



Jurnal Ilmiah Teunuleh

The International Journal of Social Sciences

Vol. 3, Issues. 3, Sept 2022

P-ISSN: 2807-193X | E-ISSN: 2746-4393

THE EFFECT OF PROFIT AND LEVERAGE MANAGEMENT ON STOCK RETURN

(Study on Manufacturing Companies Listed on the Indonesia Stock Exchange in
2018-2020)

Vaskha Yermiana¹

Postgraduate Students of University Negeri Medan

e-mail: vaskha_yermiana@yahoo.com

Nasirwan²

Universitas Negeri Medan

Chandra Situmeang³

Universitas Negeri Medan

Abstract

This study aims to examine and analyze the effect of Profit Management and Leverage on Stock Returns. The research was conducted on manufacturing sector companies listed on the Indonesia Stock Exchange (IDX) with an observation period from 2018-2020. The testing of this research model is based on agency theory and signaling theory. The research population consisted of 194 companies using purposive sampling and obtained 67 companies with 201 observations. Data analysis technique using Multiple Linear Regression Analysis. This study obtains empirical evidence, namely: First, Earnings Management has a significant negative effect on stock returns. Second, Leverage has a significant negative effect on stock returns. These results indicate that agency theory and signal theory are supported in this research model.

Keywords: *Profit management; leverage; Stock returns*

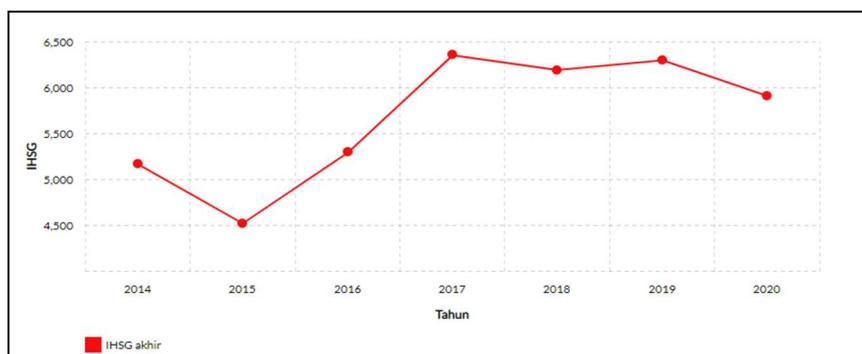
A. Introduction

Stock return is the level of income obtained from the difference between the current closing price and the previous closing price divided by the closing price of the previous year's shares. Stock returns can be divided into two types, namely consisting of actual stock returns (realized returns) and expected returns (expected returns) (Jogiyanto, 2014).

Stock returns can be influenced by macroeconomic factors as well as non-economic macro factors. The macroeconomic factors that affect stock returns are inflation, foreign exchange rates, interest rates, and economic growth rates, not to mention fuel oil on the international market and regional stock price indices. Furthermore, non-economic macro factors include domestic political events and international political events. In addition to macro factors, there are also micro factors that affect stock returns, in which this condition occurs from within the company, namely financial and non-financial information or data.

The performance of the Composite Stock Price Index (IHSG) at the end of 2018 was the worst in the last 3 years after minus 2.54% in a year, even though in 2017 and 2016 the JCI still provided returns of 19.99% and 15.32%. Based on data from the Indonesia Stock Exchange, the JCI closed up 0.06% at the level of 6,194.50 on Friday December 28 2018. Over the course of a year, the Index has minus 2.54% from early January to December 2018. When compared to the end of 2019 at 6,299.54, the JCI at the end of 2020 was in the position of 5,979.07, corrected by 5.09 percent.

Composite Stock Price index levels, 2014-2020



Source: www.idx.co.id (12 Feb 2020)

Figure 1 Indonesian Stock Exchange Sector Composite Stock Price Index

Earnings management is a condition in which management intervenes in the process of preparing financial reports for external parties so that they can even out, increase and decrease profits (Schipper, 1989). Healy & Wahlen (1999) states that earnings management occurs when management uses certain decisions in financial reporting and preparing transactions that change financial statements.

Earnings management in a company arises because of a conflict between shareholders (principal) and managers (agents). This conflict between shareholders and managers is explained in agency theory. Agency theory is a theory that explains that

agency relationships arise when one or more people (principal) hire another person (agent) to provide a service and then delegate decision-making authority to the agent (Jensen & Meckling, 1976).

Several large world companies such as Enron, World Com and Xerox in the United States, Parmalat and HIH in Italy, One Tell and Harris Scarfe in Australia and many other large companies have taken earnings management actions, causing confidence in the published financial reports to decline. In addition to the financial report scandal above, there are several other cases related to earnings management that occurred in Indonesia, such as the case of PT. Kimia Farma, PT. Indofarma, and PT. Ades Alfindo (Sulistiawan et al., 2011).

Another study regarding earnings management was also carried out by Ahmed M. Al Omush Jordan (2019) in this study the results found that there was a non-significant relationship between earnings management practices and stock returns for industrial companies listed on the Amman Stock Exchange during the study period at a significance level of 5 %, which reflects the poor efficiency of the Amman Stock Exchange and is not information contained in published financial reports and therefore has no impact on the share price.

Teoh et al (1998), Rangan (1998) used the Modified Jones Model (1991) to detect earnings management in the companies studied, according to Stubben this model still has deficiencies, so Stubben tried to make a better model compared to the Modified Jones Model. In 2010 Stubben invented a new model called the Revenue Discretionary Model. According to Stubben (2010), income is an ideal component for testing earnings management because revenue is the largest profit component for most companies and depends on policy. In 2010 Stubben obtained evidence that the Revenue Discretionary Model was more effective in detecting earnings management by companies. Research that supports Stubben's research has been carried out by Nur'aini (2012).

Hasil penelitian dari Nur'aini menyatakan bahwa model Stubben dapat digunakan untuk mendeteksi adanya indikasi manajemen laba lebih baik dibandingkan dengan Modified Jones Model. Penelitian dengan menggunakan model Stubben masih jarang dilakukan oleh akademisi sehingga dalam penelitian ini akan digunakan Revenue Discretionary Model untuk mendeteksi adanya indikasi manajemen laba.

Leverage is the use of assets and sources of funds by companies that have fixed costs originating from loans because they have interest as a fixed burden with the intention of increasing the potential profits of shareholders (Sjahrial, 2007). Leverage is

a company's ability to fulfill its financial obligations either in the short or long term, or measures the extent to which a company's assets are financed by debt (Wiagustini, 2010). Leverage in this study can be proxied by the debt-to-equity ratio (DER). DER is the ratio used to assess debt to all equity and is able to provide general guidance on the feasibility and financial risks of a company.

1. Agency Theory

Agency theory was developed in the 1970s (Jensen & Meckling, 1976) in an article entitled "Theory of the firm: managerial behavior, agency cost and ownership structure". Agency theory was developed as an effort to understand and solve problems that arise when there is an information asymmetry when entering into a contract (engagement) between the owner and the agent.

2. Signalling Theory

Signal Theory According to Morris (1987), signal theory shows how asymmetric information problems in the market can be reduced by providing more information signals to other parties. Information asymmetry in the capital market occurs because the company (management) has more information than outsiders (investors). Godfrey et al. (2006) also argues that signal theory talks about managers using accounts in financial statements to signal the company's future expectations and goals.

3. Return Saham

According to Brigham and Houston (2006: 215), return or rate of return is the difference between the amount received and the amount invested, divided by the amount invested. From the several definitions above, it can be concluded that stock return is the rate of return in the form of rewards obtained from the sale and purchase of shares.

4. Profit management

Scott (2015) states that earnings management is a choice made by managers in determining accounting policies, or concrete actions that affect earnings so as to achieve targets by reporting certain data. Earnings management as a process of taking deliberate steps within the limits of generally accepted accounting principles both within and outside the boundaries of General Accepted Accounting Principles (GAAP).

5. Leverage

Menurut Kasmir (2009: 158) Leverage is a ratio used to determine how much a company is able to pay all of its obligations (both short term and long-term liabilities). According to Atmaja (2008: 271) leverage (debt ratio) shows the company's ability to

meet long-term obligations. From the description above, it can be concluded that the leverage ratio describes the relationship between the company's debt to its own capital and assets.

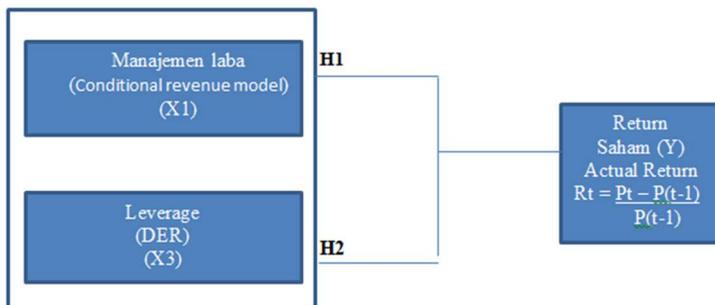


Figure 2 Conceptual Framework

B. Method

The data used in this study is secondary data taken from the Indonesian Stock Exchange. The population of this study is all companies engaged in manufacturing companies listed on the Indonesia Stock Exchange in 2018 – 2020. Sampling was carried out using a purposive sampling method, namely sampling based on criteria. Withdrawal of the number of samples in this study was conducted on 67 manufacturing companies in 2018 – 2020 so that the total sample is 201 research samples.

The data analysis technique used in this study is to use regression analysis. This analysis is used to identify and obtain an overview of the effect of earnings management and leverage on stock returns. In this study, the dependent variable, namely stock returns, is measured using actual returns. The independent variable Earnings management (X1) is measured using the Conditional Revenue Model, while Leverage (X2) is measured using the Debt-to-Equity Ratio.

C. Finding and Discussion

Descriptive statistics provide an overview or description of a data seen from the minimum, maximum, mean, and standard deviation values. Descriptive statistics are intended to provide an overview of the sample data. The results of the descriptive analysis are as follows:

Table 1 Descriptive Statistics of Research Variables

Variabel	N	Minimum	Maximum	Mean	SD
X1 (Profit management)	201	-0.14	0.31	0.0103	0.02889
X2 (Leverage)	201	0.01	51.39	1.3390	4.21312
Y (Return Saham)	201	-0.15	72.13	0.3905	5.08655

Source: Secondary data processed with SPSS 25

Based on the table above, that variable X1 (Earnings Management) has an average value of 0.0103 with a standard deviation of 0.02889, the lowest value is -0.14 and the highest value is 0.13. Variable X2 (Leverage) has an average value of 1.3390 with a standard deviation of 4.21312, the lowest value is 0.01 and the highest value is 51.39. Variable Y (Stock Return) has an average value of 0.3905 with a standard deviation of 5.08655, the lowest value is -0.15 and the highest value is 72.13.

Normality test

The normality test was carried out with the aim of testing whether in the regression model, the confounding or residual variables have a normal distribution. In this study the normality test was carried out by the Kolmogorov-Smirnov statistical test. The normality test results can be seen in the table below.

Table 2 Normality Test One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual	
N		201	
Normal Parameters ^{a,b}	Mean	.0000000	
	Std. Deviation	5.04582926	
Most Extreme Differences	Absolute	.423	
	Positive	.423	
	Negative	-.391	
Test Statistic		.423	
Asymp. Sig. (2-tailed)		.000 ^c	
Monte Carlo Sig. (2-tailed)	Sig.	.000 ^d	
	99% Confidence Interval	Lower Bound	.000
		Upper Bound	.000

From the Kolmogorov-Smirnov test results above, the Sig. (2-tailed) of 0.000. From these results it can be concluded that the residual data in this regression model are not normally distributed because the Sig. (2-tailed) below 0.05. The regression model is not

feasible for further analysis. To normalize the data, it is necessary to do treatment, namely removing outlier data. Outlier data is data that has unique characteristics that look very different from other observations and appear in the form of extreme values (Ghozali, 2005:41). This outlier data must be removed from observation. Outlier detection can be done with a boxplot that displays extreme observation values.

Outlier data will be removed from the research sample in order to produce better normality so that it is suitable for further analysis. By using outlier data, the number of samples will be reduced. Therefore, it will re-examine the descriptive statistical analysis and normality test. There are 141 research samples that are free from outliers.

Descriptive Statistics After Outlier Elimination

Based on the sampling after eliminating the outliers, it will retest the descriptive statistics. Descriptive statistics will provide a description of a data seen from the minimum, maximum, mean, and standard deviation values. The following is a descriptive statistical table for research variable data that is free from outliers.

Table 3 Descriptive Statistical Test After Outlier Elimination

	N	Minimum	Maximum	Mean	SD
X1 (Profit management)	141	-0.04	0.05	0.0089	0.01138
X2 (Leverage)	141	0.03	22.00	1.1477	2.64054
Y (Return Saham)	141	-0.02	0.07	0.0093	0.01694

Source: Secondary data processed with SPSS 25

Based on the table above, that variable X1 (Earnings Management) has an average value of 0.0089 with a standard deviation of 0.01138, the lowest value is -0.04 and the highest value is 0.05. Variable X2 (Leverage) has an average value of 1.1477 with a standard deviation of 2.64054, the lowest value is 0.03 and the highest is 22. Variable Y (Stock Return) has an average value of 0.0093 with a standard deviation of 0.01694, the lowest value is -0.02 and the highest value is 0.07.

Classic assumption test

The regression model in this study will be used for forecasting, a good model is with minimal forecasting errors. In addition to finding the most appropriate model, before the model in this study is used, it should meet several classical assumptions, including normality, autocorrelation, multicollinearity and heteroscedasticity.

a. Normality test

In this study, to detect whether the data used was normally distributed or not, it was carried out using the Kolmogorov-Smirnov test from the residual data with the following results.

Table 4 Data Normality Test Results After Eliminating Outlier One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual	
N		141	
Normal Parameters ^{a,b}	Mean	.0000000	
	Std. Deviation	.01598027	
Most Extreme Differences	Absolute	.099	
	Positive	.099	
	Negative	-.048	
Test Statistic		.099	
Asymp. Sig. (2-tailed)		.002 ^c	
Monte Carlo Sig. (2-tailed)	Sig.	.121 ^d	
	99% Confidence Interval	Lower Bound	.113
		Upper Bound	.129

Based on the table above, it appears that the residual data significance value is $0.121 > 0.05$, meaning that the data is normally distributed. Thus, the assumption of normality has been fulfilled after eliminating the outlier data.

b. Autocorrelation Assumption Test

The results of the autocorrelation test were obtained using the statistical value of Durbin Watson (D-W).

Table 5 Autocorrelation Test Results

Model	Durbin-Watson
1	1.813

Based on the results of calculations with the SPSS 25.0 program, the statistical value of Durbin Watson (D-W) is 1.813. The D-W figure, which is 1.813, is between -2 to +2, meaning there is no autocorrelation. Thus the autocorrelation test has been fulfilled.

c. Multicollinearity Assumption Test

The multicollinearity test in this study aims to test whether the regression model found a correlation between the independent variables in the model. A good regression model should not have a correlation between the independent variables. From the results of calculations using the SPSS 25.0 program, the Tolerance values are obtained (attached) for each stage of the research, the researchers put forward as follows:

Table 6 Recapitulation of Tolerance Values and VIF Values for Collinearity Tests

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	X1	0.995	1.005
	X2	0.995	1.005
a. Dependent Variable: Y			

Based on the table above it is known that the VIF and tolerance values indicate no multicollinearity, because according to the criteria that multicollinearity does not occur if the VIF value is below 10 or the tolerance is above 0.10. Thus the multiple regression line model used is appropriate.

d. Heteroscedasticity assumption test

The heteroscedasticity test aims to determine whether there are variance differences from one residual observation to another. If the variance contained in the residuals from one observation to another observation remains, it is called homoscedasticity and if it is different, it is called heteroscedasticity. A good regression model is the absence of heteroscedasticity. Heteroscedasticity test can use scatterplot graphics. If there is no certain pattern, such as dots that form a certain pattern regularly, then it can be said that heteroscedasticity occurs.

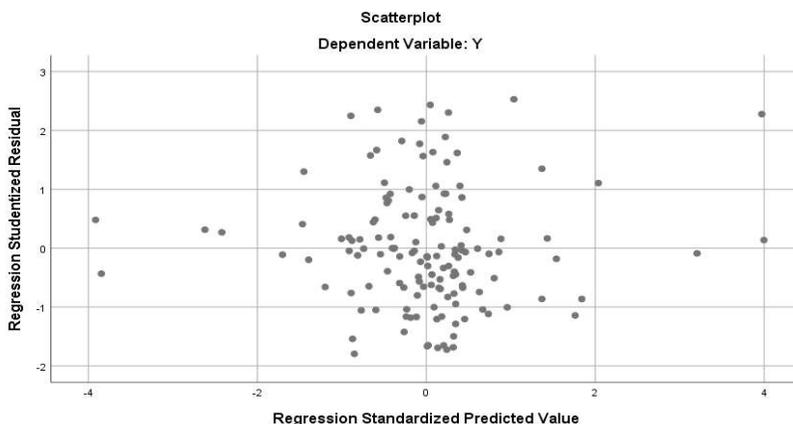


Figure 3 Heteroscedasticity Test Source: Output SPSS 25.0 (2022)

Based on the scatterplot image, the heteroscedasticity test shows that the data is scattered around the number 0 (0 on the Y axis), and does not form a particular pattern or trend line. Thus, the data can be said to be homoscedasticity or there is no heteroscedasticity and the heteroscedasticity test has been fulfilled.

e. Multiple Regression Analysis Hypothesis Testing (H1 and H2)

Results of data analysis with the help of computer processing based on SPSS Version 25.0 calculations obtained multiple regression equations based on the following output.

Table 7 Multiple Linear Regression Equations

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.015	.002		7.851	.000
	X1	-.442	.120	-.297	-3.687	.000
	X2	-.001	.001	-.172	-2.133	.035

a. Dependent Variable: Y

Source: Secondary data processed with SPSS 25

Based on the regression coefficient test, the regression equation is produced as follows:

$$Y = 0,015 - 0,442X_1 - 0,001X_2 + e$$

Tabel 8 Koefisien Determinasi

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.332 ^a	.110	.097	.01610

a. Predictors: (Constant), X2, X1

Source: Secondary data processed with SPSS 25

Based on the results of multiple linear regression, because there are 2 independent variables, the coefficient of determination uses R Square. The results of the analysis show that X₁ (Earnings Management) and X₂ (Leverage) are able to explain their influence on Y (Share Return) by 11% (R² = 0.110) and the rest (89%) is explained by other factors.

Furthermore, a simultaneous effect test is used to determine whether the independent variables namely X₁ (Earnings Management) and X₂ (Leverage) simultaneously or simultaneously affect Y (Stock Return) or the dependent variable.

Table 9 Statistical Test F Effect Simultaneously

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.004	2	.002	8.543	.000 ^b
	Residual	.036	138	.000		
	Total	.040	140			

Source: Secondary data processed with SPSS 25

Based on the SPSS output, the results of the Anova test obtained Fcount of 8.543 while the value of F_{table} with df₁ = 2, df₂ = 138 and α = 0.05 which is equal to 3.062. Then the value of F_{count} (8.543) > F₀ (3.062) or Sig. (0.000) < α (0.05) so that the decision H₀ is rejected or H₁ is accepted, meaning that X₁ (Earnings Management) and X₂ (Leverage) simultaneously affect Y (Stock Return).

Furthermore, a t statistical test was performed to determine the effect of each independent variable X₁ (Earnings Management) and X₂ (Leverage) on the dependent variable Y (Stock Return).

Tabel 9 Uji Statistik t

Coefficients^a

Model		T	Sig.
1	(Constant)	7.851	.000

	X1	-3.687	.000
	X2	-2.133	.035

a. Dependent Variable: Y

The Effect of Earnings Management on Stock Returns

The results of the coefficients show that earnings management has an effect on stock returns. Based on the SPSS output results, the results of the t statistical test obtained a significant level of the independent variable X_1 (Earnings Management) of $0.000 < \alpha = 0.05$ and $-t_{count} = -3.687 < -t_{table} = -1.977$ so the decision H_0 is rejected H_1 is accepted, meaning that earnings management has an effect significant negative effect on stock returns. So it can be concluded that the higher the earnings management, the lower the stock returns and vice versa.

Effect of Leverage on Stock Returns

The coefficient results show that leverage affects stock returns. Based on the SPSS output results, the results of the t statistical test obtained a significant level of independent variable X_2 (Leverage) of $0.035 < \alpha = 0.05$ and $-t_{count} = -2.133 < -t_{table} = -1.977$ so the decision H_0 is rejected H_1 is accepted, meaning that leverage has a significant negative effect on stock returns. So it can be concluded that the higher the leverage, the lower the rate of return on shares and vice versa.

D. Conclusion

Based on the results of descriptive analysis, regression analysis testing, and the relationship of each variable, as well as the discussion that has been carried out in the previous section, conclusions are drawn based on the results of empirical evidence obtained in this study. so that the following conclusions can be drawn: 1) Based on the first hypothesis (H_1) which has been formulated in this study that earnings management has a significant negative effect on stock returns. This finding indicates that stock returns will decrease if companies take earnings management measures. These results can be interpreted based on agency theory that earnings management in a company arises because of conflicts between shareholders (principal) and managers (agents); and 2) Based on the second hypothesis (H_2) which has been formulated in this study that leverage has a significant negative effect on stock returns. This finding indicates that stock returns will decrease if leverage increases. The higher the Debt-to-Equity Ratio in a company, the greater the debt used to finance the company.

Bibliography

- Acheampong, P., Agalega, E., & Shibu, A. K. (2014). The Effect of Financial Leverage and Market Size on Stock Returns on the Ghana Stock Exchange: Evidence from Selected Stocks in the Manufacturing Sector. *International Journal of Financial Research*, 5(1), 125–134.
- Al Saedi, A. A. (2018). Earnings management and its relationship with stock returns: An empirical study on a sample of qatari listed industrial companies. *Academy of Accounting and Financial Studies Journal*, 22(5), 1–12.
- Brigham, E. F., & Houston, J. F. (2004). *Dasar-Dasar Manajemen Keuangan* (10th ed.).
- Brigham, E. F., & Houston, J. F. (2011). *Fundamental Of Financial Management 10th Edition*.
- Healy, P. M., & Wahlen, J. M. (1999). A Review of the Earnings Management Literature and Its. *Accounting Horizons*, 13(4), pp.365-383.
- Jensen, C., & Meckling, H. (1976). *Theory of The Firm : Managerial Behavior , Agency Costs And Ownership Structure I . 3*, 305–360.
- Jogiyanto, H. (2014). *Jogiyanto 2014 Teori Portofolio dan Analisis Investasi Edisi Kesembilan*.
- Nuryaman. (2013). The Influence of Earnings Management on Stock Return and the Role of Audit Quality as a Moderating Variable. *International Journal of Trade, Economics and Finance*, 4(2), 73–78.
- Omush, A. M. Al, Masadeh, W. M., & Zahran, R. M. (2019). The Impact of Earnings Management on Stock Returns for Listed Industrial Firms on the Amman Stock Exchange. *Business and Economic Research*, 9(3), 1.
- Schipper, K. (1989). Shipper.Pdf. *Commentary on Earnings Management. Accounting Horizons*, 91–102.
- Scott, W. R. (2015). *Financial Accounting Theory. Seventh Edition. Pearson Prentice Hall: Toronto*.
- Sjahrial, D. (2007). *Pengantar manajemen keuangan* (Edisi 2). Jakarta : Mitra Wacana Media, 2007.
- Sulistiawan, D., Januarsi, Y., & Alvia, L. (2011). *Creative Accounting Mengungkap Manajemen Laba dan Skandal Akuntansi*. 120.
- Sulistiyanto, S. (2008). *Manajemen Laba :Teori dan Model Empiris*. PT Grasindo.
- Syaifuddin. (2008). Manajemen Keuangan (Teori dan aplikasi). 2008, 53(9), 1689–1699.
- Wiagustini, N. L. P. (2010). Dasar-dasar Manajemen Keuangan. In *Udayana University Press*.