The Influence of Financial Ratios and Firm Size on Firm Value

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Abstract—The purpose of this research is to analyze the influence of firm size, leverage, profitability, and price earnings ratio on firm value. The sample consisted of 11 manufacturing companies sector consumer’s goods industry listed in Indonesian Stock Exchange in 2013-2017. The sampling method in this research was purposive sampling. This is a quantitative research with descriptive approach. The analysis technique that used was multiple linear regression. The results of the statistical analysis show that partially variables of profitability and price earnings ratio have significant influence on firm value. Meanwhile, firm size and leverage do not have significant influence on firm value. Simultaneously all of independent variables have a significant influence on firm value. The result of this research are expected to be one of a consideration for investors in making investment decision. In addition, it is also expected that financial performance can increase company firm value.

Keywords: firm size, leverage, profitability, price earnings ratio

I. INTRODUCTION

The big number of companies listed on the Indonesia Stock Exchange makes it challenging for the company management to find ways to increase the value of the company, moreover increase the firm value is the main goal of companies [1]. The higher the value of the company the higher the level of prosperity of the shareholders. Company value can also show the value of assets that have been owned by the company. Furthermore, companies that have “gone public”, the value of the company will not only reflect the value of all assets, but also reflects the market value or the price of its shares.

According to Sujoko and Soebiantoro the value of the company is investors' perceptions of the company's success rate which is strongly related to stock prices [2]. Investor confidence does not only look at financial performance, but also the stock price as a form of valuation because it can describe the company's prospects in the future. Stock prices in the market are very fast changing, and depend on the demand and supply of investors. If the demand is high while the shares offered are small, the stock price will go up and if demand is low but the supply of a stock is high, the share price will be low.

The fluctuating stock price is influenced by company’s internal and external factors. Internal factors are factors that arise from within the company itself. Several internal company factors that can affect stock prices are financial performance, good corporate governance, corporate management and corporate social responsibility [3]. While external factors are factors from outside the company that are difficult to control by management, for example government regulations, political conditions, fluctuations in currency values and so forth.

In order for the value of the company to be maximized, the company must be able to position the company appropriately so that decision making to continue advancing the company can be done. One way for companies to do it in this case is to assess the performance that has been done which can be measured from the financial statements.

Munawir stated that the purpose of measuring the company's financial performance is knowing the level of liquidity, solvency, profitability, and stability [4]. This study analyzes the solvency ratio to measure the company's ability to pay off long-term debt, when the company is able to meet its long-term debt, then the company can also indirectly fulfill its short-term debt. While the profitability ratio can be used to measure the company's ability to generate profits. High profits certainly have a positive value for investors who have a long-term perspective.

Firm Size illustrates how large the total assets owned by a company, the greater the company's assets, the greater the size of the company. Large companies have the capability to manage their businesses even greater, and have more capability in making efficient use of their assets to increase profits, which will later have an impact on financial performance. This can also indirectly increase the value of the company. Price Earnings Ratio (PER) describes the price offer from investors over the profits to be generated by the company. The higher the level of earnings per share, the higher the stock price will rise. When the stock price rises, the value of the company will also rise as well.
A large size company indicates the development of the company so that investors will respond more positively to the value of the company [5]. In addition, the larger the size or scale of the company, the easier it will be for companies to obtain funding [6]. Research variables on the size of the company are also chosen because there are still differences in the results of previous studies between the effect of company size with firm value.

Another factor that may affect a company's value in terms of financial performance is leverage. When the company has a high level of leverage, the company will face a risk that is also getting higher, the risk is the potential for default. Because with a high level of debt, the more interest on the debt that needs to be paid. Investors tend to want a higher rate of return if the risks they face are also high. Therefore, investors who tend to be conservative will avoid investing in high-risk companies.

Profitability is the ability of a company to generate profits at the level of sales (gross profit margin), assets (return on investment or return on assets) and own capital (return on equity) [7]. According to Nurmina, Nuraeni, Prasetyorini, and Hasibuan et al., and Yendrawati, the higher the profit, the higher the investor's encouragement to buy shares of a company which results in high corporate value [8-11].

Price Earnings Ratio (PER) is an assessment of how much investors assess the price of shares against multiples of earnings [12]. The greater the level of price earnings ratio, the greater the price per share of a company, this statement is supported by Prasetyorini and Lebelaha and Devianasari [10,13,14]. This ratio was chosen because there are still many differences in results from previous studies. Such a different result is shown by Siregar that PER does not affect firm value [15].

Agency theory explains the separation of owner (principal) and management (agent) relationships within a company. This relationship happens if there is a principal hiring an agent, then the principal gives authority in managing the company to the agent, providing information in the context of performance evaluation and decision making related to work.

This theory explains why management or internal parties provide financial statement information to external parties. This is due to asymmetric information that occurs. Asymmetric information is a condition in which managers have different (more) information about the company's prospects than what investors have [16].

The value of the company is the total amount that investors are willing to pay for all their shares [17]. The value of a company that is related to the stock market price reflects the price of a company in the eyes of investors and illustrates investors' perceptions of the company's success.

Company value can be analyzed using Tobin's Q or Price Book Value (PBV) ratio. This study uses Tobin's Q because according to its concept this ratio focuses on the company's current value relative to how much it costs to replace it now where it is not owned in the Price Book Value (PBV) ratio [18]. Tobin's Q is a ratio that was conceived by James Tobin. This ratio is a concept regarding the appointment of current financial market estimates that shows the return value of investment in the future. on [19].

Tobin's Q can be a measure of a company's financial performance to see the potential market value. Tobin's Q is calculated by the market value of the company's shares plus debt then divided by the company's total assets. This ratio not only includes the elements of ordinary shares, but also includes the elements of debt and capital.

When Tobin's Q results show less than one this means the book value of the company's assets is greater than the market value of the company. However, when Tobin's Q value shows a higher number than this one, the company's market value is higher than the value of its assets, and the company's growth potential is higher [10]. Company size is a reflection that measures the size of the company [20]. Firm Size is one of the considerations that can influence investors in making decisions that can have an impact on business risk factors. Large companies are considered easier to access the capital market, which makes it easier for these companies to obtain funds [21].

There are many ways to measure firm size, according to Setiawan an assessment of the size of a company can use several proxies other than total assets, namely total equity, number of company employees, number of company sales and stock market value [22,23]. Proxies of company size in this study can be seen from the total assets owned by companies listed on the balance sheet. Total assets were chosen because they are considered to have a value that is more stable and able to reflect the size of the company. Firm Size value is calculated by calculating the natural logarithm formula of total assets. Natural logarithm is used to reduce the difference that is too high between companies that still have small assets and companies that have large assets so that the total assets are normally distributed [9].

Leverage is a description of the extent a company is financed by debt [24]. Leverage indicates how much the company is financed by debt. This study wants to know every IDR from its own capital that is used as a debt guarantee, and because DER can show the ability of companies to use available capital to meet their obligations, the leverage ratio in this study is proxies by Debt to Equity Ratio (DER). The greater the value of DER indicates that the lower the company in paying its debt, and this affects investor interest because high DER value means the risk of the company is also high. Thus, the value of DER is considered to affect the value of the company.

According to Horne and Wachowicz, profitability ratios are ratios that connect profits with sales and investment [24]. Profitability ratios are a measure of a company's ability to earn profits by utilizing company's internal resources such as capital, company sales or assets [25].

Profitability in this study is proxies using return on assets (ROA). ROA is a ratio used to show a company's ability to generate net profit after tax with the company's total assets. Thus, ROA is measured by comparing after-tax earnings to total assets [24]. This ratio attracts investors because investors can find out the effectiveness and efficiency of the use of assets carried out by company management. The high level of ROA
shows the efficiency of the company in managing company assets.

This ratio is related to how investors assess the company’s prospects in the future. Price earnings ratio can be calculated by dividing stock prices by earnings per share [26]. Earnings per share itself is obtained from the company's profit divided by the number of shares outstanding. Price earnings ratio shows how much investors are willing to pay for each IDR of reported profits. Understanding this PER is useful to know the right time in buying and selling shares to get maximum capital gains.

The consumer goods industry is a sector which is considered attractive during 2017 besides the financial sector, this is because during 2017, the consumer goods sector grew by 3.52%. This growth exceeds the JCI growth of only 2.5% during 2017 (databoks.katadata.co.id). In addition, this sector became the largest contributor to non-oil and gas gross domestic revenue in the 2017 quarter.

The purpose of this study is to examine the influence of the relationship between accounting earnings, firm size, leverage, profitability, and price earnings ratio partially on firm value and examine the effect of the relationship between firm size, leverage, profitability, and price earnings ratio simultaneously on firm value. The results of this study are expected to assist potential investors in making decisions to invest properly and appropriately, so that the funds invested are truly beneficial for potential investors related to decision making for their investments.

II. METHODS

The sample of this study was manufacturing companies of the consumer goods industry listed on the Indonesia Stock Exchange in 2013-2017, using purposive sampling with the criteria: All companies listed in the manufacturing industry group of consumer goods industry sectors are listed on the Indonesia Stock Exchange and publishing successive financial statements from 2013-2017, the sample companies did not experience delisting during the observation period, published financial reports in full during the 2013-2017 period, had financial data relating to the full research variables. The results of purposive sampling have been carried out, obtained 11 companies in the consumer goods industry sector that are listed on the Indonesia Stock Exchange that meet the research criteria and are selected as research samples.

The research variable used in this study was the dependent variable which was the value of the company as a Dependent Variable (Y) measured through Tobin’s Q, by calculating the ratio of the company's stock market value plus debt then comparing with the company's total assets.

\[ \text{Tobin's Q} = \frac{MVE + Debt}{Total \ Assets} \]

Firm Size is the first Independent Variable (X1). Company size can be measured using market capitalization measures [20].

The second variable is Leverage as Independent Variable (X2) using the Debt to Equity Ratio (DER) ratio which can be formulated as follows:

\[ \text{DER} = \frac{Total \ Liability}{Total \ Equity} \]

The third independent variable, profitability as (X3). Profitability uses the ratio of Return on Assets and can be calculated using the formula:

\[ \text{DER} = \frac{Net \ Income \ After \ Tax}{Total \ Assets} \]

The last independent variable is, Price Earnings Ratio as (X4). Price earnings ratio (PER) measures how investors assess the company's future growth prospects. Price earnings ratio can be calculated by the formula:

\[ \text{PER} = \frac{Stock \ Price}{Earnings \ Per \ Share} \]

Analysis model using multiple linear regression with SPSS version 16.0. The research model used:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \]

Information:

Y: Company Value
A: Constants
b1 ... b4: Regression Coefficient for X1 ... X3
X1: firm size
X2: leverage
X3: profitability
X4: price earnings ratio
e: standard error

III. RESULTS AND DISCUSSION

The test results in the table obtained a significant value of 0.000 <0.05, because the significance level is less than 0.05, then H_0 is rejected and H_5 is accepted. So it can be concluded that there is a simultaneous influence between Firm Size, leverage, profitability and price earnings ratio (PER) on firm value.

In addition to see the partial effect of each independent variable on the dependent variable, t test was also carried out to see the significance of the parameters of the regression results and the direction of the relationship of each independent variable to the dependent variable. The t test will compare the t value with t table or significance value.
Firm Size was 0.594 with sig 0.555. While t table (α = 0.05; 
db residual = 51) is 2.008. Because t arithmetic <t table was 
0.594 <2,040 or sig. T value (0.555) <α = 0.05, the effect of X1
(Firm Size) on Tobin’s Q was not significant. Firm Size did not 
have a significant contribution to the value of the company.

The insignificance of the results of this study contradicted 
the theory which states that the larger the size of the company, 
the greater the investor's interest to invest in the company 
because it is considered that large companies are more capable 
of carrying out market capitalization, large book values and 
high profits. If a company has a larger total asset, the 
management can use the assets owned more freely, and this is 
comparable with concerns that arise from the owner of the 
company [27].

The size of the company cannot be determined as the 
company has good or bad financial performance in the context 
of knowing the value of the company. That is because there are 
other aspects that determine the high or low value of the 
company including market capitalization value, company 
reputation and others. The larger companies could make the 
companies face inefficiencies, because of higher agency cost, 
and other cost that related with managing the companies [28]. 
However, the company must continue to utilize its assets to the 
maximum in order to obtain optimal profits.

The partial test that has been done shows that the t-count 
value of the Debt to Equity Ratio (DER) is 0.728, with a 
significance value of 0.470. While t table (α = 0.05; 
db residual = 51) is 2.040. Because t arithmetic <t table is 0.728> 2040 or 
sig. t (0.000) <α = 0.05. These results made DER did not have 
a significant effect on firm value. The results of this study, 
explained that DER cannot be used as a factor for decision 
making in evaluating companies.

Whatever amount of debt the company had for corporate 
spending will not affect the value of the company [25]. A 
company that has a high DER ratio, but can utilize the debt 
obtained to increase the profitability of the company and 
develop the company will get high interest from investors. 
However, the DER level cannot be used to measure company value. 
A high level of DER is not a picture of the company's poor 
financial performance because the debt functioned to finance 
the company's operations that are able to produce greater 
profits. In addition, differences in investor perceptions in 
assessing the level of risk experienced by the company make 
DER not a measure in determining the value of the company. 
However, management should still control how much debt is 
used, because a high level of DER can indicate potential 
bankruptcy. So the company must continue to ensure that its 
capital is able to be used to cover all of its obligations.

The partial test results of t-arithmetic was greater, 
t_count of ROA of 12,440 with a significance value of 0,000. 
While t table (α = 0.05; 
db residual = 51) is 2.040. Because t 
T table was 12,440> 2,040 or sig. t (0.030) <α = 0.05; 
residual db = 51) is 2.040. The results of this partial test 
statement that Return on Assets had a significant effect on firm 
value.

ROA was a ratio that can be used to measure the company's 
ability to generate profits from assets owned by the company. 
ROA is considered able to measure the company's ability to 
produce a profit to be projected in the following year. If the 
company is bigger in providing net profits, the greater the 
opportunity for investors to receive dividends from the 
company.

According to Birds in Hands Theory, investors believe that 
the value of the dividends distributed will be far greater than 
the capital gain. This theory also assumes that investors prefer 
dividends that have a clear amount of capital gains that are still 
changing. So if the profitability of the company is greater, the 
amount of dividends that can be distributed will be even 
greater, so the higher investor interest in investing in the 
company. This can increase the company's stock price, and 
rising stock prices will cause an increase in the value of the 
company, this is in accordance with the results of this study 
which states that ROA has a significant positive effect on firm 
value.

The partial test results showed that the calculated value of 
PER of 9.970 with a significance value of 0.000. While t table 
(α = 0.05; 
db residual = 51) is 2,040. Because t arithmetic> T 
table was 9,970> 2,040 or sig. t (0.000) <α = 0.05. That is, PER 
has a significant positive influence on the value of the company 
and PER can be considered by investors in valuing a company.

The company must be able to keep the PER value stable. 
Even though the company cannot control the PER value 
directly, for short term the company can use strategies that can 
attracht positive attention from the public, such as implementing 
good corporate governance and providing corporate social 
responsibility to the community, thus management 
performance is considered good by investors who can raise 
prices stock.

Companies that have good prospects, will have high PER 
value. High-value PER provides several advantages for 
companies, such as the wealth of investors can increase in 
proportion to the shares that have been bought, and the funds 
can be used for company operations.

R2 values indicate the percentage of independent or 
independent variables (X_1, X_2, X_3, X_4) in explaining the 
dependent or dependent variable (Y). R2 obtained from the test 
results is 0.852 or 85%. The purpose of the R2 results shows 
that firm Size, leverage, profitability and price earnings ratio 
(PER) influence 85% and 15% are explained by variables 
outside this study.

IV. CONCLUSIONS AND SUGGESTION

A. Conclusions

First, the test results with the statistical F test showed that 
The Firm Size, Debt to Equity Ratio (DER), Return On Assets 
(ROA), and Price Earnings Ratio (PER) variables 
simultaneously influence the value of manufacturing 
companies in the consumer goods industry sector on the Stock
Exchange in 2013 -2017, second, a partial test shows the following results: Firm Size had no partial effect on the stock returns of manufacturing companies in the consumer goods industry sector. The size of the company could be determined as the company has good or bad financial performance in the context of knowing the value of the company, Debt to Equity Ratio (DER) has no partial effect on the value of manufacturing companies in the consumer goods industry sector. A high level of DER was not a picture of the company's poor financial performance because the debt functioned to finance the company's operations that were able to produce greater profits. However, management should continue to control how much the use of its debt. Return on Assets (ROA) partially influences the value of manufacturing companies in the consumer goods industry sector. Management must be able to maintain the level of profitability so that it increases from year to year in order to increase the value of the company, because large profitability can provide opportunities for dividend distribution to investors, Price Earnings Ratio (PER) partially affects the value of manufacturing companies in the consumer goods industry sector. The company must be able to keep the PER value stable, even though the PER value cannot be controlled, the company can use strategies that can attract positive attention from the public such as implementing good corporate governance and providing corporate social responsibility to the community.

B. Suggestion

For investors in addition to assessing the company's financial performance, investors should also consider other things, such as political, economic conditions and so on. As the company's value is influenced by many factors, the financial performance factors used are Firm Size, Debt to Equity Ratio (DER), Return On Assets (ROA), and Price Earnings Ratio (PER). In addition, this variable should be supplemented with other variables to find out what other variables can be considered in investigating that affect the value of the company. For further researchers, the research sample should be expanded, not just using one sector or using a sample of other sector companies so that get better results and can be used as guidelines for further researchers.

REFERENCES


