The Effect of Profitability, Bonus Plan, Company Size, and Net Profit Margin on Income Smoothing with Financial Leverage as Variable Moderating (Empirical Study of Real Estate and Property Companies Listed on the IDX in 2019-2021)

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Abstract: This study attempts to examine the impact of profitability, bonus plans, business size, and net profit margins on income smoothing, with financial leverage functioning as a moderating variable. The population of this study consists of real estate and property enterprises that are represented on IDX during the 2019–2021 time frame. Using the technique of purposive sampling, samples are collected. Hence, 60 organizations were sampled across a three-year research period, yielding a total of 180 observational data. In this inquiry, SPSS version 26 was employed to conduct a logistic regression employing the program as a data-analysis tool. According to the results of the logistic regression analysis, profitability has no effect on income smoothing, bonus plans have an effect on income smoothing, company size has an effect on income smoothing, and net profit margin has no effect on income smoothing. Additionally, leverage cannot moderate the relationship between profitability and income smoothing, but it can moderate the relationship between bonus plan and income smoothing. Companies with debt cannot reduce the link between net profit margin and income smoothing.

Keywords: Profitability, Bonus Plan, Company Size, Net Profit Margin, Income Smoothing, Financial Leverage

1. Introduction

Companies and investors come together on the capital market to get the funds they require for things like corporate expansion, additional working capital, and other needs. Since it serves two purposes—first as a company financing facility and second as a channel for corporations to raise money from the general public—the capital market is crucial for a nation's economy (investors). The Indonesia Stock Exchange serves as Indonesia Stock Exchange (IDX). On the Indonesia Stock Exchange, there are 9 industrial sectors, namely the agricultural sector, mining sector, basic industry, and chemical sector, various industrial sectors, consumer goods sector, property and real estate sector, infrastructure and transportation sector, financial sector, and services trade and investment sector. The nine sectors are divided into 3 groups, namely: the industrial sector producing raw materials, the manufacturing industry sector, and the service industry sector.

Financial statements are concise documents that give an overview of the company's finances over a specific period. They are a form of management accountability for the owner-provided resources (Josep et al, 2016). Financial statements are one of the indicators used to evaluate a company's success since they can inform readers about the firm's performance, which is intended to assist the stakeholders in the company in making financial, political, and economic decisions. Statement of Financial Position, Income Statement, Statement of Changes in Equity, Statement of Cash Flows, and Notes to Financial Statements are the five reports that help compensate financial statements. The part produced by the company in the income statement is the area of the financial statements that are most visible to the company's internal parties (management) and external parties (investors, creditors, government, and society). The performance of the business in producing profits can be seen in the income statement. One of the metrics used to assess managerial effectiveness is profit. The bigger the profit a firm makes, the better its performance and the more likely it is to survive over the long term.

Users of financial statements always pay close attention to the profit information seen in the income statement. Information on profit is one of the crucial factors in financial statements that owners use to evaluate management (Murti, Diana, and Junaidi, 2017). One of the compelling reasons for management to engage in dysfunctional conduct (improper behavior), namely through manipulating profits or profit management, is the keen interest of investors in the degree of profit generated by an organization (Khairani, Sasongko, and Bawono, 2022). One of them is income smoothing, which is a strategy used by management to lessen profit swings with the intention of giving investors a sense of confidence owing to minor profit variations and improving their capacity to energize future cash flow (Mirwan et al, 2020). The goal of profit leveling is to enhance the company's reputation among outsiders and demonstrate the company's negligible risk.

Ambarwati et al. (2022) investigated the effect of profitability, bonus plans, and size of the company on profit leveling in food and drinks sub-sector manufacturing companies listed on the Indonesia Stock Exchange between 2017 and 2020. In the current study, independent variables, namely Net Profit Margin and financial leverage, have been added as moderation variables. The prior study looked at manufacturing businesses in the Food and Beverage sub-sector, whereas the present study looks at Real Estate and Property companies listed on the Indonesia Stock Exchange (IDX). The current study spans 2019-2021, whereas the previous study covered 2017-2020.

Based on the background above, the researcher is interested in conducting a study entitled **"THE EFFECT OF PROFITABILITY, BONUS PLAN, COMPANY SIZE, NET PROFIT MARGIN ON INCOME SMOOTHING WITH FINANCIAL LEVERAGE AS A MODERATING VARIABLE (Empirical Study on Real Estate and Property Companies listed on the IDX for the 2019-2021 Period)"**

2. Literature Review

2.1 Agency Theory

The meeting of the contractual connection between management (agent) and company owner (principal) can be viewed as agency theory. According to Jensen and Meckling (1976), agencies can be linked because they exist when one or more individual company owners (principals) hire other persons or managers (agents) to deliver an outcome and then delegate decision-making authority. The essence of authority is distinguishing between the function of the owner (investor) and management's control of the organization. They each have their rights and interests, both as principals and as agents. Principals have access to all internal corporate information as well as the rights and ability to make key choices, whereas agents are only actors in company operations but have access to information about the firm's overall operations and performance but lack decision-making capacity (Rifky et al, 2017). In general, even if it is related to the delegation of duty, each decision made by the organization is a different risk. If investors are unable to sort or select good management, they must accept the risk of losing their invested assets. Simultaneously, management must face the risk of investor demands to generate earnings that continue to expand and be stable. This conflict of interest will only worsen if the principal is unable to conduct frequent supervision, leaving a gap that allows agents to fulfill non-contractual interests with the principal or agents who are unable to meet the principal's performance commitments. As a result, the agent selects the path to undertake income smoothing actions.

2.2 Signal Theory

Signal theory, according to Indrawan and Damayanthi (2020), is a valuable theory for describing behavior between two parties who have differing access to information. Agents have a better understanding of the company than principals, therefore expected information can be used to gauge the company's health. This is also due to the difficulty that investors have in distinguishing between good and bad firm performance. Information can be interpreted as both positive and negative signals. A positive signal is increasing firm earnings, while a negative signal is diminishing company profits (Kusmiayati and Hakim, 2020). Kurniawati (2019) claims that the filing of financial statements might indicate whether or not the agent is functioning in compliance with the contract. According to signal theory, there is an information imbalance between management and information-seeking actors such as creditors and investors. Managers are frequently motivated by, information asymmetry to immediately give excellent information about the company to the public, such as company earnings. In such cases, managers can alter financial figures to maximize their income while avoiding the principal's suspicion that the company's performance is degrading. In such a case, agents with limited profit information are encouraged to create financial statements with income smoothing to maintain the company's credibility in the capital market.

2.3 Income Smoothing

Income smoothing, according to Belkaoui (2006), reduces annual profit volatility by shifting money from high-earning years to less profitable years. Another definition proposed by Beidelman (1973) in Belkaoui (2006) is a purposeful effort to reduce or fluctuate in a company's usual profit level. In this circumstance, leveling is part of the company's management's effort to decrease anomalous variability in results to acceptable levels under good accounting and management principles.

2.4 Profitability

Profitability is a metric that assesses a company's capacity to generate profits. The profitability ratio also assesses an entity's ability to make profits over a specific period and shows its activities and management performance by comparing the profit earned to the entity's sales or investments (Kusumawati et al, 2018).

2.5 Bonus Plan

A bonus plan is a type of corporation reward for manager performance (Amin, Pahyasah, and Murdi, 2021). When management meets the predetermined targets set by the company's owner, the company will award bonuses. Management with a compensation system would adopt accounting techniques that can produce profitable bonuses for them. Managerial capacity is judged by the bonus received, which is determined by the benefits obtained (Dewi and Suryanawa, 2019). Profit-based bonus plans are one of the corporate policy practices. Businesses that implement bonus plans will ask their managers to put in as much as possible to generate profits in accordance with previously established targets for management to obtain bonuses. This is what motivates managers to manage earnings through profit leveling.

2.6 Company Size

The size of a company's assets is one metric that indicates its size. The greater the amount of assets, the better the ability of the company to make profits. The higher the dividend payment, the greater the company's profit (Styaningrum et al, 2018).

2.7 Net Profit Margin

Net Profit Margin (NPM) is a profit on sales margin ratio that reflects a company's net profit based on total sales. This ratio can be calculated by comparing net profit after tax to net sales (Kasmir, 2014). According to Sarra and Mikrad (2021), the net profit margin is the amount of money left over after subtracting all costs, including taxes and interest.

2.8 Leverage

Leverage is defined as the ratio of total liabilities to total equity. The higher the leverage ratio, the higher the company's debt. When the leverage ratio is high, the managers tend to do income smoothing(Khairani et al, 2022). According to Firth and Smith (1992) in Saiful (2002), the high amount of liability makes predicting the company's future trajectory more challenging for management. The bigger the company's debt, the tighter the oversight conducted by creditors, reducing management's flexibility to flatten earnings. This suggests that profit smoothing is inversely connected to the debt-to-equity ratio.

3. Methodology and Hypothesis Development

3.1 Theoretical Framework

The framework developed in the research model on the Effect of Profitability, Bonus Plan, Organization Size, and Net Profit Margin on Income Smoothing with Financial Leverage as a Moderating Variable is shown below.
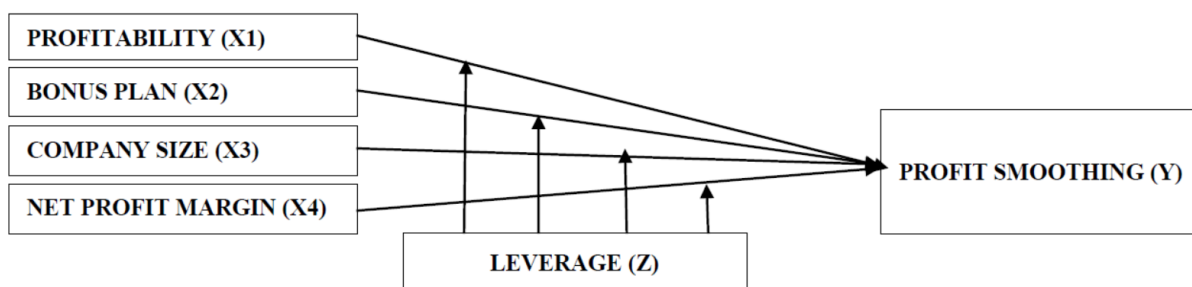
3.2 Hypothesis Development

H1: Profitability has an effect on income smoothing.
H2: The bonus plan has an impact on income smoothing.
H3: The company's size dont have effect on income smoothing.
H4: The net profit margin has an impact on income smoothing.
H5: Leverage can help to control the link between profitability and income smoothing.
H6: Leverage can assist with managing the link between bonus plans and income smoothing.
H7: The association between firm size and income smoothing can be moderated by leverage.
H8: Leverage has the potential to regulate the link between net profit margin and income smoothing.

3.2 Data and Data Sources

This study is a form of quantitative study. Quantitative methods are research approaches that use statistical data analysis to analyze specific populations or samples and evaluate hypotheses (Sugiyono and

Lestari, 2021). Secondary data was employed in this investigation. Secondary data is information gained indirectly, through intermediary media. The information is provided in the form of financial statements and annual reports for Real Estate and Property businesses listed on the Indonesia Stock Exchange (IDX) for the years 2019-2021. Data sources include the Indonesia Stock Exchange's (IDX) official website, https://www.idnfinancials.com/, as well as the websites of each firm.

3.3 Population and Research Sample
This study's population consists of real estate and property companies listed on the IDX for the 2019-2021 time period. To collect samples, the purposive sampling method is used. Therefore, 60 organizations were picked across a three-year research period, with a total observation data of 180 data. The logistic regression technique was utilized to analyze the data in this study.

3.4 Logistic Regression Analysis and Variable Operational Measurement
Because the dependent variable in this investigation was a dummy variable, logistic regression analysis was performed in this study. In this research, the dummy variable is represented by the number 1 for companies that use income smoothing and the number 0 for organizations that do not use profit smoothing. Logistic regression is a type of regression that is used to determine how well the probability of occurrence of a dependent variable can be predicted using an independent variable (Ghozali, 2016). A normality test and a classical assumption test on the independent variable are not required using the logistic regression analysis technique.

Hypothesis testing employs logistic regression modeling since the dependent variable in this research is a dummy variable. In this scenario, researchers looked at the association of profitability, bonus plans, firm size, and net profit margin of income smoothing, using leverage variables as moderators. The interaction hypothesis is tested using the moderation interaction test. Moderated regression analysis (MRA) is a type of linear multiple regression analysis in which the regression equation includes an element of interaction (multiplication of two or more independent variables). This test is used to determine the significance of the independent variable's influence on the dependent variable in the model.

In this study, the logistic regression models utilized to test the hypothesis are:
Model of regression without moderating variables:

$$LN\left[\frac{PL}{1-PL}\right] = \alpha + \beta_1 ROA + \beta_2 KB + \beta_3 UP + \beta_4 NPM + \varepsilon$$

Regression model with moderation variables:

$$LN\left[\frac{PL}{1-PL}\right] = \alpha + \beta_1 ROA + \beta_2 KB + \beta_3 UP + \beta_4 NPM + \beta_5[ROA * DER] + \beta_6[KB * DER] + \beta_7[UP * DER] + \beta_8[NPM * DER] + \varepsilon$$

Description:
PL: Income smoothing
α: Constant
β_1-β_8: Regression Coefficient
ROA: Profitability
KB: Bonus plan
UP: Company Size
NPM: Net Profit Margin
DER: Leverage
ε: Error

Solimun (2011) classifies moderation factors into four types: pure moderation (pure moderation), quasi moderation (pseudo moderation), homologiser moderation (possible moderation), and moderation predictors (moderation as a predictor). A classification table of moderating variables is provided below:

Table 1 Classification of moderation variables

NO	Moderation Type	Coefficient
1	Pure Moderation	β2 non-Significant β3 Significant
2	Quasi-Moderation	β2 Significant β3 Significant
3	Homologiser moderation	β2 non-Significant β3 non-Significant
4	Predictor Moderation	β2 Significant β3 non-Significant

The following are the independent variables, moderation variables, and dependent variables in this study:

Table 2 Variable Operational Measurement

Variable	Indicators	Source
Income Smoothing	A value of the Eckel index > 1 indicates that a profit smoothing action is not being performed and is assigned a value of 0. The Eckel index value <1 is deemed to conduct a profit leveling action and is assigned a value of 1.	Ambarwati dkk, (2022)
Profitability	ROA = PROFIT AFTER TAX/TOTAL ASSETS X 100%	Mirwan dkk, (2020)
Bonus plan	The company that provides the bonus is assigned a value of 1. Companies that do not offer bonuses are assigned a value of 0.	Amin, Pahyasah, and Murdi, (2021)
Company Size	Company Size = Ln (Total Assets)	Styaningrum et al, (2018)
Net Profit Margin	NPM = PROFIT AFTER TAX/SALES X 100%	Kusumawati dkk, (2018)
Leverage	DER = TOTAL LIABILITIES/AMOUNT OF EQUITY X 100%	Nurani and Maryanti, (2021)

4. Result and Discussion

4.1 Descriptive Statistics

The descriptive statistical analysis seeks to provide a clear picture of a set of data by presenting theoretical ranges, frequencies, and percentages in tables. Researchers simply intend to sum up the information in this descriptive statistical study using mean, minimum, maximum, and standard deviation. The following are the findings of descriptive statistical analysis:

Table 3 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Income Smoothing	180	0	1	0,60	0,491
Profitability	180	-37,52	44,30	,6622	6,71982
Bonus plan	180	0	1	0,41	0,492
Company Size	180	24,57	31,75	28,7396	1,61127
Net Profit Margin	180	-1783,41	15817,03	73,8331	1196,87082
Leverage	180	-2105,75	411,46	55,9852	197,38710
ROAxDER	180	-13371,51	3353,55	-84,6471	1151,00895
KBxDER	180	-2105,75	411,46	12,0106	189,16334
UPxDER	180	-60542,42	12163,58	1641,1860	5706,55402
NPMxDER	180	-329752,51	239944,35	-1445,6663	32846,63864
Valid N (listwise)	180				

Source: SPSS data processing results, 2023

The income smoothing variable has a minimum value of 0 and a maximum value of 1 based on descriptive statistical tests, with an average of 0.60 and a standard deviation of 0.491. Profitability has a low of -37.52 and a high of 44.30, with a mean of 0.6622 and a standard deviation of 6.71982. With an average of 0.41 and a standard deviation of 0.492, the variable bonus plan has a minimum value of 0 and a maximum value of 1.

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The variable firm size has a low of 24.57 and a high of 31.75, with an average of 28.7396 and a standard deviation of 1.61127. The variable net profit margin ranges from -1783.41 to 15817.03, with an average of 73.8331 and a standard deviation of 1196.87082. The variable leverage ranges from -2105.75 to 411.46, with a mean of 55.9852 and a standard deviation of 197.38710.

4.2 Model Feasibility Test (Goodness of Fit Test)
a. Model Feasibility Test Without Moderation Variables
The goodness of fit test can be used to determine the viability of a logistic regression model. The purpose of this examination is to assess the accuracy of data on a logistic regression model. If the value of Hosmer and Lemeshow's Goodness of Fit Test is equal to or less than 0.05, the logistic regression model is not fit or viable since it cannot predict the observation data. If the value of Hosmer and Lemeshow's Goodness of Fit Test is more than 0.05, the logistic regression model is deemed to be fit or feasible because it agrees with the field observations. The Goodness of Fit Test findings of Hosmer and Lemeshow is shown in the table below:

Table 4 Model Feasibility Test Results

Step	Chi-square	df	Sig.
1	5,899	8	0,659

Source: SPSS data product was made for 2023

According to the table provided, the value of the model feasibility test has a significance value of 0.659. This means that the significance level is higher than 0.05 (0.659>0.05). As a result, it is possible to infer that the regression model included in this study is fit or practicable because it corresponds to the observation data.

b. Model Feasibility Test with Moderation Variables

Table 5 Model Feasibility Test Results

Step	Chi-square	df	Sig.
1	11,967	8	0,153

Source: SPSS data processing outcomes, 2023

According to the table above, the value of the model feasibility test has a significance value of 0.153. This means that the significance level is higher than 0.05 (0.153>0.05). As a result, it is possible to infer that the regression model included in this study is fit or practicable because it corresponds to the observation data.

4.3 Overall Model Fit Test
a. Test the Entire Model Without Moderation Variables
This hypothesis is tested by determining whether the hypothesized model is fit or feasible with the evidence. The complete model is evaluated by comparing two values: the initial -2 Log Likelihood (Block Number = 0) and the final -2 Log Likelihood (Block Number = 1). If the difference between the two values of -2 Log Likelihood decreases in value, it is possible to conclude that the hypothesized variable is fit or feasible with the data. The following table shows the value of the overall model test comparison or overall model fit test results:

Table 6 Result -2 Log Likelihood Block 0

Iteration		-2 Log likelihood	Coefficients
			Constant
Step 0	1	242,285	0,400
	2	242,248	0,405
	3	242,284	0,405

Table 7 Result -2 Log Likelihood Block 1

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerker R Square
1	218,187a	0,125	0,169

Source: SPSS data dealing out results, 2023

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According to the table above, the value of -2 Log Likelihood at the start (Block Number = 0) is 242.285, whereas the value at the finish (Block Number = 1) is 218.187. Based on the test results, the difference between -2 Log Likelihood at the start (Block Number = 0) and -2 Log Likelihood at the conclusion (Block Number = 1) reduced, indicating that the regression model in this study is fit or feasible between the hypothesized variables and the existing data.

b. Test the entire model with moderation variables

Table 8 Result -2 Log Likelihood Block 0

Iteration		-2 Log likelihood	Coefficients
			Constant
Step 0	1	242,285	0,400
	2	242,248	0,405
	3	242,284	0,405

Table 9 Result -2 Log Likelihood Block 1

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerker R Square
1	209,505a	0,166	0,225

Source: SPSS data processing is employed for 2023

According to the table above, the value of -2 Log Likelihood at the start (Block Number = 0) is 242.285, whereas the value at the finish (Block Number = 1) is 209.505. Based on the test results, the difference between -2 Log Likelihood at the start (Block Number = 0) and -2 Log Likelihood at the conclusion (Block Number = 1) reduced, indicating that the regression model in this study is fit or feasible between the hypothesized variables and the existing data.

4.4 Test Coefficient of Determination (Nagelkerke R Square)
a. Test Coefficient of Determination Without Moderation Variables

The value of Nagelkerke R Square was employed as the coefficient of determination in this investigation. The Nagelkerke R Square coefficient is a variation on the Cox and Snell R Square coefficients that ensures the value ranges from 0 to 1. If the value of the acquired test findings is minimal, the ability of independent factors to explain the dependent variable is severely constrained. If the value of the test findings is bigger, the independent factors supply nearly all of the information required to explain the dependent variables. The coefficient of determination test results is shown in the table below:

Table 10 Result -2 Log Likelihood Block 1

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerker R Square
1	218,187a	0,125	0,16

Source: SPSS data processing fallouts, 2023

Based on the table, the test value of the coefficient of determination (Nagelkerke R Square) is 0.169. The Nagelkerke R Square value indicates that the independent variables in this study, namely profitability, bonus plan, company size, and net profit margin, can only justify 16.9% of the dependent variable, namely income smoothing, with the remaining 83.1% discussed by variables other than the four variables mentioned above.

b. Test the coefficient of determination with moderation variables

Table 11 Result -2 Log Likelihood Block 1

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerker R Square
1	209,505a	0,166	0,225

The SPSS data process is considered for 2023

As indicated in the following table, the test value of the coefficient of determination (Nagelkerke R Square) is 0.225. The Nagelkerke R Square value indicates that the independent variables in this study, namely profitability, bonus plan, company size, and net profit margin with leverage as a moderation variable, can only explain 22.5% of the dependent variable, namely income smoothing, while the remaining 77.5% is explained by variables other than the five variables listed above.

4.5 Results of Logistic Regression Models and Hypothesis Testing
a. Regression Model Results and Hypothesis Testing Without Moderation Variables

The logistic regression model utilized in this study is being examined to evaluate whether or not the factors of profitability, bonus plan, firm size, and net profit margin have a significant effect on income smoothing. The findings of the logistic regression analysis are shown in the table below:

Table 12 Test Results of Logistic Regression Model

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Profitability	0,042	0,034	1,518	1	0,218	1,043
	Bonus plan	0,971	0,356	7,464	1	0,006	2,641
	Company Size	0,253	0,104	5,915	1	0,015	1,288
	Net Profit Margin	-0,002	0,001	2,104	1	0,147	0,998
	Constant	-7,239	2,979	5,905	1	0,015	0,001

Source: SPSS facts processing results, 2023

Based on the regression analysis model test findings in the table above, the regression model equation derived from the analysis results is as follows:

$$LN\left[\frac{PL}{1-PL}\right] = -7{,}239 + 0{,}042ROA + 0{,}971KB + 0{,}253UP - 0{,}002NPM + \varepsilon$$

The hypothesis will be tested using the regression model equation above by comparing the level of significance (sig) with the error rate (α), which is 0.05 or 5%. The hypothesis test yielded the following results:

The profitability variable has a regression coefficient value of 0.042 and a significance level of 0.218, which is greater than $\alpha = 5\%$ or (0.218>0.05). This demonstrates that the first hypothesis (H1) is rejected, implying that profitability does not affect on income smoothing. The regression coefficient value for the bonus plan variable is 0.971, with a significance level of 0.006, which is less than the significant level of $\alpha = 5\%$ or (0.006<0.05). This demonstrates that the second hypothesis (H2) is accepted, implying that bonus schemes influence income smoothing. The regression coefficient value for the company size variable is 0.253 with a significance level of 0.015, which is less than the significant threshold of $\alpha = 5\%$ or (0.015<0.05). This indicates that the third hypothesis (H3) is rejected, implying that the size of the company affects income smoothing. The variable net profit margin has a regression coefficient value of -0.002 and a significance level of 0.147, which implies it is greater than $\alpha = 5\%$ or (0.147>0.05). This demonstrates that the fourth hypothesis (H4) is rejected, implying that the net profit margin does not affect on income smoothing.

b. Regression Model Results and Hypothesis Testing with Moderation Variables

Table 13 Test Results of Logistic Regression Mode

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Profitability	0,062	0,050	1,503	1	0,220	1,064
	Bonus plan	1,739	0,477	13,321	1	0,000	5,693
	Company Size	0,187	0,174	1,153	1	0,283	1,206
	Net Profit Margin	-0,004	0,003	2,034	1	0,154	0,996
	Leverage	0,013	0,050	0,064	1	0,801	1,013
	ROAxDER	0,000	0,000	0,074	1	0,786	1,000
	KBxDER	-0,011	0,004	5,888	1	0,015	0,989
	UPxDER	0,000	0,002	0,003	1	0,953	1,000
	NPMxDER	0,000	0,000	0,735	1	0,391	1,000
	Constant	-6,048	4,907	1,519	1	0,218	0,002

Source: SPSS figures processing results, 2023

Based on the logistic regression model test findings in the table above, the regression model equation derived from the results obtained is as follows:

$$LN\left[\frac{PL}{1-PL}\right] = -6{,}048 + 0{,}062ROA + 1{,}739KB + 0{,}187UP - 0{,}004NPM + 0{,}000ROAxDER$$
$$- 0{,}011KBxDER + 0{,}000UPxDER + 0{,}000NPMxDER + \varepsilon$$

The hypothesis will be verified using the regression model equation above by comparing the level of significance (sig) with the error rate (α), which is 0.05 or 5%. The hypothesis test produced the following results:

The variable interaction between profitability and leverage has a regression coefficient value of 0.000 with a significance level of 0.786, which is greater than α = 5% or (0.786>0.05). This implies that the fifth hypothesis (H5) is rejected, implying that leverage cannot control the profitability-income smoothing relationship. The variable interaction between the bonus plan and leverage has a regression coefficient value of -0.011 and a significance level of 0.015, which is less than α = 5% or (0.015<0.05). This implies that the sixth hypothesis (H6) is correct, implying that leverage can regulate the relationship between bonus plans and income smoothing. The variable interaction between firm size and leverage has a regression coefficient value of 0.000 with a significance level of 0.953, which is greater than α = 5% or (0.953>0.05). This implies that the seventh hypothesis (H7) is invalid, implying that leverage cannot control the relationship between business size and income smoothing. The variable interaction between net profit margin and leverage has a regression coefficient value of 0.000 with a significance level of 0.391, which is greater than 5% or (0.391>0.05). This implies that the eighth hypothesis (H8) is invalid, implying that leverage cannot regulate the link between net profit margin and income smoothing.

4.6 Discussion

The first hypothesis (H1) suggests that income smoothing is affected by profitability. According to the testing results, the profitability variable has a significance of 0.218, which is more than the significant level of α = 5% or (0.218>0.05). This demonstrates that the first hypothesis (H1) is rejected, implying that profitability does not affect on income smoothing. As a result, high or low profit levels cannot induce management to use income-smoothing measures. Excessive income smoothing by firm executives will tend to draw public notice. Furthermore, income smoothing can jeopardize a company's reputation, therefore management will aim to reduce the action of profit smoothing. Income smoothing's lack of profitability might also be related to other factors considered by investors before making investment selections. This indicates that when making investment selections, investors should evaluate not just financial ratios but also other financial measures such as activity ratios and market valuation ratios. The findings of the preceding study are consistent with the findings of Dewi and Suryanawa (2019), who found that profitability variables have no effect on income smoothing. However, it contradicts the findings of Ambarwati et al (2022), who discovered that profitability variables influence income smoothing.

The second hypothesis (H2) contends that bonus plans have an impact on income smoothing. The second hypothesis, based on the testing findings, demonstrates that the bonus plan variable has a significance of 0.006, which is less than the significant level of α = 5% or (0.006<0.05). This demonstrates that the second hypothesis (H2) is accepted, implying that bonus plans influence income smoothing. A bonus plan is a method of rewarding managers for exceeding targets. With the introduction of remuneration, management will be obliged to manipulate reported profits, incentivizing management to accurately report profits and thus choose accounting processes that can move current period profits in the following period. The findings of the preceding study are consistent with the findings of Amin et al (2021), who found that bonus plans affect income smoothing. However, it contradicts the findings of Murti et al. (2017), who found that bonus plans have no bearing on income smoothing.

According to the third hypothesis (H3), the size of the company has no effect on income smoothing. As shown by the testing results, the third hypothesis indicates that the company size variable has a significance of 0.015, which is less than the significant level of α = 5% or (0.015<0.05). This indicates that the third hypothesis (H3) is rejected, implying that the size of the company affects income smoothing. Since the results of this study are related to signal theory and information asymmetry. The corporation strives to convey to outside parties that the company's state and size are commensurate with the earnings it makes. The magnitude of a company adds value to investors who are considering investing in it. After all, large corporations are more concerned with the ability of the company to generate substantial and consistent profits, the company's ability to survive is also vital in order for investors to maintain faith in the company. This is extremely sensible because the size of the firm has a significant impact on income smoothing because large corporations have a greater and more complicated operational scale, resulting in gaps that can be utilized to the company's advantage. The study's findings are consistent with research by Sarra and Mikrad (2021), which found that company size affects income smoothing. However, it contradicts the findings of Mirwa and Amin (2020), who found that firm size has no effect on income smoothing.

According to the fourth hypothesis (H4), net profit margin influences income smoothing. According to the testing results, the variable net profit margin has a significance of 0.147, which is more than the significant level of α = 5% or (0.147>0.05). This demonstrates that the fourth hypothesis (H4) is rejected, implying that the

net profit margin has no effect on income smoothing. A company's profit leveling is not based on the size of its net profit margin. Businesses with a high NPM imply that their profits are very high, but firms with a low NPM do not cause companies to stabilize their profits, therefore they do not conduct profit leveling steps. The study's findings are consistent with research by Kusmiyati and Hakim (2020), who found that net profit margin had no effect on income smoothing. However, it contradicts the findings of Josep et al. (2016), who discovered that net profit margin influences income smoothing.

According to the fifth hypothesis (H5), leverage can decrease profitability against income smoothing. According to the testing results, the variable of profitability interaction with leverage has a significance of 0.786, which is larger than the significant level of α = 5% or (0.786>0.05). This implies that the fifth hypothesis (H5) is rejected, implying that leverage cannot control the profitability-income smoothing relationship. Profitability is proxied in this study by the return on asset (ROA) ratio, which is a financial statistic that can be used to gauge a company's performance in creating profits. Businesses with a high degree of profitability are more likely to see a fall in earnings in the future; therefore, management adopts income smoothing steps to lessen profit volatility. Furthermore, the interaction between leverage and profitability is small, implying that the use of a good leverage mechanism does not impair income smoothing even when the organization is highly profitable. The higher an enterprise's degree of profitability, the better the role of the leverage mechanism has worked. In this study, the Leverage coefficient is small, and the ROAxDER moderation interaction coefficient is similarly insignificant. This implies that leverage could be a potential moderation variable (homologiser moderation).

As shown in the sixth hypothesis (H6), leverage can reduce bonus programs against income smoothing. According to the testing results, the variable of bonus plan interaction with leverage has a significance of 0.015, which is less than the significant level of α = 5% or (0.015<0.05). This indicates that the sixth hypothesis (H6) is correct, implying that leverage can regulate the relationship between bonus programs and income smoothing. The company's profit-based bonus plan policy also encourages managers to practice profit management. If the reported profit does not exceed the maximum bonus limit, management will modify the profit up (up), and vice versa if the reported profit exceeds the maximum bonus limit. When faced with the decision of which accounting policies to use to maximize compensation, managers will act opportunistically. The company will offer a bonus scheme if management meets the target set by the company's owner. Businesses that employ bonus programs force management to work as hard as possible to meet targets to receive bonuses. This dynamic encourages management to smooth out income. Accounting is typically practiced by management by shifting profits from the future to the current period. In this study, the Leverage coefficient was insignificant, whereas the KBxDER moderation interaction coefficient was significant. As a result, leverage is a pure moderation variable.

The seventh hypothesis (H7) states that leverage can protect a firm's size from income smoothing. According to the testing results, the variable of interaction of firm size with leverage has a significance of 0.953, which is greater than the significance level α = 5% or (0.953>0.05). This implies that the seventh hypothesis (H7) is invalid, implying that leverage cannot control the relationship between business size and income smoothing. Because of the company's size, it has a huge overall asset base and may easily acquire the trust of creditors to get revenue sources. The more debt a corporation accumulates, the more likely it will experience bankruptcy. This is because the bigger the debt, the greater the amount of interest that must be paid, and thus the risk of not paying interest increases. In this study, the Leverage coefficient was insignificant, and the UPxDER moderation interaction coefficient was also insignificant. This assumes that leverage could be a potential moderation variable (homologiser moderation).

According to the eighth hypothesis (H8), leverage can moderate net profit margin against income smoothing. As shown in the testing results, the variable of net profit margin interaction with leverage has a significance of 0.391, which is greater than the significant level of = 5% or (0.391>0.05). This implies that the eighth hypothesis (H8) is invalid, implying that leverage cannot regulate the link between net profit margin and income smoothing. Since the value of the net profit margin is directly tied to the value of net profit after tax, it is one indicator of the profitability ratio that is frequently the primary concern of investors. The net profit margin evaluation component can provide a general picture of how the business operates. From the production flow to the distribution flow. Based on agency theory, management is the main party who plays an important role and knows more important information about the company than the owners or shareholders, so management is frequently in a position and situation where it is very likely to benefit itself by manipulating profits in the financial statements. However, this supposedly does not inspire management to do income smoothing because the average firm with a high Net Profit Margin value is one whose performance from the full production flow to distribution is good and efficient, resulting in a strong profit value. In this study, the Leverage coefficient is insignificant, and the NPMxDER moderation interaction coefficient is also insignificant. This reveals that leverage could be a possible moderation variable (homologiser moderation).

5. Conclusion

The aim of the research is to examine the impact of profitability, bonus plans, firm size, and net profit margin on revenue smoothing with leverage as a moderation variable. The following conclusions can be derived from the findings of the analysis and discussion:

1. Profitability has no effect on income smoothing in the real estate and property industry on the Indonesia Stock Exchange for the 2019-2021 term.
2. For the 2019-2021 period, the bonus plan tends to affect income smoothing in the real estate and construction sector on the Indonesia Stock Exchange.
3. For the 2019-2021 timeframe, the size of the company influences income smoothing in the real estate and property sector on the Indonesia Stock Exchange.
4. For the 2019-2021 term, net profit margin has no effect on income smoothing in the real estate and property industry on the Indonesia Stock Exchange.
5. For the 2019-2021 period on the Indonesia Stock Exchange, leverage cannot moderate profitability against income smoothing in the real estate and property sector. A potential moderation variable is leverage (homologiser moderation).
6. For the 2019-2021 term, leverage can moderate bonus plan for income smoothing in the real estate and property industry on the Indonesia Stock Exchange. Leverage is strictly a moderation variable.
7. Leverage cannot moderate the company's size against income smoothing in the real estate and property industry on the Indonesia Stock Exchange for the 2019-2021 term. A potential moderation variable is leverage (homologiser moderation).
8. For the 2019–2021-year, leverage cannot moderate net profit margins against income smoothing in the real estate and property sector on the Indonesia Stock Exchange. A potential moderation variable is leverage (homologiser moderation).

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