The Effect Of Return On Asset, Net Profit Margin And Financial Leverage On Income Smoothing In Banking Companies Listed On The Indonesian Stock Exchange

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ABSTRACT

This study aims to examine the effect of return on asset, net profit margin and financial leverage on income smoothing study in Banking Companies listed in the IDX for the 2019-2021 period. The population in this study is all mining companies listed on the Indonesian Stock Exchange, which is as many as 43 companies.The sample in this study uses a saturated sample that uses all members of the population as many as 43 companies. Data obtained from the publication of the Indonesian Stock Exchange and the official website of each company. This study used 43 samples with 3 years of research so that a total of 129 observations with logistic regression were processed using E-views 10 software. The results of this study using the partial test (t-test) found that the variables return on assets has a positive effect on income smoothing, net profit margin do not have a significant effect on income smoothing and financial leverage do not have a significant effect on income smoothing.

Keywords: Return on Asset, Net Profit Margin, Financial Leverage, and Income Smoothing.

1. INTRODUCTION

Income Smoothing according to Belkaoui (2006: 56) is a deliberate effort so that fluctuations in the level of earnings can be minimized and are considered normal for the company [1]. (Rosalie et al., 2019) Income smoothing is an action deliberately taken to minimize profit fluctuations to a level that is normal for the company by allocating costs or revenues from one period to another [2]. Earnings smoothing actions are deliberately applied by management within the limits of the applicable rules and produce the desired level of reported earnings. The case of income smoothing in Indonesia is Bank Bukopin revising its consolidated financial statements for the 2016 financial year submitted at the end of March 2018. The previously published net profit for the year attributable to owners of the parent entity of Rp 1.08 trillion plummeted to Rp 183.56 billion. Bukopin's net profit in 2016 has plummeted 81% compared to a year earlier and earnings per share has lost more than 80% of its value to only Rp 20 from 2015's position of Rp 106 (cnbcindonesia.com).

According to (Amini, 2021) there are several factors that affect income smoothing, some of which are Return on Asset, Net Profit Margin and Financial Leverage [3]. Return on Asset is one of the profitability ratios that shows the company's ability to generate profits from the company's assets. Investors use ROA to find out how much return they will get in the future. A high ROA indicates that the company is more efficient in using its assets to generate net profit after tax, so it can be concluded that the company's performance is more effective. This is in line with research conducted by Deli & Irfan (2019), Putri & Budiasih (2018), Kurniawati et al (2019), which states that Return on Asset affects income smoothing. But it is different from the research conducted by Rosalie et al (2019), Handayani & Opti (2021), Purnamasari et al (2018 which states that Return on Asset has no effect on income smoothing.

The second factor is Net Profit Margin. According to Kasmir (2012: 235) "Net Profit Margin is a ratio used to measure the company's ability to generate Net Income from its operational

activities. Net Profit Margin is used to measure the operational results of company leaders in controlling costs, approving products made by the company, and so on. A decrease in a company's Net Profit Margin can affect the company's image in the eyes of external parties and can make it less attractive to investors. The higher the net profit margin, the better the company's operations. This is in line with research conducted by Deli & Irfan (2019), Pertiwi (2019), and Yunengsih et al (2018) which state that Net Profit Margin affects Income Smoothing. But it is different from the research conducted by Rosalie et al (2019), Desiyanti & Desaputra (2018) and Cahyaningrat et al (2018) which state that Net Profit Margin has no effect on Income Smoothing.

The third factor that affects income smoothing is Financial Leverage. Financial leverage in this study is proxied by the Debt to Total Asset (DAR) ratio. A ratio that measures how much of the company's assets are financed by debt or how much the company's debt affects asset management. Because companies cannot always finance their investments with their own capital, so companies need loans from outside parties. Companies that apply for loans must convince the lender that the company can repay the loan given. Companies with a high level of leverage are more risky because they require a greater amount of assets to pay off their obligations. This is in line with the research of Ayu & Budiasih (2018), Wulan & Nabhan (2021), and Sari & Darmawati (2021), which states that Financial Leverage has a positive effect on Income Smoothing. But it is different from the research conducted by Nurjanah (2021), Tsuroyya & Astika (2017) and Maharani (2015) which states that Financial Leverage has no effect on Income Smoothing.

2. LITERATURE REVIEW
2.1 Income Smoothing

Income smoothing is an action deliberately taken to minimize fluctuations in earnings to a level that is normal for the company by allocating costs or revenues from one period to another. Earnings smoothing actions are deliberately applied by management within the limits of the applicable rules and produce the desired level of reported earnings.

2.2 Return on Asset

Return on assets is a ratio that shows the return on assets used in the company (Kasmir, 2015: 202). ROA is one of the important aspects that potential investors need to consider, because ROA serves as

an indicator of the company's efficiency in using its assets to make a profit. A high ROA indicates that the company is more efficient in using its assets to create net profit after tax. Conversely, the lower the ROA, the worse.

This ratio shows the return on assets used in the company . The higher the ROA, the more efficient the company is in using its assets to create net profit after tax. A stable ROA indicates that the company's profitability is stable and gives investors confidence that the company has good performance. The higher the ROA value, the higher the tendency of management to practice income smoothing. High profitability makes investors fully believe that the company's performance is quite stable and can affect investor decision making in the future. Increasing profitability usually indicates that the opportunity for income smoothing is also increasing because companies that have published financial reports with high profits will try to keep profits in the next period from decreasing drastically because it will give a negative picture to investors (Wulan & Nabhan, 2021) [4]

Research conducted by (Deli & Irfan, 2019) and (Putri & Budiasih, 2018) shows the results that return on assets affects income smoothing because the higher the ROA, the tendency to practice income smoothing. Based on the description above, the research hypothesis is proposed as follows:

H1 : Return on Asset affects Income Smoothing.

2.3 Net Profit Margin

According to Kasmir (2012: 235) "Net Profit Margin is a ratio used to measure the company's ability to generate Net Income from its operational activities". Net Profit Margin is used to measure the operational results of company leaders in controlling costs, approving products made by the company, and so on. A decrease in a company's Net Profit Margin can affect the company's image in the eyes of external parties and can make it less attractive to investors. The higher the net profit margin, the better the company's operations.

Net profit margin is a ratio that shows the ratio between net profit after tax to total net income. Net profit margin is often used by investors as a basis for decision making that describes company performance. Companies with a low level of net profit margin, the tendency of managers to flatten earnings is getting bigger with the aim of increasing the value of the company's profitability, one of which is the net profit margin, because with a high level of profitability it will be able to raise the standard bonus or profit in the future. So that management's interests can be fulfilled to get compensation in the form of bonuses from large profits in the current year. So in this case the company management will use its discretion to choose accounting methods that can increase company profits. (Yunengsih et al., 2018) [5]

Research conducted by (Deli & Irfan, 2019) and (Yunengsih et al., 2018) shows the results that net profit margin affects income smoothing because companies with a low level of net profit margin in the previous year, the tendency of managers

to do income smoothing is getting bigger with the aim of increasing the company's net profit margin value again. Based on the description above, the research hypothesis is proposed as follows:

H₂ : Net Profit Margin affects Income Smoothing

2.4 Financial Leverage

Financial leverage is all of the company's unmet financial obligations to other parties, where this debt is a source of funds or capital from creditors. Financial leverage in this study is proxied by the Debt to Total Asset (DAR) ratio. A ratio that measures how much of the company's assets are financed by debt or how much the company's debt affects asset management. Companies with a high level of leverage are more risky because they require a greater amount of assets to pay off their obligations.

Financial Leverage shows how much of the company's assets are financed by debt. Companies that have a high level of financial leverage tend to take income smoothing actions. This is because the higher the level of corporate debt, the greater the risk faced by investors, as a result investors will want greater profits as well. The higher the level of financial leverage of a company, the greater the risk of the company in returning debt so that it makes the company carry out policies by smoothing income. Because if the profit earned by the company is relatively stable, it gives investors confidence that the company is able to pay or pay off its debts and avoid violating the debt agreement.

Research conducted by (Wulan & Nabhan, 2021) and (Sari & Darmawati, 2021) shows the results that financial leverage affects income smoothing because the higher the leverage, the higher the proportion of debt the company has. Based on the description above, the research hypothesis is proposed as follows:

H₃ : Financial Leverage affects Income Smoothing
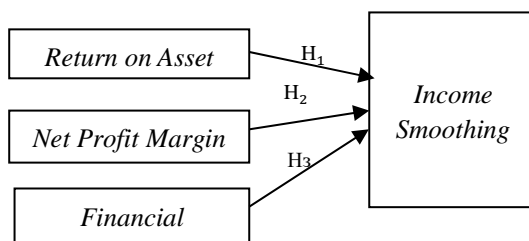
3 RESEARCH METHODS

3.1 Data

The population in this study were 43 banking companies listed on the Indonesia Stock Exchange (IDX) with 3 years of observation, namely in 2019-2020. The sampling used in this study was the saturated sample method. The saturated sample method is a sampling technique when all members of the population are used as samples.

2.5 Operational Definition of Variables

2.5.1 Income Smoothing

Income smoothing is an action deliberately taken to minimize profit fluctuations to a level that is normal for the company by allocating costs or revenues from one period to another. Earnings smoothing actions are deliberately applied by management within the limits of the applicable rules and produce the desired level of reported earnings. Income smoothing practices are measured using the Eckel Index. The Eckel Index will distinguish between companies that practice income smoothing and those that do not practice income smoothing. The formula used is as follows:

$$\text{Indeks Income Smoothing} = \frac{\text{CV } \Delta I}{\text{CV } \Delta S}$$

2.5.2 Return on Asset

Return on assets is a ratio that shows the return on assets used in the company (Kasmir, 2015: 202). ROA is one of the important aspects that potential investors need to consider, because ROA serves as an indicator of the company's efficiency in using its assets to make a profit. A high ROA indicates that the company is more efficient in using its assets to create net profit after tax. Conversely, the lower the ROA, the less good. The formula used is as follows:

$$ROA = \frac{Net\ After\ Tax}{Total\ Assets}$$

2.5.3 Net Profit Margin

According to Kasmir (2012: 235) "Net Profit Margin is the ratio used to measure a company's ability to generate Net Income from its operational activities." Net Profit Margin is used to measure the operational results of company leaders in controlling costs, approving products made by companies, and so on. A decrease in a company's Net Profit Margin can affect the company's image in the eyes of external parties and can make it less attractive to investors. The higher the net profit margin, the better the company's operations. The formula used is as follows:

$$NPM = \frac{Earning\ After\ Tax}{Sales}$$

3.1.1 Financial Leverage

Financial leverage is all of the company's unmet financial obligations to other parties, where this debt is a source of funds or capital from creditors. Financial leverage in this study is proxied by the Debt to Total Asset (DAR) ratio. A ratio that measures how much of the company's assets are

financed by debt or how much the company's debt affects asset management. Companies with a high level of leverage are more risky because they require a greater amount of assets to pay off their obligations. The formula used is as follows:

$$DAR = \frac{\text{Total Debt}}{\text{Total Assets}}$$

3.1.2 Analysis Method

The data analysis method used in this research is descriptive analysis and logistic regression analysis using Microsoft Excel 2019 and E-Views 10 software. The formulation of the panel data regression equation is :

$$Y = \beta_0 + \beta_1\,ROA + \beta_2\,NPM + \beta_3\,FL + e$$

4 RESULTS AND DISCUSSION

4.1 Analisis Statistik Deskriptif

Tabel 1
Analisis Statistik Deskriptif

	IS	ROA	NPM	FL
Mean	0.217391	0.011591	0.312309	0.739831
Maximum	1.000000	0.090990	2.762300	0.918900
Minimum	0.000000	0.000100	0.000200	0.021400
Std. Dev.	0.414731	0.014749	0.401530	0.227714

From the results of the descriptive statistical analysis above, it can be seen that the number of observations in this study was 129. The income smoothing variable has a mean or average value of 0.217391, with a maximum income smoothing value of 1.000000 and a minimum value of 0.000000 and a standard deviation of 0.414731. In the variable return on assets (X_1), the average value is 0.011591, the maximum value of return on assets is 0.090990 owned by PT Bank BTPN Syariah Tbk (BTPS) in 2019 and the minimum value is 0.000100 owned by PT Bank Panin Dubai Syariah Tbk (PNBS) in 2020. As well as a standard deviation of 0.014749.

The net profit margin variable (X_2) has a maximum value of 2.762300 owned by PT Bank Woori Saudara Indonesia 1906 Tbk (SDRA) in 2021, and a minimum value of 0.000200 owned by PT Bank Panin Dubai Syariah (PNBS) in 2020. The average value of the net profit margin is 0.312309 and the standard deviation value is 0.401530. The financial leverage variable (X_3) has a maximum value of 0.918900 owned by PT Bank Capital Indonesia

(BACA) in 2019, and a minimum value of 0.021400 owned by PT Bank Raya Indonesia (AGRO) in 2020. Financial leverage has an average value of 0.739831 and a standard deviation value of 0.227714.

4.2 Logistic Regression Analysis

Tabel 2
Analisis Regresi Logistik

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-5.181245	2.269628	-2.282861	0.0224
ROA	58.63125	25.48300	2.300799	0.0214
NPM	-0.191804	0.745791	-0.257182	0.7970

McFadden R -squared	0.086401	Mean dependent var	0.217391
S.D. dependent var	0.414731	S.E. of regression	0.405014
Akaike info criterion	1.043653	Sum squared resid	14.43518
Schwarz criterion	1.153296	Log likelihood	-44.00802
Hannan-Quinn criter.	1.087905	Deviance	88.01604
Restr. deviance	96.33989	Restr. log likelihood	-48.16994
LR statistic	8.323845	Avg. log likelihood	-0.478348
Prob(LR statistic)	0.039772		

From the Logistic regression test results, the constant value of the regression model = -5.181245 and the regression coefficient (β) of each variable obtained $\beta_1 = 58.63125$, $\beta_2 = 0.191804$, and $\beta_3 = 4.111632$. Based on the constant value and the regression coefficient, the relationship between the independent variable and the dependent variable in the regression model can be formulated as follows:

$$Y = -5.181245 + 58.63125ROA - 0.191804NPM + 4.111632FL + e$$

4.3 Hosmer and Lemeshow Test (Assessing the Feasibility of Regression Models)

Tabel 3
Hasil Hosmer and Lemeshow Test (Assessing the Feasibility of Regression Models)

	Quantile of Risk		Dep=0		Dep=1		Total	H-L
	Low	High	Actual	Expect	Actual	Expect	Obs	Value
1	0.0065	0.0657	9	8.80339	0	0.19661	9	0.20100
2	0.0713	0.1289	9	7.97505	0	1.02495	9	1.15668
3	0.1306	0.1598	6	7.71751	3	1.28249	9	2.68231
4	0.1630	0.1779	8	7.46529	1	1.53471	9	0.22460
5	0.1795	0.2038	7	8.08915	3	1.91085	10	0.76745
6	0.2069	0.2211	8	7.08028	1	1.91972	9	0.56010
7	0.2260	0.2498	7	6.82892	2	2.17108	9	0.01777
8	0.2504	0.2826	8	6.58352	1	2.41648	9	1.13506
9	0.2829	0.3618	5	6.10828	4	2.89172	9	0.62584
10	0.3983	0.6764	5	5.34862	5	4.65138	10	0.04885

Total	72	72.0000	20	20.0000	92	7.41967

H-L Statistic	7.4197	Prob. Chi-Sq(8)	0.4921
Andrews Statistic	20.6854	Prob. Chi-Sq(10)	0.0234

Table 3 shows the feasibility test of the model using the Hosmer and Lemeshow test which obtained a Probability Chi-Squared H-L (Hosmer and Lemeshow) statistic of $0.4921 > 0.05$, thus the model is feasible to use in this study.

4.4 Hypothesis Testing

Tabel 4
Partial Test Result (t)

C	-5.181245	2.269628	-2.282861	0.0224
ROA	58.63125	25.48300	2.300799	0.0214
NPM	-0.191804	0.745791	-0.257182	0.7970
FL	4.111632	2.570475	1.599561	0.1097

4.5 Determinant Coefficient (R2)

Based on the regression test results of the coefficient of determination in table 2 above, it can be seen that the McFadden R-squared value obtained in this study is 0.086 or equal to 8.6%. This shows that 8.6% is given to return on assets, net profit margin and financial leverage in explaining income smoothing, while the remaining 91.4% is explained by other independent variables not included in this study.

4.5.1 Effect of Return on Asset on Income Smoothing

In this study, ROA has a positive effect on income smoothing practices. The results of this study are in line with research conducted by (Putri & Budiasih, 2018) which states that ROA has an effect on income smoothing. This shows that the high and low level of the company's ROA will affect income smoothing. The increasing ROA ratio of the company illustrates that the company is considered capable of generating profits quite well and the company's performance is in good condition, but management still needs to do income smoothing to maintain the company's good judgment in the eyes of external parties such as creditors and investors. Return on Asset is used as one of the main considerations for creditors and investors to make investment decisions because profitability is enough to describe the company's condition effectively. The higher the ROA value, the higher the tendency of management to practice income smoothing (Yunitasari & Agustiningsih, 2022). A

high ROA makes investors fully believe that the company's performance is quite stable and can influence investor decision making in the future. An increasing ROA usually indicates that the opportunity for income smoothing is also increasing because companies that have published financial reports with high profits will try to keep profits in the next period from decreasing drastically because it will give a negative picture to investors (Wulan & Nabhan, 2021). Therefore, ROA has a positive effect on income smoothing in banking companies listed on the Indonesia Stock Exchange in 2019-2021.

4.5.2 Effect of Net Profit Margin on Income Smoothing

Profitability is a major consideration for investors and creditors in making decisions both in investing funds and in lending funds to a company. Because profitability provides an overview of the company's ability to earn profits and also provides information on the company's effectiveness in managing its assets. If the company has the ability to get very small and unstable profits, this will greatly jeopardize the company's ability to survive in the long term. In this study, NPM has no significant effect on income smoothing practices. The results of this study are in line with research conducted by (Cahyaningrat et al., 2018) [6] which states that NPM has no significant effect on income smoothing because companies with a high NPM level, the higher the level of sales obtained by the company and this indicates that the company's performance conditions are good so that management does not need to practice income smoothing. Fluctuations in NPM do not affect management in smoothing income because this variable emphasizes or focuses more on sales volume and cost efficiency, the company's profits from sales are used more to pay the company's debts than to increase its capital and investors tend to pay more attention to net profit information generated from each asset value (asset) owned by the company rather than net profit information generated from each company's operating activities or sales information so that management is not motivated to do income smoothing through NPM (Artawan et al., 2020) [7]. Therefore, NPM has no effect on income smoothing in banking companies listed on the Indonesia Stock Exchange in 2019-2021.

4.5.2 The Effect of Financial Leverage on Income Smoothing

In this study, financial leverage proxied by debt to asset ratio (DAR) has no effect on income smoothing. The results of this study are in line with research conducted by (Tsuroyya & Astika, 2017) which states that financial leverage has no effect on income smoothing. This shows that the high and low levels of financial leverage have no effect on income smoothing. Companies with a high level of financial leverage will cause investors to pay more attention and be tighter in supervision, because when the company has high financial leverage it will have an impact on investors with the thought that the company will be faced with the risk of inability to pay its debts, tighter

supervision will be able to reduce improper behavior by management, this causes the company to be difficult to practice income smoothing (Yudistira, 2022). Then the financial leverage has no effect on income smoothing because debt is no longer a reason for a manager to take income smoothing actions because companies are more advanced by providing reserve funds to finance their operational costs (Sulistiawan et al., 2011). Therefore, financial leverage has no effect on income smoothing in banking companies listed on the Indonesia Stock Exchange in 2019-2021.

AUTHORS' CONTRIBUTIONS

Based on the tests and research results that have been carried out, the conclusions in this research are as follows: Return on Assets has a positive effect on income smoothing in banking companies listed on the Indonesia Stock Exchange (BEI) in 2019-2021. Net profit margin has no effect on income smoothing in banking companies listed on the Indonesia Stock Exchange (BEI) in 2019-2021. Financial Leverage has no effect on income smoothing in banking companies listed on the Indonesia Stock Exchange (BEI) in 2019-2021. It would be better for future research to use a larger sample with different company sectors and a longer time span so that the test results are more accurate. Apart from that, testing other variables which are thought to influence the practice of income smoothing, such as bonus plans, dividend payout ratio, financial risk, company value and others which also influence income smoothing.

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