



THE INFLUENCE OF PROFITABILITY AND DEBT RATIOS TOWARD THE STOCK RETURN OF COSMETIC INDUSTRY IN INDONESIA

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ARTICLE INFO

Keywords:

Stock Return,
Cosmetic Industry,
Profitability

ABSTRACT

The definite aim of this research is specifically for measuring the influence of profitability and debt ratios on stock return in the Indonesian cosmetic industry, both partially and simultaneously. There are five independent variables within this study examined by descriptive analysis, classical assumption test, multiple linear regression, and hypothesis testing. The research methodology uses a quantitative method that took from 2014-2019 quarterly financial report from five cosmetics companies listed in Indonesia Stock Exchange Adopting quantitative research and using secondary data, there will be 120 pieces of observation data from 5 samples from 2014-2019. The theoretical framework focused on Debt to Total Asset Ratio, Debt to Equity Ratio, Return on Asset, Earning per Share, Price Earning Ratio and the influence of financial ratios calculation in terms of EPS, DAR, DER, ROE, and PER on Stock Return in Indonesia's Cosmetics Industry as the independent variables and Stock Return (Y) as the dependent variable. The findings of this research reveal that EPS, DAR, DER, ROA, and PER all have a significant impact on Stock returns. On the other hand, EPS and ROA do not significantly influence Stock returns. The other variables, DAR, DER, and PER, significantly influence Stock returns.

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1. Introduction

According to table 1, the stock returns of cosmetic companies registered in IDX during the 2014-2019 periode changed the trend, some are negative, and some are positive. This phenomenon is abnormal because if the company has increased sales, it can generate a higher return for investors in the future, and the cause of negative stock return is that investors tend to sell the stock rather than buy the stock (Putri & Vadilla, 2021)

However, it has previously been emphasized that doing business and penetrating the market in the beauty sector is an opportunity for several companies in Indonesia. Therefore the Ministry of Industry continues to boost and strive to advance this industry because it has millennials and exceptional digital standards. This trend will peak in Indonesia, so it is not wrong to see trends every year. Therefore, the researcher decided to conduct further research by analyzing what ratios influence stock returns in the cosmetic industry.

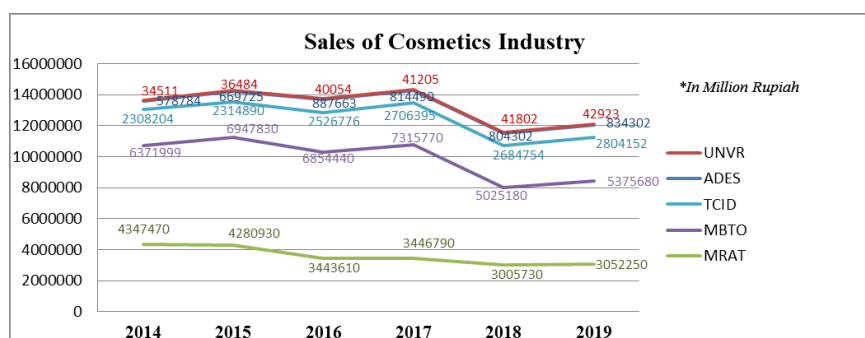


Fig 1. Sales of Cosmetic Industry

Table 1. Stock Return of Cosmetic Industry

Company Name	Stock Return %					
	2014	2015	2016	2017	2018	2019
PT Mustika Ratu Tbk	2.47	4.05	0.96	1.90	-1.31	-1.45
PT Martina Berto Tbk	3.44	3.00	3.21	-2.70	6.67	2.54
PT Mandom Indonesia Tbk	4.72	5.85	2.42	4.32	3.63	-3.62
PT Akasha International Tbk	8.67	-2.61	-1.48	1.15	3.95	1.35
PT Unilever Indonesia Tbk	2.42	1.45	4.86	4.40	-1.87	-7.49

Source : constructed by Author, 2021

The cosmetics industry shows rapid growth from year to year. Although there will be obstacles in each subsequent year where the sales value will decline, the following year will show a higher value than before.

In figure 1.1 above, sales of five (5) cosmetic companies registered on the IDX have decreased and for the table below that is table 1.1, there shows that the return of shares of these cosmetic companies shows a downward trend. This research was conducted to see the causes of this trend where the most likely causes are equity or debt.

The relationship between debt and equity has three critical theories: tax theory, signalling theory, and agency cost theory (Kebewar, 2012). For tax theory, this theory usually suggests that profitability and debt ratio will depend on interest and income taxes. Whereas for agency cost theory, debt usually has a contradictory effect. It can be positive or negative on the profitability of a company. For example, equity agency costs can positively affect lenders and shareholders, while the negative effect usually can be seen from agency costs on debt. According to table 1.1, the stock returns of cosmetic companies registered in IDX during the 2014-2019 period changed the trend, some are negative, and some are positive. This phenomenon is abnormal because if the company has increased sales, it can generate a higher return for investors in the future, and the cause of negative stock return is that investors tend to sell the stock rather than buy the stock (Putri & Fadilla, 2021)

However, it has previously been emphasized that doing business and penetrating the market in the beauty sector is an opportunity for several companies in Indonesia. Therefore the Ministry of Industry continues to boost and strive to advance this industry because it has millennials and exceptional digital standards. This trend will peak in Indonesia, so it is not wrong to see trends every year. Therefore, the researcher decided to conduct further research by analyzing what ratios influence stock returns in the cosmetic industry.

Based on previous research, the researcher found some ratios from the aspect of debt and profitability ratio. In some studies, the DAR and DER positively correlate with the stock return, while in others, PER negatively correlates with stock return. Meanwhile, there are also previous studies that

used EPS and ROA. Other studies showed that EPS has two results with no influence and positively influences stock return. So, the researcher wants to determine whether EPS, DAR, DER, ROA, and PER positively or negatively influence stock returns.

2. Methods

2.1 Research Design

Research design is the framework used to assist the researcher in completing their research by providing a detailed outline of each procedure from several questions to the data analysis stage. In this study, the researcher decided that the research design to be used was conclusive research because it is more likely to be under quantitative techniques and is indeed conclusive more often using quantitative rather than qualitative (Bougie & Sekaran, 2018).

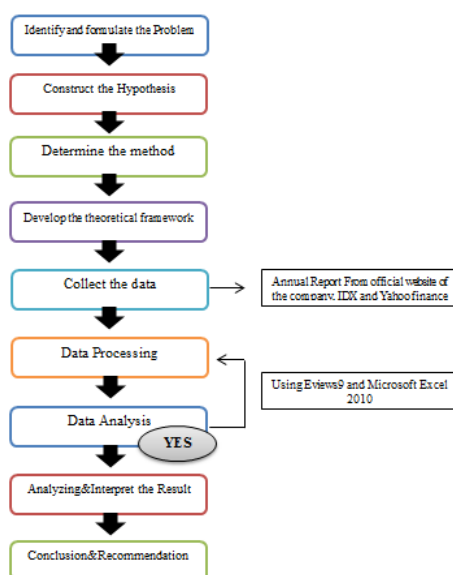


Fig 2. Research Design

2.2 Sampling Design

Sampling design can be interpreted as a design related to a statistical methodology carried out by taking a population sample as a sampling design. The technique of sampling design is a part or representative of the population under this study (Easterby-Smith, 2021). The sample used in this research is a company engaged in the cosmetics sector registered on the Indonesia Stock Exchange (IDX) for the 2014-2019 period.

2.3 Operational Definition

Table 2. Operational Definition

No	Company Name	Definition	Measurement
1.	Earnings Per Share (EPS) (X1)	This ratio was measure by net income divided by number of share outstanding	EPS = net income/number of common shares outstanding
2.	Debt on Asset Ratio (DAR)(X2)	Interpreted as a company’s ability to cover all of the debts	DAR = Total Debt/Total Asset
3.	Debt on Equity Ratio (DER) (X3)	This ratio was calculated by total liabilities as a percent of total shareholder equity	DER = Total debt/total equity

No	Company Name	Definition	Measurement
4.	Return on Asset(ROA) (X4)	The Profitability ratio which shows the percentage of profit (net margin) that the company receives in relation to the total resources or the average number of assets	ROA = Net Income/Total Assets
5.	Price Earnings Ratio(PER) (X5)	Comparison between the Share price and the company's net income where the share price of an issues is compared to the net profit generated by the issue in a year	PER = Market Value per Share/Earning per Share
6.	STOCK RETURN (Y)	Stock return was calculated by ending value of the stock divided by beginning value of the stock	$R_t = \left(\frac{P_t - P_{t-1}}{P_{t-1}} \right) \times 100\%$

2.4 Data Analysis Design

In this study, the analytical method used is Multiple Regressions Analysis. This analysis is commonly used to analyze and determine how the results of the independent variable influence the dependent variable indicator. So it can be said that if the number of independent variables in the analysis of the study is more than two variables, it can be said that in this study, Multiple Regression Analysis can be used (Sugiyono, 2014). Since this research has five (5) independent variables (EPS, DAR, DER, ROA and PER), the multiple regression is calculated using Eviews 9.

The general form of multiple Regression Analysis equation can be written as follows:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + e \dots\dots\dots (1)$$

Where :

- Y = Stock Return
- b_0 = Constant Value
- X_1 = EPS
- X_2 = DAR
- X_3 = DER
- X_4 = ROA
- X_5 = PER
- b_1, b_2, b_3, b_4, b_5 = The regression coefficients of each independent variables
- e = the error or effect value of other variable

3. Result and Discussion

3.1 Result

For the estimation result, model test regression has three (3) alternative models, which are CEM (Common Effect Model), FEM (Fixed Effect Model), and the last one is REM (Random Effect Model). To get the suitable estimation model that will be used for further test, then the researcher chooses to use the chow test and Hausman test.

Table 3.
Hausman Test

Correlated Random Effects - Hausman Test			
Equation: REM_MODEL			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.798687	4	0.0016

Based on table 4, the hausman test shows that the probability of cross section random is significant at 0.0016 and that is less than the standard value of research significance which is $\alpha 5\% = 0.05$, which means that the preferable for this models is also Fixed Effect Model.

Table 4.
Multiple

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.393988	1.881754	1.803630	0.0040
EPS	0.007556	0.014661	-0.515422	0.6073
DAR	0.073423	0.066971	-1.096345	0.0053
DER	-0.025802	0.013914	1.854392	0.0064
ROA	0.265342	0.142798	1.858172	0.0658
PER	0.003738	0.012621	0.296128	0.0077

Then the Multiple Regression Analysis Result :

$$Y = 3.393988 + 0.007556 \text{ EPS} + 0.073423 \text{ DAR} - 0.025802 \text{ DER} + 0.265342 \text{ ROA} + 0.003738 \text{ PER}$$

The equation of Multiple Regression for this model and the information stated can be interpreted in sentences as follows :

- a. The Constanta with the value of 3.393988, which means if all the independent variables value is zero, the amount of Stock Return would be 3.393988
- b. DER has a negative sign on regression coefficient (-0.025802), thus explain if examined DER is harming Stock Return prediction
- c. EPS, DAR, ROA, and PER, are having a positive sign, which means that these variables are having a positive effect on Stock Return

1). Interpretation of Results

a) The Influence of EPS to Stock Return

From the results of the Eviews9 output, it can be seen that the significance value for EPS is 0.6073 with $\alpha = 0.05$, the significance value is $> \alpha$, and the regression coefficient is positive 0.007556. Thus one is rejected. EPS has a positive effect on Stock Return. It would increase the value of stock return by about 0.007556.

When the value of EPS increases, shareholders or investors who expect short-term profits and understand dividends quickly decide to sell their shares because the company's stock returns will decrease shortly due to the excess supply of shares. So it can be said that EPS has a negative and significant effect on stock return (Faturohman & Abdulmannan, 2015).

b) The Influence of DAR to Stock Return

From the results of the Eviews9 output, it can be seen that the significance value for DAR is 0.0053 with $\alpha = 0.05$, then the $\text{sig} < \alpha$ value and the regression coefficient are positive, namely 0.073423. Thus HA2 is accepted, DAR has a significant effect on stock return, and DAR has a positive impact on stock return. It would increase the value of stock return by about 0.073423.

The results of the significant value of DAR indicate that DAR has a significant effect on stock returns may be because investors or shareholders can control the company with a small investment of funds. For example, it is usually for companies that are developing and growing, especially companies in the cosmetic sector, which shows that there is much interest in them. Indonesian society will need a source of funding to finance it.

The debt ratio (the ratio between debt to total activity) reflects the use of debt is getting bigger, at the old earning before interest and tax or the same EBIT will result in a higher profit per share. If earnings per share increases, such as the results of the regression coefficient that have been tested and are positive, it is clear that it would increase the value of stock return so that DAR has a positive and significant effect on stock returns.

c) The Influence of DER to Stock Return

From the results of the Eviews9 output, it can be seen that the significance value for DER is 0.0064 with $\alpha = 0.05$, then the $\text{sig} < \alpha$ value and the regression coefficient are negative, namely -0.025802. Thus, HA3 is accepted, DER significantly affects stock returns, and DER harms stock return. It would decrease the value of stock return by about 0.025802.

The results of this study show that the DER variable partially influences stock returns because it shows a probability value with a significance value of less than 0.05.

DER's significant value results indicate that DER has a significant effect on stock returns. Maybe because investors do not see how much total debt and total equity the company has and its capital capacity to meet all its obligations.

d) The Influence of ROA to Stock Return

From the results of the Eviews9 output, it can be seen that the significant value of ROA is 0.0658 with $\alpha = 0.05$, then the $\text{sig} > \alpha$ value and the regression coefficient are positive (0.265342). Thus, HA4 is rejected, and ROA has no significant effect on stock returns. The positive value of the regression coefficient of ROA would increase the value of stock return by about 0.265342.

The insignificance of ROA, for good or bad, does not potentially attract the company to investors. This condition illustrates that the company's ability to generate profits and control all operational and non-operational costs is less efficient. Hence, investors think that the company's performance is not good and causes the stock price to decline.

This shows that investors do not solely use ROA to assess company performance to predict stock returns in the cosmetic market. The results of this study are in line with research conducted by (Turyanto & Susilawati, 2011) which states that ROA does not have a significant effect on stock returns in cosmetics industry companies at IDX.

e) The Influence of PER to Stock Return

From the results of the Eviews9 output, it can be seen that the significance value for PER is 0.0077 with $\alpha = 0.05$, then the $\text{sig} < \alpha$ value and the regression coefficient are positive, namely 0.003738. Thus HA5 is accepted, and PER has a positive and significant effect on stock returns. The positive regression coefficient value of PER would increase the value of stock return by about 0.003738.

The test results in this study indicate a positive and unidirectional relationship between PER and stock returns can be seen from the positive regression coefficient (X5).

The significant influence of PER on stock returns in this study may be because PER is the most capable of describing market conditions and the price of the company's shares, so investors should pay attention to PER in making decisions to buy or sell shares. In addition, PER also shows the worth or not the company's shares to own, so changes in PER significantly affect stock returns.

f) The Influence of EPS, DAR, DER, ROA and PER to Stock Return

For the five (5) independent variables which is Earning PerShare (EPS)(X1), Debt to Asset Ratio (DAR)(X2), Debt to Equity Ratio (DER)(X3), Return on Asset (ROA)(X4), and Price Earning Ratio (PER)(X5) can significantly influence and affect the dependent variable which is Stock Return because the ability of all independent variable has probability value 0.000268.

The result that obtained by the researcher for determining influence or affect of five(5) independent variables (EPS, DAR, DER, ROA, and PER) to the dependent variable (Stock Return) that tested by F-test show that all of them have an effect to Stock Return. Although there are those that do not have a significant effect from the probability value namely EPS and ROA, unlike DAR, DER and PER that have significant effect to Stock Return, but EPS and ROA are actually considered to have a positive effect because the value of stock return will be the same following the increase or decrease that occurs in EPS and ROA. In short, if the EPS and ROA values have increased, so will the Stock Return.

4. Conclusions

Based on the analysis of the research about the influence of profitability ratios and debt ratios on the stock return of 5 cosmetic companies that have been carried out in the previous chapter, the following conclusions is; Earning per Share had been examined, and it showed that EPS does not have a significant influence on Stock Return, but EPS has a positive impact on stock return. Therefore, it can be seen that when the value of EPS increases, investors who expect short-term profits and understand

dividends quickly decide to sell their shares because the company's stock return will decrease shortly due to the excess supply of shares.

Debt to Asset Ratio had been examined and showed that DAR has a significant influence on Stock Return and has a positive impact on stock return. The results of the significant value of DAR indicate that DAR has a significant effect on stock returns because investors or shareholders can control the company with a small investment of funds. For example, it is usually for companies that are developing and growing, especially companies in the cosmetic sector, which shows that there is much interest in the cosmetic industry.

Debt to Equity Ratio had been examined and showed that DER significantly influences Stock Return but hurts stock return. The negative impact of DER can happen because the increase in the value of the DER will decrease the Stock Return value. DER's significance value results indicate that DER has a significant influence on stock returns because investors do not see how much total debt and total equity the company has and the company's capital capacity to meet all its obligations.

Return on Asset had been examined and showed that ROA does not significantly influence Stock Return, but ROA has a positive impact on stock return. For good or bad, the result of ROA does not potentially attract the company to investors.

Price Earning Ratio had been examined and showed that PER has a significant influence on Stock Return and PER has a positive impact on stock return. The significant influence of PER indicates that PER is the most capable of describing market conditions and the price of the company's shares, so investors should pay attention to PER in making decisions to buy or sell shares.

Depending on F-test results, EPS, DAR, DER, ROA and PER have a simultaneous influence toward Stock Return of 29.12%, with the remaining 70.88% influenced by other factors excluded within this research.

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