Original article

The Effect of Debt-To-Equity Ratio (Der), Net Profit Margin (Npm), and Return-on-Investment (Roi) on Profit Growth

Haryono Umar[1], Nur Fajri[2], Agustina Indriani[3]

Perbanas Institute, Jakarta
Perbanas Institute, Jakarta
Darma Persada University, Jakarta

Abstract - *This study aims to examine the effect of Debt to Equity Ratio, Net Profit Margin and Return on Investment on profit growth in manufacturing companies in the consumer goods industry sector of the pharmaceutical sub-sector in the year listed on the Indonesia Stock Exchange on profit growth in the period 2014 to 2019. The subjects used in this study are manufacturing companies in the consumer goods industry sector of the pharmaceutical sub-sector, which are listed on the Indonesia Stock Exchange. The period used is 2014-2019. Based on those criteria, the data obtained from the report published by the IDX were comprised of 10 companies as the study samples. Meanwhile, the study used panel data regression with least-squares equation and hypothesis testing using t-statistics to test the partial regression coefficients. Next, f-statistics was used to test the simultaneous effect at the significance level of 5%. Based on the analysis results using software reviews version 10, it was revealed that: (1) Debt to Equity Ratio (DER) had a positive and significant effect on Profit Growth; (2) Net Profit Margin (NPM) has a positive and significant effect on Profit Growth; (3) Return on Investment (ROI) has a negative but not significant effect on profit growth; (4) Debt to Equity Ratio (DER), Net Profit Margin (NPM) and Return on Investment (ROI) have a positive and significant effect on profit growth.*

Keywords - *net profit margin (NPM), return on investment (ROI), debt to equity ratio (DER), Profit growth.*

I. INTRODUCTION

With the rapid development of the world economy in the globalization era, industries are currently facing highly intense and complex competition. Such a condition strongly impacts industrial sectors, such as manufacturing companies. Facing the competition in the current globalization era, each company is required to be able to effectively and efficiently manage its vital functions to survive its business activities.

To gain maximum profits as targeted, companies can do much for owners' and employees' welfare and improve product quality. An indicator that a company has achieved success and managed to win the competition with others is that it is able to generate profits for its owners. According to Kasmir (2015; 63), profit is one of a company's main goals in carrying out its activities. Furthermore, profits are also used to increase capital for production capacity improvement and market expansion. Earnings information serves as management productivity assessment, helps predict long-term profit potential, and identifies risks and returns in borrowing or investing.

A company's profit growth can increase for the current year, but it can also decrease for the following year. Because profit growth cannot be ascertained, it is necessary to analyze the rate of profit growth. The financial statements analysis with the financial ratio is commonly used to measure a company's financial performance. Assessment of the company's performance can reflect its financial condition, which can later predict profit growth it can generate in the future.

Profit growth is one of the growth ratios used to measure a company's performance. Profit growth reflects the management's success in managing the company effectively and efficiently. It is a ratio that showcases the company's ability to increase net profit compared to the previous year (Harahap, in Pratama 2019). Each company expects an increase in profit in each period, but sometimes in practice, profits might decline. Therefore, it is necessary to analyze financial statements to estimate profits and make future profit growth decisions. Increasing profit growth from year to year indicates a good signal about a company's performance (Firmansyah et al., 2019).

Financial statements analysis commonly uses financial ratios to measure a company's financial performance. A

financial ratio is a comparison of the amount, from one amount to another, by which one can find answers as study materials to analyze a company's financial condition. According to Wiratna (2017), financial ratio analysis is an activity to analyze financial statements by comparing one account with others in the financial statements. The comparison is contained in the balance sheet and profit and loss financial statements. This financial statement analysis is intended to determine the relationship between the accounts in the financial statements, both in the balance sheet and in the income statement. According to Fahmi (2014), there are six main financial ratios, i.e., liquidity ratio, leverage ratio, activity ratio, profitability ratio, growth ratio, and market value ratio. Using analytical methods, such as these ratios, will explain or provide an overview of a company's financial position.

II. LITERATURE REVIEW

A. Profit growth

According to the Indonesian Accounting Association (2012:12), net income (earnings) is often referred to as a performance measure or the basis for other measures such as return-on-investment or earnings per share. Moreover, a company's performance results from a series of processes at the expense of various resources. One of the parameters for evaluating the company's performance is profit growth. It is calculated by subtracting the current year's net profit from last year's net profit and then dividing it by last year's net profit. In this study, the profit refers to the EAT (earning after-tax) profit, which is net profit after tax. The formula for calculating profit growth is as follows:

$$\text{Profit growth} = \frac{profit_t - profit_{t-1}}{profit_{t-1}}$$

According to Dewi Utari, Ari, and Darsono (2014:67-68), the essential type of growth is net profit after tax (earning after-tax/EAT) since it determines the growth in earnings per share (EPS) and dividends per share (DPS).

a) Debt-to-equity ratio (DER)

The debt to equity ratio is used to assess the comparison of debt to equity by comparing all debts, including current debt, with all equities (Kasmir, 2015). This ratio is helpful to determine the number of funds provided by the borrower (creditor and company owner). In other words, the ratio serves to determine each of own capital that is used as debt collateral.

Mathematically, according to Horne and Wachowicz (2009: 186), the debt to equity ratio refers to the comparison of total debts with total shareholder's equity. The ratio is determined using the following formula (Kasmir, 2014:158):

$$DER = \frac{total\ debts}{equity}$$

Based on some previous definitions, we can conclude that the debt to equity ratio measures the extent to which the debts finance a company compared with its ability to fulfill its obligations with its equity (Nurmayasari et al., 2021).

b) Net profit margin (NPM)

The measure of a company's performance appraisal is the center of attention for those who take benefits from financial statements. Through it, they can assess the final results of a policy carried out by the company's management. In particular, they can overview how much profit is generated from various levels, one of which is the ability to generate profits from sales, i.e., net profit margin. This ratio constitutes part of the profitability ratio.

The net profit margin ratio can also be interpreted as a company's ability to reduce costs (a measure of efficiency) in its operations in a certain period. A high-profit margin indicates a company's ability to generate high profits at a certain level of sales. On the other hand, a low-profit margin indicates too low sales for a certain level of costs; alternatively, the costs are too high for a certain level of sales, or a combination of both. Generally speaking, a low net profit margin ratio indicates management inefficiency (Hanafi and Halim, 2009:83-84).

According to Murhadi (2015:64), the measurement of net profit margin reflects a company's ability to generate net profit from each sale. It is expected that the higher the NPM, the better the company's performance is. Furthermore, according to Agus Sartono (2015:122-123), the measurement of net profit margin shows a company's ability to earn profits in relation to sales. This ratio can be calculated as follows:

$$NPM = \frac{profit\ after\ tax}{sales}$$

c) Return on investment (ROI)

Investors in the capital market are very concerned about a company's ability to generate, maintain, and increase its profits. There is an indicator to measure a company's profitability, which is called the return-on-investment (ROI). Return on investment (ROI) is a form of profitability ratio which aims to measure a company's ability with the overall funds invested in assets used for its operations to generate profits. Therefore, ROI is also known as the rate of profit or return on investment.

According to Riyanto (2010: 336), return-on-investment or the rate of return on investment indicates the ability level of the capital invested in overall assets to generate net profits. In this sense, the authors conclude that return-on-investment (ROI) shows the extent to which a company can generate net income from the entire utilization of its capital. Therefore, the net profit after tax and company assets are used in this term. Sartono (2009: 123) proposed that return-on-investment (ROI) can be determined using the following formula.

$$ROI = \frac{net\ profit}{total\ assets}$$

The rate of return on investment (ROI) is usually used as the basis of financial investment decisions. Investors can see potential investments by comparing the profits and losses of the investment.

III. THEORETICAL FRAMEWORK

The following research model describes a conceptual framework as a study guideline, as well as a rationale about the effect of debt to equity ratio (DER), net profit margin (NPM), and return on investment (ROI) on profit growth. The research framework can be depicted as follows:
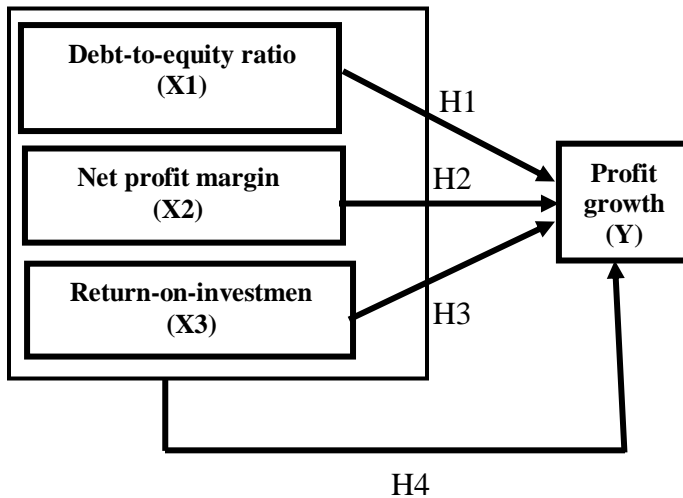

Fig. 1 Conceptual framework of the research

IV. RESEARCH METHOD

Since this research uses the quantitative method, it emphasizes testing the theories through measuring research variables with numbers and data analysis using statistical procedures (Indriantoro et al., 2012). More specifically, this study examines the effect of debt-to-equity ratio (DER), net profit margin (NPM), and return-on-investment (ROI) on profit growth in manufacturing companies of the consumer goods industry, the pharmaceutical sub-sector from 2014 to 2019. The population of this study was manufacturing companies in the consumer goods industry sector, more specifically in the pharmaceutical sub-sector. The data were obtained from the stocks of the companies which were listed on the Indonesia Stock Exchange (IDX) from 2014 to 2019.

V. TESTING DATA AND HYPOTHESES

A. Descriptive analysis

This study discusses the effect of the company's financial performance on the profit growth of sample companies listed on the Indonesia Stock Exchange. There are three independent variables used, i.e., debt-to-equity ratio (DER), net profit margin (NPM), and return-on-investment (ROI), while the dependent variable is profit growth. The data in this study were secondary data in the form of panel data and processed using a statistical package for Windows, EViews 11. The number of research objects (samples) was ten companies from 2014 to 2019.

Table 1. Descriptive statistical test results

	Y	X1	X2	X3
Mean	273931.3	0.494177	0.072202	0.057167
Median	233215.0	0.464405	0.055110	0.068925
Maximum	954869.0	13.97688	0.702540	0.253240
Minimum	-653602.0	-31.03660	-0.410300	-0.429010
Std. Dev.	311275.5	4.551579	0.124332	0.106511
Skewness	-0.579519	-5.215117	1.368700	-1.921215
Kurtosis	4.516458	41.04075	15.60490	10.37576
Observations	60	60	60	60

Source: data processing using Eviews 11

From the descriptive statistical test results, as shown in the table above, the number of observation data is 60, while each observation comprises four variables. Therefore, the total data in this study is 240 consisting of 10 companies and six years of the financial reporting period from 2014 to 2019.

B. Regression model test

This study uses panel data with three regression models: the common effect model, the fixed-effect model, and the random effect model. The best model selection test in this study was conducted to determine the most suitable panel data regression model used to test the hypotheses of the research models that have been developed. The Chow test and Hausman test are carried out to select which model is the most suitable among the three models. The selection is carried out using EViews 11. Furthermore, a model selection test is conducted to determine which model is suitable for use, as follows:

a) The Chow test

The Chow test is used to choose either the common effect model or the fixed effect model. To perform the Chow test, the following test criteria apply. If p-value > 0.05, the common effect model is selected, but if p-value < 0.05, the fixed-effect model and further Hausman test is chosen. Based on these criteria, the results of the Chow test in this study are shown in the following table.

Table 2. The Chow test results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.626461	(9,47)	0.0726
Cross-section Chi-square	38.064885	9	1.0539

Source: authors own data, 2020

Based on the test results shown in Table 2, we could observe that both the p-value and the chi-square are significant (p-value > 5%). These results are in accordance with the test criteria that the results of the Chow test, i.e., the value of chi-square cross-section is 1.0539, which is greater

than 0.05. Therefore, we can conclude that this study uses the common effect, and we no longer require the Hausman test to select the fixed effect or the random effect model as a suitable regression model.

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C. Classical assumption test

A classical assumption test is conducted to determine whether there is a deviation of the classical assumption from the multiple regression equation. Four classical assumptions must be satisfied before performing regression on the equation model, i.e., normality, multicollinearity, autocorrelation, and heteroscedasticity.

a) Normality test

The results of the normality test are shown in Figure 2 as follows:
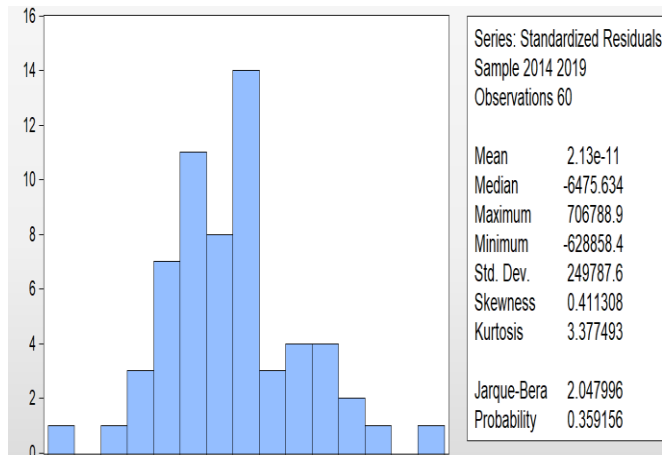

Source: the authors own data, 2020

Fig. 2 The normality test results

Based on the test results shown in Figure 2, it is known that the probability is significantly greater than 0.05. These results are in accordance with the test criteria which have been previously described. We can observe that the normality test results, i.e., the probability of 0.359156, are greater than 0.05. Thus, we conclude that the data are normally distributed.

b) Multicollinearity test

A multicollinearity test is a condition in which one or more independent variables can be expressed as a linear combination of other independent variables. One of the classical linear regression assumptions is the absence of

perfect multicollinearity. A regression model is regarded to be affected by multicollinearity if there is a perfect or exact linear relationship between some or all independent variables. As a result, it will be challenging to observe the influence of individual independent variables on the dependent variable (Madalla, 1999). The detection of multicollinearity in this study was carried out using the VIF method.

Test criteria:

If VIF > 10, H0 is rejected

If VIF < 10, H0 is accepted

The multicollinearity test results using the VIF method are presented in the following table.

Table 3. The multicollinearity test results using the VIF method

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
X1	.989	1.011
X2	.697	1.435
X3	.691	1.448

Source: the authors own data, 2020

Based on the results of the multicollinearity test using the VIF method, as shown in Table 3, the VIF value < 10 indicates no multicollinearity in all independent variables. We can conclude that the data do not exhibit multicollinearity problems nor bias the interpretation of the regression analysis results.

c) Heteroscedasticity test

Heteroscedasticity is a situation where the variance ($\sigma 2$) of the disturbance factor is equal for all observations X. The deviation from this assumption is called heteroscedasticity; that is, the value of variance ($\sigma 2$) of the dependent variable (Yi) S increases as a result of the increasing variance of the independent variable (Xi). Thus, the variance of Yi is not equal (Insukindro, 2001). Heteroscedasticity detection in this study was carried out using the Glejser method by observing the probability value (sig.). If the probability value (sig.) > 0.05, it is not affected by heteroscedasticity (Ghozali, 2015). The results of the heteroscedasticity test with the Glejser method are presented as follows:

Table 4. The heteroscedasticity test results

Model		Sig.
1	(Constant)	.000
	X1	.765
	X2	.557
X3		.458

Source: the authors own data, 2020

Based on the results of the heteroscedasticity test using the Glejser method as shown in Table 4, we can observe that the probability value is > 0.05. It means that the estimated model is free from heteroscedasticity.

d) Autocorrelation test

Autocorrelation is a condition in which a confounding factor (error term) in a certain period is correlated with other confounding factors in another period. Confounding factors are not random. Autocorrelation is caused by inertial factors, data manipulation, errors in determining the model (specification bias), the presence of cobwebs, and the use of lag in the model. The detection of autocorrelation assumptions in this study was carried out using the Durbin-Watson test.

- Testing criteria:

If d-count < dL or d-count > (4-dL), H0 is rejected, it indicates there is autocorrelation;

If dU< d-count < (4–dU), H0 is accepted, it indicates there is no autocorrelation;

If dL < d-count <dU or (4-dU) < d-count < (4-dL), it cannot be concluded whether there is autocoelation.

The results of the autocorrelation test with the Durbin-Watson test are presented in the table as follows:

Table 5. Autocorrelation test results with the Durbin-Watson

Root MSE	189803.2	R-squared	0.621891
Mean dependent var	273931.3	Adjusted R-squared	0.525353
S.D. dependent var	311275.5	S.E. of regression	214452.1
Akaike info criterion	27.57870	Sum squared resid	2.16E+12
Schwarz criterion	28.03247	Log likelihood	-814.3609
Hannan-Quinn criter.	27.75619	F-statistic	6.441907
Durbin-Watson stat	1.602317	Prob(F-statistic)	0.000001

Source: the authors own data, 2020

According to the autocorrelation test results with Durbin-Watson as found in Table 5; it shows that the D-W statistic is 1.6023, with n = 60, k = 3, and the significance level (α) 5%. Thus,the dL value = 1.4797, dU = 1.6889, (4-dU) = 4-1.6889 = 2.3111 and (4–dL) = 4–1.4797 = 2.5203. Therefore, the D-W statistic of 1.6023 is in the area of acceptance of H0 (1.4797 < 1.6023 < (2.3111). It indicates that there is no autocorrelation in the estimated model.

D. Multiple linear regression analysis

Having selected the common effects model as the best model and ensured that the development of a regression model to test the research hypothesis does not exhibit classical assumption problems, we further perform regression analysis on each regression model. Multiple linear regression is used to model the relationship between a dependent variable and an independent variable, with more than one independent variable (Yamin, 2011:29). Regression analysis in this study was conducted to determine whether there is a relationship between a dependent variable and an independent variable in the regression model. In this study, there is a dependent variable, i.e., profit growth. In contrast, the independent variables consist of debt to equity ratio (DER), net profit margin (NPM), and return on investment (ROI). The regression results of the common effect model are shown in Table 6 as follows:

Table. 6 The regression results of the common effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	178720.3	36286.15	4.925303	0.0000
X1	16416.99	6333.725	2.591996	0.0127
X2	1516001.	294874.7	5.141171	0.0000
X3	-391127.5	455445.4	-0.858780	0.3948

Source: the authors own data, processed using Eview 11, 2020

Based on the test results as shown in Table 6, the multiple linear regression equation used in this study is as follows:

$$Y = 178720.3 + 16416.99X1 + 1516001X2 - 391127X3 + \varepsilon$$

where:

Y = profit growth

X1 = debt to equity ratio

X2 = net profit margin

X3 = return on investment

ε = standard error

E. Hypothesis testing

Hypothesis testing in this study was carried out using two tools, namely the t-test and the coefficient of determination (R^2) test.

a) Statistical t-test

The t-test aims to determine whether independent variables partially or individually have a significant effect on a dependent variable. The t-test is performed using criteria by comparing the t-statistical value (t count) of each independent variable coefficient to the t table value and based on probability (ρ). In this study, the resulting df (n-k) is 56 (60-4), where n of 60 is the number of observations and k = 4 is the number of dependent and independent variables. With a df value of 56 and a level of significance of 0.05, the

t-table value is 2.00324. To find out whether the independent variables have a significant effect on the dependent variable, we used the test criteria as follows: if (t count > t table) or (p-value < 0.05), the independent variable has an effect on the dependent variable. The t-test results are shown in Table 7 as follows:

Table 7. T-test results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	178720.3	36286.15	4.925303	0.0000
X1	16416.99	6333.725	2.591996	0.0127
X2	1516001.	294874.7	5.141171	0.0000
X3	-391127.5	455445.4	-0.858780	0.3948

Source: the authors own data, processed using Eview 11, 2020

Based on the test results as displayed in Table 7, we can observe the effect of each independent variable on the dependent variable. In the following paragraphs, we elaborate on the hypothesis testing results.

1) Testing Hypothesis 1
The first hypothesis proposed in this study states that H1: debt to equity ratio (DER) positively affects profit growth. Based on the results of the t-test presented in Table 7 above, the size of the company has a t-count of 2.591996 with a significance level of 0.0127. It shows that t-count has a greater value than t-table (i.e., 2.591996 > 2.00324) at a significance level (0.01 < 0.05). Thus, we can conclude that debt to equity ratio (DER) has a positive and significant effect on profit growth. Therefore, Hypothesis 1 is accepted.

2) Testing Hypothesis 2
In this study, the second hypothesis is proposed, stating that H2: net profit margin (DER) positively affects profit growth. Based on the results of the t-test presented in Table 7 above, we observe that the net profit margin (NPM) has a t-count value of 5.141171 with a significance level of 0.0000. It indicates that the t-count value is greater than that of the t-table (5.141171> 2.00324) at a significance level of (0.00 < 0.05). Hence, it could be concluded that net profit margin (NPM) positively and significantly affects profit growth. Thus, Hypothesis 2 is accepted.

3) Testing Hypothesis 3
Previously, it was stated, the third hypothesis (H3) proposed that return-on-investment (ROI) has a positive effect on profit growth. Based on the analysis results, the value of the t-test presented in Table 4.8 above, return on investment (ROI), has a t-count value of -0.858780 with a significance level of 0.3948. It shows that t-count value is less than that of t-table (-0.858780 < 2.00324) with a significance value (0.39 > 0.05). Thus, we can conclude that return-on-investment (ROI) insignificantly has a negative effect on profit growth. Therefore, Hypothesis 3 is rejected.

4) The F-test results
The F-test is a simultaneous test used to determine the simultaneous effect of debt-to-equity ratio (DER), net profit margin (NPM), and return-on-investment (ROI) variables on profit growth. The results of the F-test are shown in Table 8 as follows:

Table 8. The F-test results

F – Statistics	6.441907
Prob (F-statistic)	0.000001

Source: The authors own data, 2020

Simultaneously, debt to equity ratio (DER), net profit margin (NPM), and return-on-investment (ROI) have a positive effect on profit growth. Based on the results of the F-test as shown in Table 8 above, the Sig. Value of 0.000001 < significance level of 0.05, which means that there is a simultaneous effect of the said variables on profit growth.

5) The coefficient of determination test
The coefficient of determination (R^2) test aims to determine the extent to which an independent variable is able to explain a dependent variable. The coefficient of determination (R2) test is performed using adjusted R-squared as a regression equation. Meanwhile, adjusted R-squared reflects how much the change in a dependent variable can be determined by the changes in independent variables. The higher value of the coefficient of determination (R^2) (closer to unity) indicates a stronger relationship between the dependent variable and the independent variable. The results of testing the coefficient of determination (R^2) are shown in the following table.

Table 9. The results of the coefficient of determination (R^2) test

R-squared	0.621891
Adjusted R-squared	0.525353

Source: Eviews 11, data processed by the authors, 2020

Based on the test results as shown in Table 9, it could be observed that the adjusted R^2 of the independent variables in this study is 0.525353 or 52.53%. It means that 52.53% of profit growth is influenced and can be explained by the four independent variables of this study, which are a debt to equity ratio (DER), net profit margin (NPM), and return on investment (ROI). Meanwhile, the remaining 47.47% is still unaccounted for and influenced by other variables outside the regression model, such as the variable of business group affiliation, an audit committee, and others.

VI. DISCUSSION

A. The effect of debt to equity ratio (DER) on profit growth
The regression results show that the debt to equity ratio (DER) positively and significantly affects profit growth, which means that if the debt to equity ratio (DER) increases, and so does the company's profit growth.

The debt to equity ratio (DER) is employed to determine the number of funds provided by the borrower with the company's owner. A company with a high debt to equity ratio does not indicate it is in financial distress if it can utilize the debit as effectively as possible. It can provide benefits to the owner and make the best use, and the profit earned is sufficient to pay interest expenses on a regular basis. A high debt to equity ratio will impact the company to bear a high risk of loss, but it can earn increased profits. It is because the higher debt to equity ratio (DER) indicates that the total debt sourced from creditor funds is high. Therefore, it can be used to generate or earn profits. These funds can be used to expand the production process, which can increase the company's sales or revenues. A high debt to equity ratio affects the increased profit growth because if the debt is used as effectively as possible, sales will increase the company's profits.

The study results are in line with those conducted by Titto (2016), which stated that the debt to equity ratio (DER) has a positive and significant effect on profit growth. It is because the debt to equity ratio (DER) uses the ratio of total debt and total equity in its calculation. However, these results are not in line with those conducted by Rouli (2015), which stated that the debt to equity ratio (DER) does not affect profit growth.

B. The effect of net profit margin (NPM) on profit growth
The regression results show that net profit margin (NPM) positively and significantly affects profit growth. It means that the company's profit growth will increase given the increase in net profit margin (NPM).

Based on the study results, a significantly positive effect of testing the net profit margin (NPM) variable on profit growth indicates that the company can generate a higher net profit than its sales activity. Observing the net profit margin ratio (NPM) can encourage investors to invest in the company to expect a high return. Therefore, the company can sustain to increase profit. With the achievement of high profits, investors will earn a positive picture of the company's performance to expect a high return from their capital.

C. The effect of return-on-investment (ROI) on profit growth
The regression results prove that return on investment (ROI) does not affect profit growth. In other words, changes in return on investment (ROI) value are not followed by an increase or decrease in profit growth. This study does not prove the theory stating that return on investment (ROI) is a ratio that shows a company's ability to generate profits that will be used to cover investments and a measure of its efficiency of capital use.

Based on the study results, it can be seen that this finding is not in line with the theory stating that return-on-investment (ROI) is a form of profitability ratio intended to measure a company's ability with the investment of overall funds in assets used for its operations of profits generations. Investors in the capital market are even very concerned about a company's ability to generate, maintain, and increase profits by measuring profitability indicators using return on investment (ROI). Based on this study, it can be concluded that return on investment (ROI) cannot sufficiently be used as a reference in measuring a company's profitability; rather, the authors recommend return-on-assets (ROA) and return-on-equity (ROE) as indicators of a company's profitability for further research.

This study cannot either prove the relationship between the use of Signaling theory stating that information, such as return on investment (ROI) or the rate of return on assets, or also how much profit is obtained from the assets utilization. Thus, a high return on investment (ROI) sends a good signal for investors. It is because a high return on investment (ROI) indicates a sound company's performance. Therefore, investors are encouraged to invest their funds in stocks. As a result, the demand for shares will increase the stock price (Feri, 2013).

Furthermore, the results of this study are in line with those conducted by Mardi Irawan, Azwir Nasir, and Yesi Mutia Basri (2012), in which they revealed that return on investment (ROI) did not affect profit growth. On the other hand, these present research results are not in line with those of MartalenaSilalahi, Bati & Dian Wahyuni (2019), which found that return on investment (ROI) affected profit growth.

D. The effect of debt-to-equity ratio (DER), net profit margin (NPM), and return-on-investment (ROI) on profit growth
The regression results reveal that deb- to-equity ratio (DER), net profit margin (NPM), and return-on-investment (ROI) simultaneously have a positive and significant effect on profit growth, given an adjusted R-square value of 0.525353. This result means that 52.53% of the independent variables consisting of debt to equity ratio (DER), net profit margin (NPM), and return on investment (ROI) can explain/account for the dependent variable, i.e., profit growth. Meanwhile, the remaining 47.47% is still unaccounted for and explained by other variables which are not examined in the study. In other words, changes in the value of debt to equity ratio (DER), net profit margin (NPM), and return on investment (ROI) will simultaneously be followed by an increase in profit growth.

These study results support the Signaling theory, which explains that companies provide information on their increased profit growth to external parties. The companies will urge to provide information to anticipate information asymmetry between their party and the outsiders. The internal party knows more about their internal state and future prospects than outside parties (investors and creditors). On the other hand, a lack of information to outsiders about the company will cause them to protect themselves by

charging the company at low prices. Therefore, firms can improve their value by providing more information regarding their internal states to outside parties. One way to reduce information asymmetry is to provide signals to outside parties (Arifin, 2005).

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