The Influence of Profitability, Leverage, and Market Value on Income Smoothing in Coal Mining Industries Listed on the Indonesia Stock Exchange

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Abstract. This study aims to analyze the effect of profitability, leverage, and market value on income smoothing in Coal Mining industries listed on IDX. An important information for investors is profit and loss performance. Profit gives a signal that the company's performance is in a positive trend so that it can provide attractive dividends to investors. Income smoothing is a management effort to reduce the number of reported earnings variations. It is held with the motivation to show the company's good performance to attract investors. This research method used a quantitative description with multiple regression analysis to answer the research hypothesis. The population in this study was all mining industries listed on the IDX from 2019 to 2021. Of the total 26 industries listed, only 22 industries met the criteria. The results show that simultaneously, all variables significantly influence income smoothing, while partially, only the market value variable influences income smoothing.

Keywords: income smoothing · investor · profitability · leverage · market value

1 Introduction

Industries with stable profits can attract investors to invest their capital into the company because stable profits provide a sense of security to investors. Managers who are aware that the number of profits generated measures the company's performance will be motivated to improve their performance and achieve profit stability. However, it is undeniable that the existence of this condition also encourages the manager to tend to take inappropriate actions (dysfunctional behavior) by making better reports, namely income smoothing.

Managers take income smoothing to improve the company's image in the eyes of external parties, namely that the company has a low risk. In addition, another reason for the manager to take action on income smoothing is because they want to increase investor confidence in the expected stability of earnings. Based on Agency Theory, income smoothing occurs because the parties involved have their interests, causing conflict between the principal and the agent. Realizing that their performance is measured

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based on profit, the agent will present previously manipulated financial statements, so the earning information disclosed is misleading. This will be detrimental from the principal's side because there will be an error in decision-making.

Income smoothing is a common phenomenon as a management effort to reduce fluctuations in reported earnings [1]. Investor prefers stable profit because easier to predict future earnings and provide a sense of security in investing. However, if done intentionally and artificially, income smoothing may lead to improper earning disclosure. As a result, the investor may not obtain sufficient accurate information about earnings to evaluate the returns and risks of their portfolios. One of the factors that influence income smoothing is profitability. Profitability affects income smoothing because industries with high profits will attract investors to invest in the company.

Income smoothing also has a relationship with Financial Leverage (Leverage) which is one of the financial ratios because Financial Leverage shows how much company debt is used to finance company assets or investments. If the company's leverage ratio is high, the risk faced by investors will be even higher [2]. The profitability ratio is a comparison to assess the company's ability to seek profit and measure the level of management effectiveness of a company [3]. Furthermore, another variable that affects income smoothing is market value. This ratio indicates how much investors appreciate the firm, as seen by their willingness to pay more for corporate shares than the book value.

2 Literature Review

2.1 Agency Theory

The technique utilized in the explanation of Income Smoothing is agency theory. Conflicts of interest between management (agent) and owners (principals) that develop when each party strives to reach or maintain the desired degree of success, according to this idea, impact earnings management techniques. In agency theory, personal interest drive an individual to maximize their interest, often scarifying the principal's interest.

Watts and Zimmerman [4] stated that accounting numbers often determine principal and agent relationships. This spurs agents to think about how these accounting numbers can be used to maximize their interests where one way is to take Income Smoothing actions.

Meanwhile, Hendriksen and Breda [5] explained that the two interests between owners and managers are more directed toward business risks. The owner prefers to avoid risk while the management represented by the manager assumes that there is no difference in risk in the company. Creating the above relationship will encourage agency costs, where these costs decrease the welfare experienced by the principal and the interests of the agent.

2.2 Signaling Theory

Signaling theory provides an overview to company owners and potential investors regarding the circumstances and actions of company managers where the failure or success of the manager or agent will be conveyed to the owner or potential shareholders [6]. According to Brigham and Houston [7], the signal is an action taken by the company's management to provide instructions to investors on how management assesses the company's prospects.

Signal theory reduces asymmetry, in which managers and investors have different knowledge about a business's prospects, to symmetric information, in which investors and company managers have the same information about a company's prospects. The completeness of the financial statements released by the firm would pique investors' and the public's interest in the company's future prospects if accurate and reliable financial information is provided in the form of corporate financial reports. Furthermore, management's choice to properly forecast future earnings and keep investors informed can aid the company's path.

2.3 Income Smoothing

Income smoothing is a company's effort to set up its profits to be relatively the same over several periods. This effort is carried out by adjusting the income and expenses of the current period to be higher or lower than the actual income or costs [8]. Income smoothing is carried out to reduce fluctuations in income to a certain level by using generally accepted accounting principles [9].

Income smoothing, on the other hand, is defined by Maimanah [10] as a purposeful effort to flatten or vary the amount of profit such that it is regarded typical for a corporation. In this situation, income smoothing refers to the company's management's endeavor to eliminate anomalous profits variations within the bounds of acceptable accounting processes and appropriate management principles.

2.4 Profitability

Profitability measures a company's ability to generate profit [3]. Another definition consider profitability as a reflection of the relationship between revenue and costs [11].

The profitability ratio describes the company's ability to increase its profits through all existing capabilities and sources. It is known to measure the company's level of business efficiency and profits. To measure the company's ability to earn profits, it can use the profitability ratios depending on the information taken from the financial statements. Generally, profitability ratios are measured through ROA (Return on Assets).

2.5 Leverage

According to Kasmir [3] leverage is a financial ratio that measures how debt is used to finance a company's assets. Because financial ratios can be used to assess a company's financial health and performance, the results of these ratios will reveal the company's health. Creditors and shareholders are the two sources of funding for the company.

The leverage ratio shows how much the company is financed by creditors and shareholders. The debt ratio, also known as the leverage ratio, describes the relationship between a company's debt and its assets. This ratio compares the company's ability to be financed by debt or external parties to the company's ability to be financed by capital (equity). The leverage ratio is calculated using the Debt to Asset Ratio, according to Harahap [12].

2.6 Market Value

Market value is a ratio that shows how much investors value a company to the point where they want to buy company shares at a higher price than the book value [3]. Earnings per share (EPS) is important to shareholders because it describes the profit earned for each share of common stock. Earnings per share (EPS) is one factor that influences stock prices, and an investor who invests in the company will, of course, receive a return on his shares [7].

The amount of a company's net profit that is ready to be distributed to all shareholders is shown in Earnings Per Share information. The amount of Earnings Per Share of a company can be determined by looking at its financial statements. Although the amount of Earnings Per Share of the company in question is not included in some industries' financial statements, it can be calculated using information from the balance sheet and income statement [13].

2.7 Conceptual Framework

The Conceptual Framework explains the thinking flow in research [14]. The conceptual framework is prepared as a guide in conducting research so that research has a corridor in finding answers according to the formulation of research problems. The conceptual framework in this research shown by Fig. 1.

2.8 Hypothesis

Based on the Conceptual Framework as described in Fig. 1, the hypotheses are:

H1: There is a positive and significant influence between profitability, leverage, and market value on income smoothing simultaneously.
H2: There is a positive and significant influence between profitability on income smoothing partially.

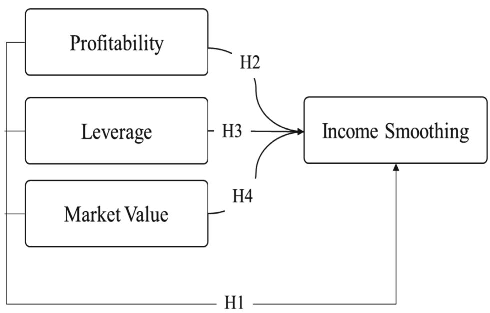

Fig. 1. Conceptual Framework

H3: There is a positive and significant influence between leverage on income smoothing partially.
H4: There is a positive and significant influence between market value on income smoothing partially.

3 Research Method

The design used in this research was correlational analysis, a type of research carried out to detect the extent to which variations in a variable are correlated with one or more other variables based on the correlation coefficient [14]. Hypothesis testing was done using Multiple Regression Analysis. The population in this study was all mining industries listed on the IDX from 2019 to 2021. Of the total 26 industries listed, only 22 industries met the criteria.

4 Results and Discussion

4.1 Descriptive Statistics

Table 1 show descriptive statistics from the study results, which explain the description of data from all variables included in the research model. The variables in this study consisted of the dependent variable of Income Smoothing and the independent variables: Profitability (X1), Leverage (X2), and Market Value (X3). The results of the descriptive statistics can be seen in Table 1.

4.2 Multiple Regression Testing Assumption

4.2.1 Normality Assumption

Normality Assumption testing in this research was carried out by the Histogram, as seen in Fig. 2. Based on Fig. 2, it is obtained that the data is normally distributed by forming an inverted parabolic curve.

4.2.2 Multicollinearity Assumption

Multicollinearity testing in this research was carried out by Variance Inflation Factor (VIF) score, as seen in Table 2. Based on Table 2, it is obtained that all scores of VIF variable < 10, so there is no multicollinearity issue in this research.

Table 1. Descriptive Statistics of the Research Variables

	Min	Max	Mean	St dev.
ROA	(7.74)	12.51	2.83	5.27
DER	(6.24)	8.45	1.23	2.84
EPS	(54.83)	1934.23	280.14	543.22
IS	(231.00)	9740.00	1591.48	2.78

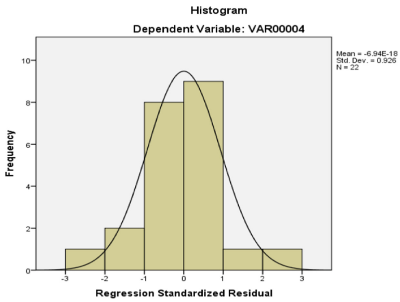

Fig. 2. Histogram

Table 2. Multicollinearity Testing

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	X1 (ROA)	.696	1.437
	X2 (DER)	.982	1.018
	X3 (EPS)	.699	1.431

[a] Dependent Variable: Income Smoothing

Table 3. Durbin Watson Score

Model Summary[b]		
Model	Std. Error of the Estimate	Durbin-Watson
1	2.59804	2.062

[a] Predictors: (Constant), (EPS), (DER), (ROA)
[b] Dependent Variable: Income smoothing

4.2.3 Auto Correlation Assumption

Auto Correlation testing in this research was carried out by Durbin Watson score as seen in Table 3.

4.3 Hypothesis Testing

4.3.1 Simultaneous Test

The results of simultaneous testing can be seen in Table 4. Based on Table 4, it can be seen that profitability, leverage, and market value simultaneously influence income smoothing with a significant score of $0.003 < 0.050$.

Table 4. Simultaneous Testing

Model		Sum of square	df	Mean square	F	Sig.
1	Regression	73228210.12	3	24409403.37	6.667	.003[b]
	Residual	65906320.19	18	3661462.233		
	Total	139134530.3	21			

[a] Dependent variable: VAR00004
[b] Predictors: (Constant), VAR00002, VAR00001

Table 5. Partial Testing Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	458.291	524.830		.925	.367
	VAR00001	106.400	95.029	.218	1.120	.278
	VAR00002	22.498	148.527	.025	.151	.881
	VAR00003	2.776	.920	.586	3.018	.007

[a] Dependent variable: VAR00004

4.3.2 Partial Test

Meanwhile, the results for partial testing can be seen in Table 5.

Based on Table 4, it can be seen that Profitability partially does not influence income smoothing as a significant score of $0.278 > 0.050$. Leverage partially does not influence Income Smoothing as a significant score of $0.881 > 0.050$. Market Value partially influences income smoothing as a significant score of $0.007 < 0.050$.

4.4 Discussion

The main results of the study indicate that simultaneously profitability, leverage, and market value influence income smoothing. This shows that there is a tendency for managers to do Income Smoothing in order to increase the image of profitability because Income Smoothing can indicate the stability of the company's profitability. Another motive is to increase the impression of using debt according to its designation and ability to generate dividends. In the end, income smoothing represents a positive market value in the eyes of investors.

Partially, only market value relates to income smoothing. These results are in line with Peranasari and Dharmadiaksa [15].

5 Conclusion

Based on the research above can be concluded that profitability, leverage, and market value simultaneously influence income smoothing, meanwhile only market value partially influences income smoothing. A manager does income smoothing as signal theory to impress investors by profitability, leverage, and market value.

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