



The Effect of Price Earning Ratio, Firm Size, and Corporate Social Responsibility on Firm Value (Empirical Study on Pharmaceutical Sub-Sector Companies Listed on The Indonesia Stock Exchange 2016 – 2020 Period)

T F W Marc¹⁾, D P Suciwati²⁾, and I G M Karma³⁾

Accounting Department, Politeknik Negeri Bali

Jalan Kampus Bukit Jimbaran, Kuta Selatan, Badung, Bali - 80364

E-mail to:

¹⁾trevhfirdha@gmail.com

²⁾desakputusuciwati@pnb.ac.id

³⁾igmkarma@pnb.ac.id

Abstract: Investors can use the firm value to see the company's performance in the past and predict the company's performance in the future. There are many factors that can affect the firm value in the future, including the company's ability to generate profits, the scale of the company, and the company's responsibility to stakeholders. However, there is a difference between expectations and the phenomena that occur in the field regarding these factors. The purpose of this research was to determine the effect of Price Earning Ratio, Firm Size, and Corporate Social Responsibility either partially or simultaneously on the value of pharmaceutical companies listed on the Indonesia Stock Exchange for the 2016-2020 period. The type of data used in this research is quantitative data, namely the annual financial statements of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange. The sample selection in this research was based on purposive sampling method, so that the sample used in this research amounted to 45 companies for 5 years. The data analysis technique used is multiple linear regression analysis. The results showed that partially Price Earning Ratio had a significant positive effect on firm value, while Firm Size and Corporate Social Responsibility had no significant effect on firm value. Simultaneously, Price Earning Ratio, Firm Size, and Corporate Social Responsibility have a significant effect on the value of pharmaceutical companies listed on the Indonesia Stock Exchange by 19.4%.

Keywords: *Price Earning Ratio, Firm Size, Corporate Social Responsibility, Firm Value*

1. Introduction

Firm value describes how much investors are willing to pay for a company if the company is sold [1]. In making an investment decision, investors can use firm value to see the company's performance in the past and predict the company's performance in the future. During this *Covid-19* pandemic, one of the companies that have improved performance are pharmaceutical companies due to the increasing need for vitamins, supplements, and herbal medicines to increase the body's immunity.

There are many factors that can affect the firm value in the future, including the company's ability to generate profits, firm size, and company responsibility to stakeholders. One of the factors that affect the firm value in terms of the company's ability to generate profits is *Price Earning Ratio* (PER). A low

PER indicates that the company has poor performance [2]. However, the phenomenon that often happens is the investors prefer to choose the companies with low PER because investors believe that a low PER indicates the better performance per share of the company in generating profits for the company.

Another factor that affects the firm value is the firm size as seen from the total assets of the company. Large companies are believed to be able to generate high profits and tend to be easier to obtain funding sources because creditors believe in the company's performance [3]. However, in reality investors buy a stock without seeing or considering the size of the company because companies with large total assets may not necessarily be able to pay dividends due to accumulated assets.

In addition, the factor that affects the firm value is *Corporate Social Responsibility* (CSR). The implementation of CSR can improve the company's positive image because companies that implement CSR show that the company does not only focus on financial conditions, but also pays attention to social and environmental dimensions. However, the phenomenon that occurs is that the majority of companies still focus on financial factors and less concerned about environmental and social factors. This is evident from the CSR disclosures made by the company which are still far from the standards that have been set and there are still many companies that are inconsistent in disclosing CSR in each period to the public and stakeholders.

Based on the background of the problem, this research needs to be carried out to determine the effect of Price Earning Ratio, Firm Size, and Corporate Social Responsibility partially and simultaneously on the value of pharmaceutical companies listed on the Indonesia Stock Exchange.

2. Literature Review

2.1 Theoretical Basis

2.1.1 Firm Value

Firm value is an economic measure that reflects the market value of the entire business or it can be said that the price that prospective buyers or investors are willing to pay if the company is sold [1]. A high firm value indicates that the market believes in the company's performance and the company's prospects in the future. There are several indicators that can be used to measure firm value namely, Price Earning Ratio (PER), Price to Book Value (PBV), and Tobin's Q.

2.1.2 Price Earning Ratio

Price Earning Ratio (PER) is a market value ratio that shows how investors assess the company's prospects in the future which is reflected in the share price that investors are willing to pay for every rupiah of profit earned by the company [4]. PER is a market ratio that compares the market price of a share with the Earning Per Share (EPS) of the shares concerned.

2.1.3 Firm Size

Firm size is a scale that describes the size of the company as seen from the total assets owned by the company [5]. Large companies are believed to be able to generate high profits and tend to be easier to obtain funding sources because creditors believe in the company's performance.

2.1.4 Corporate Social Responsibility

Corporate Social Responsibility (CSR) is a form of corporate social responsibility to its internal and external stakeholders by carrying out various social activities that can provide benefits to the society around the company [6]. With CSR, companies are no longer faced with responsibilities in the form of economics only (single bottom line), but also have responsibility for social and environmental problems (triple bottom line).

2.2 Definition of Operational Variables

2.2.1 Price Earning Ratio (X_1)

Price Earning Ratio (PER) is a market ratio that compares the market price of a share with the Earning Per Share of the shares concerned with the following formula:

$$PER = \frac{\text{Share market price}}{\text{Earning per share}}$$

2.2.2 Firm Size (X_2)

Firm size is proxied by using the Natural Logarithm of total assets to reduce excessive data fluctuations. By using Natural Logarithms, total assets with a value of hundreds, billions, even trillions will be simplified without changing the proportion of the actual total assets. The formula used is as follows:

$$\text{Firm Size} = \ln(\text{Total Assets})$$

2.2.3 Corporate Social Responsibility (X_3)

In this research, the indicators used to measure Corporate Social Responsibility (CSR) are indicators of CSR disclosure according to GRI-G4 which consist of 91 indicators. CSR disclosure based on these 91 indicators can be assessed using the Corporate Social Responsibility Disclosure Index (CSRDI) with a dichotomous approach, namely if a CSR item is disclosed it will be given a score of 1 and if it is not disclosed it will be given a score of 0. The formula used is as follows:

$$CSRDI_j = \frac{\sum X_{ij}}{n_j}$$

Information:

- CSRDI_j = Corporate Social Responsibility Disclosure Index of companies j
- $\sum X_{ij}$ = Total items disclosed by the company j
- n_j = Number of disclosure items according to GRI-G4, $n_j = 91$

2.2.4 Firm Value (Y)

In this research, the indicator used to measure the firm value is Tobin's Q. Tobin's Q is considered capable of providing the best information for investors related to fundamental aspects and market views of the company. The formula used is as follows:

$$\text{Tobin's } Q = \frac{\text{MVE} + \text{Debt}}{\text{TA}}$$

Information:

- MVE = Number of shares outstanding x closing share price
- Debt = Total debt of the company
- TA = Total assets of the company

2.2.5 Research Hypothesis

The hypothesis is a temporary answer to a problem that is still presumption because it still has to be proven true [7]. The hypotheses in this research are as follows:

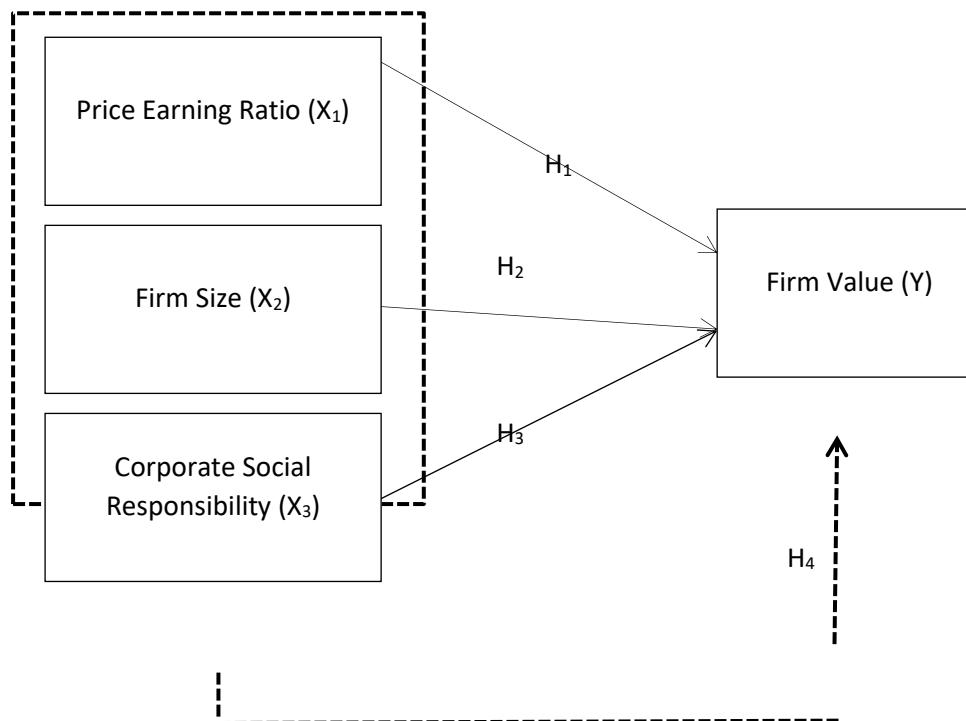


Figure 1. Research Hypothesis

Information:

_____ : Partial

----- : Simultaneous

H₁: Price Earning Ratio has an effect on firm value.

H₂: Firm Size has an effect on firm value.

H₃: Corporate Social Responsibility has an effect on firm value.

H₄: Price Earning Ratio, Firm Size, and Corporate Social Responsibility simultaneously affect the firm value.

3. Methodology

This type of research is quantitative research with the type of data used is quantitative data, namely the annual financial statements of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange from 2016-2020. The data sources in this research is all secondary data obtained from the official website of the Indonesia Stock Exchange, namely www.idx.co.id and the official websites of each company. The sample selection in this research was based on purposive sampling method, so that the sample used in this research amounted to 45 companies for 5 years. The data collection method used in this research is the documentation method. The data analysis technique used in this research is multiple linear regression analysis.

4. Results and Discussion

Before doing the multiple linear regression analysis, the classical assumption test is done first, which consists of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. And

every test of this classical assumption has been fulfilled, so that multiple linear regression analysis can be done.

4.1 Hypothesis Test Result

4.1.1 Partial Test (t-test)

Table 1. t-test

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.337	9.438		.248	.806
	PER	.007	.002	.498	3.613	.001
	Firm Size	.042	.339	.018	.123	.903
	CSR	-4.413	4.173	-.153	-1.058	.296

a. Dependent Variable: Tobins

Table 1 provides information about the effect of the independent variables, namely Price Earning Ratio (PER), Firm Size, and Corporate Social Responsibility (CSR) partially on Firm Value (Tobins q).

Based on the results of the t test in table 1 above, it is known that only the Price Earning Ratio variable has a significant effect on firm value, which can be seen from its significance value of 0.001 which is smaller than 0.05. So, H1 which states that the Price Earning Ratio has an effect on firm value is accepted. Meanwhile, the variables of Firm Size and Corporate Social Responsibility have no significant effect on firm value, which is indicated by the significance value of Firm Size of 0.903 and Corporate Social Responsibility of 0.296 both greater than 0.05. Therefore, H2 which states that firm size affects firm value and H3 which states that Corporate Social Responsibility affects firm value are rejected.

4.1.2 Simultaneous Test (F-Test)

Table 2. F-Test
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	110.103	3	36.701	4.523	.008 ^b
	Residual	332.697	41	8.115		
	Total	442.800	44			

a. Dependent Variable: Tobins

b. Predictors: (Constant), CSR, PER, Firm Size

Table 2 provides information about the presence or absence of the effect of Price Earning Ratio (PER), Firm Size, and Corporate Social Responsibility (CSR) simultaneous on Firm Value (Tobins q).

Based on Table 2, it can be seen that from the F test results obtained a significance value of 0.008 which is smaller than 0.05, it can be concluded that Price Earning Ratio, Firm Size, and Corporate Social Responsibility simultaneously have a significant effect on firm value. Therefore, H4 which states that the Price Earning Ratio, Firm Size, and Corporate Social Responsibility simultaneously affect the firm value is accepted.

4.1.3 Multiple Linear Regression Analysis

Table 3. Multiple Linear Regression

		Coefficients ^a				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.337	9.438		.248	.806
	PER	.007	.002	.498	3.613	.001
	Firm Size	.042	.339	.018	.123	.903
	CSR	-4.413	4.173	-.153	-1.058	.296

a. Dependent Variable: Tobins

Table 3 provides information about the regression equation. The multiple linear regression equation in this research is as follows:

$$Y = 2,337 + 0,007X_1 + 0,042X_2 - 4,413X_3 + e$$

From the regression equation, it can be interpreted that the constant value of 2,337 indicates that if the value of Price Earning Ratio (PER), Firm Size, and Corporate Social Responsibility (CSR) is zero ($X = 0$) then the firm value is 2,337 times. Then, the regression coefficient PER (X_1) of 0.007 indicates a positive value, meaning that if the PER increases by Rp. 1, then the firm value will also increase by 0.007 times, assuming the other independent variables are constant. Then, the regression coefficient of firm size (X_2) of 0.042 indicates a positive value, meaning that if the firm size increases by Rp. 1, then the firm value will also increase by 0.042 times, assuming the other independent variables are constant. Then, the regression coefficient CSR (X_3) of -4.413 indicates a negative value, meaning that if CSR increases by 1%, then the firm value will decrease by 4.413 times, assuming the other independent variables are constant.

4.1.4 Coefficient of Determination

The coefficient of determination used in this research is the value of Adjusted R Square which can be seen in Table 4 below:

Table 4. Coefficient of Determination

Model Summary ^b			
Model	R	R Square	Adjusted R Square
1	.499 ^a	.249	.194

a. Predictors: (Constant), CSR, PER, Firm Size

b. Dependent Variable: Tobins

Table 4 shows that the value of Adjusted R Square is 0.194 or 19.4%, which means that the magnitude of the effect of Price Earning Ratio, Firm Size, and Corporate Social Responsibility simultaneously on firm value is 19.4%, while the remaining 80.6% is effected by other variables outside the regression model of this research.

4.2 Discussion

4.2.1 The Effect of Price Earning Ratio on Firm Value

The results of testing the first hypothesis (H1) indicate that the Price Earning Ratio has a significant positive effect on firm value. Price Earning Ratio (PER) is seen by investors as a measure of the company's strength to earn profits in the future. A high PER indicates that the market is willing to pay dearly for a company's revenue or profit. This condition shows that investors believe that the company has high growth prospects in the future. Therefore, a high PER will give a good signal to investors, so

investors will be interested in buying the company's shares and demand will increase. High stock demand makes the stock price higher and it will potentially generate profits from the difference in stock prices that occurs. Thus, the firm value will increase in the eyes of investors. The results of this research are in line with the research conducted by Nafisah et al. (2018) which concludes that the Price Earning Ratio has a positive and significant effect on firm value [8] and contradicts research conducted by Sari & Jufrizen (2019) which concludes that the Price Earning Ratio has no significant effect on firm value [9].

4.2.2 The Effect of Firm Size on Firm Value

The results of testing the second hypothesis (H2) indicate that firm size has no significant effect on firm value. The results of this research indicate that the size of the company is not able to affect the firm value. In buying a stock, investors do not really see or consider the size of the company. However, investors will pay more attention to the company's performance as seen in the company's financial statements. In addition to the company's performance, investors will also pay attention to the company's dividend policy because large companies may not always pay large dividends to shareholders. In addition, investors will also pay attention to external factors that can affect the firm value such as inflation, interest rates, exchange rates or currency rates, as well as regulations from the government that can guarantee their welfare. The results of this research are in line with research conducted by Indriyani (2017) which concluded that firm size had no significant effect on firm value [10] and contradicted research conducted by Pratama & Wiksuana (2016) which concluded that firm size had a significant positive effect on firm value [11].

4.2.3 The Effect of Corporate Social Responsibility on Firm Value

The results of testing the third hypothesis (H3) indicate that Corporate Social Responsibility has no significant effect on firm value. The results of this research indicate that the size of the disclosure of Corporate Social Responsibility (CSR) carried out by the company cannot affect the firm value. This is because investors view that most companies only disclose the implementation of CSR as a formality. The majority of companies still focus on financial factors and less concerned about environmental and social factors. This is evident from the company's CSR disclosures that are still far from the established standards and there are still many companies that are inconsistent in disclosing their company's CSR in each period to the public and stakeholders. The results of this research are in line with research conducted by Wahyuni (2018) which concludes that firm value is not effected by Corporate Social Responsibility [12] and contradicts research conducted by Murnita & Putra (2018) which concludes that Corporate Social Responsibility has a significant positive effect on firm value [13].

4.2.4 The Effect of Price Earning Ratio, Firm Size, and Corporate Social Responsibility on Firm Value

The results of testing the fourth hypothesis (H4) show that Price Earning Ratio, Firm Size, and Corporate Social Responsibility simultaneously have a significant effect on firm value. Then, based on the results of the coefficient of determination, it can be seen that the value of Adjusted R Square is 0.194 or 19.4%, which means that the magnitude of the effect of Price Earning Ratio, Firm Size, and Corporate Social Responsibility simultaneously on firm value is 19.4%. The results of this research indicate that the Price Earning Ratio (PER), firm size, and Corporate Social Responsibility (CSR) will simultaneously affect the firm value. This is because a high PER indicates investors believe that the company has high growth prospects in the future as indicated by the stock price being increasingly expensive due to high demand. Then, large companies are believed to be better able to bear the risks of various situations that may be faced by the company in the future because companies are believed to have good control over market conditions and tend to find it easier to obtain funding sources. Furthermore, companies with high CSR activities make investors think that the profits earned by the company will be used for CSR implementation because in implementing CSR the company will require large funds, so the company cannot provide maximum profit to investors.

5. Conclusion

Based on the results of research and discussion that have been described in the previous chapter, the following conclusions can be drawn: 1) Price Earning Ratio has a significant positive effect on firm value, 2) Firm size has no significant effect on firm value, 3) Corporate Social Responsibility has no significant effect on firm value, 4) Price Earning Ratio, Firm Size, and Corporate Social Responsibility simultaneously have a significant effect on firm value with the following regression equation: $Y = 2.337 + 0.007X_1 + 0.042X_2 - 4.413X_3 + e$.

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