancement of the firm's stock price.

3. LITERATURE REVIEW

Profitability Effect on Firm Value

Profitability is a ratio that pictures the ability of a firm to generate income by using all the resources that the firm has. According to Zuhroh [4], profitability has positively impacted firm value. This result happens because the more profit a firm can generate, the more investors will buy the stock, raising the stock price and bringing the firm value upwards. The other research supports this result written by Hapsoro and Falih [5], Djashan [6], Hidayah and Rahmati [7], and so many more. Some research also generated different results that said profitability does not impact firm value written by Emanuel and Rasyid [8], Chasanah [9], et cetera.

Leverage Effect on Firm Value

Leverage is a ratio that shows the relationship between all the liability owned by the firm and the firm's equity, which presents the financing from the outside party and the ability of a firm to fulfil all the liable billing that comes from it [10]. The higher the liability the firm has, shows more capability that the firm has. According to Suryadi [11], leverage has positively impacted the firm value because measurable liability will enable the firm to maximize its potential. Based on that thinking, more liability attracts more investors, which refers to an increase in stock price and pushes the firm value upwards. The other research supports this result written by Zuhroh [4] and Trijuniyanto et al. [12]. Some research also generated different results that said leverage had impacted firm value negatively, written by Fajaria and Isnalita [13], Kahfi, Pratomo, and Aminah [14], and also Andayani, Wiksuana, and Sadana [15].

Liquidity Effect on Firm Value

The firm's liquidity is mainly calculated by the firm ownership of the short-term assets that can quickly be turned into cash [4]. Hanafi and Halim [16] stated that liquidity is a firm's capability to fufill its short-term liability by comparing the ownership of the short-term assets and liability. Jamilah et al. [17] state that liquidity positively impacts firm value. The higher liquidity value gave a safety feeling to all of the stockholders that the firm they invested in would be able to fulfil the short-term liability and has a low possibility of bankruptcy. The other research supports this result, written by Fajaria and Isnalita [13], Kahfi et al. [14], and many more. Some research also generated different results that said liquidity has negatively impacted firm value Hidayah and Rahmawati [7] and Ardianto et al. [18].

Firm Size Effect on Firm Value

Firm size is a ratio that calculates the size of a firm by calculating the total assets of a firm [19]. Widiastari and Yasa [20] state that firm size is a scale to classify the size of a firm by the ownership of assets. Research by Trijuniyanto et al. [12] states that firm size has impacted firm value positively because a big firm indicates a stable stock price that grows steadily. This fact turns out to be so important these days because of the pandemic and the uncertainty that happened in these 2 to 3 years. Some research also generated different results that said that firm size had impacted firm value negatively that have been written by Hapsoro and Falih [5], Djashan [6], Emanuel and Rasyid [8], and many more.

Activity Ratio Effect on Firm Value

Activity Ratios show the efficiency level to maximize the usage of their resources, including assets and equity [21]. Ulfah and Abbas [22] state by their research that activity ratio has impacted firm value positively. This result could have happened because, long-term speaking, efficiency is the critical success of a firm. By maximizing the resources a firm has, it can generate to maximize its income throughout the year, attracting investors to invest more in the stock firm. The other research supports this result, written by Kahfi et al. [4], Ulfah and Abbas [22], and Suryadi [11]. Some research also generated different results that said activity ratio negatively impacted firm value, as stated by Jamilah et al. [17].

4. RESEARCH HYPOTHESIS

Profitability is one variable that financial report user has pinpointed. The main purpose of a business in a corporation is to be able to make a profit for all of the stakeholders. Every corporation then competes to maximize the profitability of a firm. The higher the profit of a firm, then the higher the firm value of a firm is. The improvement of the firm value is caused by the increase of a stock price caused by the increase of the market interest in the firm stock. This phenomenon is the signaling theory practice where the market react after the signal given by the firm management in a form of financial statement. Ha_1: Profitability positively impacts the firm value of manufacturing companies listed on the Indonesia stock exchange in 2018-2020.

Leverage defines the debt portion that the firm has to fund all of the assets that the firm has. The higher the firm's leverage level, the higher the firm value. The firm's debt is often seen as a problem for investors. Besides that, the high debt shows the willingness for growth the firm is trying to achieve. The firm's effort without any funds from a third party is time-consuming.

In this position, conflict of interest has a big chance to happen, the agent side hoping for more funding from the third party to facilitate the operation. On the other hand, the principals are on a mission to press and avoid the third parties debt so that the financial report becomes more attractive by the low level of debt. Ha_2: Leverage positively impacts the firm value of manufacturing companies listed on the Indonesia stock exchange in 2018-2020.

Liquidity show how fast the business cycle of a firm is so that it can fulfill all of its short-term debt. Business cycles that are too fast make firms have much cash in certain periods. This action can cause a firm to lose a chance to get more income from investing. On the other hand, a firm does not has to have a certain amount of money caused of the fastness of a business cycle. They need to know their liability and if they have enough cash to fulfill them. The remaining can be allocated to investment—the more liquidity of a firm, the lower the firm value.

Agency theory is often seen in business operational achievements. When the principals push the agents to make sure the amount of receivables in a month increases the amount of liquidity of the business so that it can give positive signals to the user of the financial report that the business has high liquidity and the inventories are very fast moving. To fulfill the principal's expectations, the agents must make a fake report about the receivables. In practice, it is hard to see that the suppliers have been on time to fulfill their liability in just a month. Ha_3: Liquidity negatively impacts the firm value of manufacturing companies listed on the Indonesia stock exchange in 2018-2020.

The size of a firm gets often seen by the ownership of total assets. A big firm shows big capacity with lots of equipment and supporting factors to boost a firm's profitability. Besides that, a big firm shows stability, where the bigger the firm, the harder the stock price of a firm to move significantly. This is one of the reasons investors get bored with investing in a firm that is too big because there is no room for profitability in investing in them. Ha_4: Firm size negatively impacts the firm value of manufacturing companies listed on the Indonesia stock exchange in 2018-2020.

The high activity ratio shows that the firm management successfully maximizes the capacity of the assets owned by the firm also to maximize the profitability of a firm. On the other side, the uncertainity caused by the COVID-19 pandemic made efficiency not the main character of the things to consider about investing in a firm. Investors will only see the firm's income and its stock price trend. So the higher the activity ratio of a firm, the lower the firm value of a firm. Ha_5: Activity Ratio negatively impacts the firm value of manufacturing companies listed on the Indonesia stock exchange in 2018-2020.

5. METHODS

The method used in this research was quantitative, with the secondary data found and calculated by the website www.idx.co.id and the firm's official website. The sampling technique used in this research is purposive sampling. Several criteria are applied to this technique 1) manufacturing companies listed on the Indonesia stock exchange in 2018-2020, 2) companies that have been listed before the research period (2018), 3) manufacturing firm that has not been delisted on the Indonesia stock exchange in 2018-2020, 4) manufacturing firm that presents the income statement ended on December 31st in 2018-2020, 5) firm that used Rupiah as their standard on the income statement, 6) manufacturing firm that has never lost as long as the research period.

Table 1. Variables of This Study

Variable	Formula	Scale	Sources
Dependent Variable			
Firm Value	Tobin's Q = $\frac{MVE+Debt}{Total\ Assets}$	Ratio	[13]
Independent Variable			
Profitability	ROA = $\frac{Net\ Income}{Total\ Assets}$	Ratio	[4]
Leverage	DER = $\frac{Total\ Liabilities}{Total\ Assets}$	Ratio	[13]
Liquidity	CR = $\frac{Current\ Asset}{Current\ Liabilities}$	Ratio	[13]
Firm Size	FS = Ln (Total Assets)	Ratio	[12]
Activity Ratio	TATO = $\frac{Sales}{Total\ Assets}$	Ratio	[14]

6. RESULTS AND CONCLUSION

Before getting into hypothetical analysis, there are classical assumption tests. In this research, there are multicollinearity tests and heteroskedasticity tests. Based on the test result, all the variable correlation coefficients is below 0.85, meaning there is no multicollinearity in the research data. The heteroskedasticity test has done using the Harvey test. Based on the test result, the Probability Chi-Square has a value above 0.05 which is 0.0509, meaning that the data research passed the heteroskedasticity test.

After passing all of the classical assumption tests, the Chow and Hausman tests are done to know the best testing method for the research data. The fixed effect model is the best suited for the research data. The FEM is done to understand the impact of the independent variable on the dependent variable. The data test result can be seen in the table below.

Table 2. Regression Model Estimation Results (FEM)

Dependent Variable: Y_TOBIN				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	28.65595	4.942487	5.797881	0.0000
X1_ROA	12.28532	0.596898	20.58194	0.0000
X2_DER	0.186303	0.067782	2.748552	0.0069
X3_CR	-0.000307	0.000714	-0.43075	0.6674
X4_SIZE	-0.953285	0.169571	-5.621742	0.0000
X5_TATO	-0.120426	0.087448	-1.377111	0.1709

Based on the test result in the table above, obtained regression equation without any moderation variable that has been used in this research, which is as follows.

Tobin's Q = 28.65595 + 12.28532 ROA + 0.186303 DER – 0.000307 CR – 0.953285 SIZE – 0.120426 TATO + ε

The profitability (ROA) regression coefficiency value based on table 2 is significantly positive at 12.2853. This result means that if there is one unit increase in the firm profitability, there will be an escalation of 12.2853 on the firm value. The same goes for leverage (DER), referred to in table 2. Leverage has a significant impact on firm value. The regression coefficiency value of leverage on firm value is 0.186303, which means if there is one escalation on leverage will also escalate firm value by 0.186303. The bigger the leverage, the also bigger the firm value. The firm size variable also has a negative significance on firm value with the regression coefficiency value of 0.953285. means the more extensive the firm size will drop the firm value by 0.953285. Contrarily, the liquidity (CR) and activity ratio (TATO) regression coefficiency values in table 2 are negative at 0.000307 and 0.120426. Still, it has an insignificant effect on the firm value, which means that the volatility of a firm's liquidity and activity ratio value will not impact its value.

To understand the correlation between the independent variable on the dependent variable, the determinant test (R) is done. The Adjusted R-Squared value at 0.978789, meaning that the independent variable, which are profitability, leverage, liquidity, firm size, and activity ratio can describe the 97.88% variation of the firm value (dependent variable).

7. DISCUSSION AND LIMITATIONS

Based on the research outcome, profitability is still of the most influential variables that can drag the market towards any firm stock. In the middle of a crisis/pandemic/uncertainty, profitability is no worry, the thing that anyone will seek more about a firm. This momentum of a change about getting better after a hard time is also a chance for any firm to get better and market responses that it was okay to have a debt as long as the firm management calculated it. Besides that, under the uncertainty that all of the firms faced, the bigger the size of the firm indicates stiff management that is having a hard time implementing changes. In this situation, the ability to have an understatement about the situation and adapt from it is one of the most important things to be focused on, and bigger firms, unfortunately, do not offer that. So, investors nowadays are more into a flexible and profitable firm with room for improvements supported by an accountable amount of liabilities.

There are some limitations to this research. Hoping that in the future, this research can be developed so it can be more relevant and hopefully helpful to all investors. Among them, this research just included a few variables. Also, there is just a short period of years and included a limited amount of sampling among all the manufacturing firms registered on the Indonesian stock exchange. Hopefully, this research can be developed that includes many other variables like *the corporate* social responsibility index, dividend policy, carbon emission disclosure, and so many more. To become more relevant, this research needs to include more industries, not only the manufacturing industry, over a more extended period to add many more circumstances and events that can impact firm value. Hopefully, this research will not only become any other research but can be implemented and become helpful in understanding the financial statements.

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