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Profitability Effect on Smoothing of Income with Size of Firm as Moderating Variable in Manufacturing Corporates

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ABSTRACT

Empirically, this research examines the effect of profitability on income smoothing practices with the moderating variable of firm size in the manufacturing industry during the 2017 – 2019 period which is listed on the Indonesia Stock Exchange. 75 data used in this research were selected 225 data using purposive sampling method with a total during the research period. Financial statements are the data used in this research. Econometric view software (EViews) version 10 was used to process the data. The results showed that net profit margin had a significant positive effect on income smoothing practices, return on equity had a significant negative effect. Moderating variable Firm size has no significant effect on the relationship between net profit margins and income smoothing practices as well as on the relationship between return on equity and income smoothing practices.

Keywords: *Income Smoothing, Firm Size, Net Profit Margin, Return on Equity*

1. INTRODUCTION

Financial statements are a measurement tool and information that is quite accurate for investors to make decisions on their investment in the capital market in Indonesia. The financial report of a corporate is a very important and useful aspect for stakeholders or shareholders where this financial report can provide data and information about the prospects of a corporate. There are many techniques in earnings management, for example: *taking a bath, income minimization, income maximization, and income smoothing* (Sari dan Kristanti, 2015) [1].

Suwito dan Arleen (2005) [2] To reduce fluctuations in reported earnings to match the desired target, both through accounting methods and management transactions using the income smoothing. Income smoothing is important, especially because this practice can lead to dysfunctional behavior that arises as a result of conflicts that arise between parties who have an interest in the corporate's financial statements. In analyzing the financial statements of a corporate to see how well the performance of a corporate can use financial ratios. Return on equity is a profitability ratio that shows how well a corporate manages its own capital effectively. The greater the return on equity owned by a corporate, the better the corporate's performance. In addition, the net profit margin (NPM) reflects the level of the corporate's ability to generate the expected net profit from the level of sales, both ratios are related to income smoothing.

Income smoothing has become a problem that often occurs even from small to large businesses, from within the country and abroad. In general, small corporates tend to take income smoothing practices because the management wants to gain the trust of creditors so they are not reluctant to provide loans. However, large corporates are also more likely to practice income smoothing because management knows that if the corporate's profits are high, it will attract the attention of regulators, especially the government, to carry out policies on the corporate so that management tends to minimize profits.

1.1. Related Work

1.1.1. Agency Theory

Anthony and Govindarajan (2005) [3] argue that an agency relationship occurs when one party (the principal) hires another party (the agent) to perform a service and, performing it, delegates the authority to make a decision to the agent. In a corporation, shareholders are the principal and the CEO is their agent. Shareholders hire the CEO to act as they see fit in operating the corporate. Conflicts of interest between two parties, namely the management and the corporate owners or shareholders that arise because each party wants to achieve and maintain the level of prosperity of a corporate, they own can affect the practice

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of earnings management, especially income smoothing. In an agency relationship, in general, management will benefit more because they must have information asymmetry with respect to external parties from the corporate such as creditors and investors. This asymmetry occurs because the management has relatively more information about the corporate and gets that information faster than external parties from the corporate.

1.1.2. Positive Accounting Theory

Positive accounting theory is a theory that deals with how to respond to proposed new accounting standards and predict actions related to the choice of accounting policies by companies (Scott, 2014) [4]. According to Sari and Kristanti (2015) [1], This accounting theory is based that corporate owners or shareholders and management seek to optimize their functions, which are directly related to their compensation and prosperity in a corporate. One of the hypotheses put forward by Watts and Zimmerman (1990) [5] In order to be able to make an estimate in positive accounting theory regarding management motivation in managing earnings, this is the theoretical basis for this study, namely The Political Cost Hypothesis. When comparing large corporates with small corporates, they tend to prefer accounting methods that reduce their current year's profit. This is done because big corporates in general are often the attention of the government for inspections related to the possibility of abuse of power or regulations of certain officials and the monopolistic practices of these corporates.

1.1.3. Earning Management

Earnings management is the selection of accounting policies by managers to achieve specific objectives. There are two complementary ways of earnings management. First, see it as an opportunistic behavior of managers to maximize their utility in compensation, contracts, and political costs. Second, by looking at earnings management from another perspective where earnings management gives managers the flexibility to protect themselves and the corporate in anticipating events that should not happen for the benefit of the parties involved. However, earnings management itself is often concluded as something that is not good for management, so many definitions emphasize earnings management as an opportunistic behavior of management (Saiful, 2004) [6].

1.1.4. Income Smoothing

Income smoothing is an attempt to increase the amount of reported profit if the actual profit is smaller than normal profit and an attempt to reduce the amount of reported profit if the normal profit is smaller than the actual profit. (Oviani, 2014) [7]. In simple terms, income smoothing is an action that is intentionally carried out by managers using special tools in accounting to reduce fluctuations in earnings (Bora dan Saha, 2015) [8]. income smoothing can be through several dimensions of income smoothing, namely: (1) income smoothing through the occurrence or recognition of an event, (2) income smoothing through allocation over a certain period, (3) income smoothing through classification.

1.1.5. Return on Equity

Brigham and Houston (2006:91) [9] explained that return on equity is a ratio used to measure the rate of return on shareholder investment. According to Harahap (2007:156) [10] ROE is used to measure the return on investment of shareholders. This figure shows how well management is utilizing the investments of shareholders. Return on equity is one of the determining factors in determining the growth of a corporate's income level which is an indicator that reflects financial performance that is correlated with the earnings of the corporate concerned, so the lower the return on equity ratio, the more likely management is to practice income smoothing to show that management can manage source of funds effectively (Fuad, 2015) [11] dan (Sugiarti, 2017) [12].

1.1.6. Net Profit Margins

According to Hanafi and Halim (2009: 83) [13], net profit margins calculate the level of a corporate's ability to generate net profit at a certain level of sales. The ratio is interpreted as the ability of a corporate to reduce costs (efficiency measure) in a certain period. For investors, this ratio is used as a measure of how capable management is in managing the corporate and to take into account the level of profitability of the corporate in the future based on sales forecasts made by management. This proves that this ratio helps investors in making decisions and making good investment estimates.

1.1.7. Corporate Size

According to Suryandari (2012) [14], Corporates with a larger size and having a strategic industry are more likely to practice income smoothing because the corporate's activities are known and get great attention in the eyes of investors, the government, and the public. Corporate size is a scale that provides an overview of the size of the corporate where the size of the corporate is measured by the total value of assets owned by a corporate (Machfoedz, 1994) [15]. According to Denziana and Monica (2014) [16], corporate size is an indicator that shows a corporate's financial strength by using corporate assets as capital and as market capitalization so that the corporate can be recognized by the public. This theory is in line with the political cost hypothesis in positive accounting theory which says that large corporates tend to manage profits, one of which is decreasing income when obtaining high profits to avoid government regulation. This theory supports the statement that large corporates tend to practice income smoothing.

1.1.8. Return on Equity Related with Income Smoothing

Corporates that have a low return on equity ratio tend to practice income smoothing, when their low return ratio proves that the corporate is not reliable in managing the capital that has been received from an investor's investment which for sure will make investors think again to invest their funds because of performance. the corporate in managing its capital is very bad. This theory is supported by several studies, Siregar (2015) [17] and (Fuad, 2015) [11] stated that the return on equity variable had a significant negative effect on the practice of income smoothing, but this study was refuted by study conducted by (Sholikhah and Worokinasih, 2018) [18] also (Sugiarti, 2017) [12] in this study shows that return on equity has no significant effect on income smoothing practices.

1.1.9. Net Profit Margins Related with Income Smoothing

Net Profit Margin is the ratio between net profit and sales. The greater the NPM, the more productive the corporate's performance will be, so that it will increase investor confidence to invest in the corporate. This can be interpreted with the aim of gaining investor confidence, management will not hesitate to practice income smoothing to achieve this goal, so it can be concluded that net profit margins have a significant effect on income smoothing. the study results of Joseph, et al. (2016) [19] stated that NPM has a significant positive effect on income smoothing. This is because the high NPM value occurs due to a high net income. However, this statement is refuted by study from Astuti (2013) [20] which says that net profit margins have no significant effect on income smoothing.

1.1.10. Return on Equity Related with Income Smoothing with Corporate Size as A Moderating Variable

Suryandari (2012) [14] which says that corporates with a larger size and have a strategic industry are more likely to practice income smoothing because the corporate's activities are known and receive great attention in the eyes of investors, the government, and the public. Because it gets the attention of investors, the corporate wants to provide a good performance report to attract their interest and one way is to display a stable and profitable rate of return or return on equity for investors. This is also supported by Siregar (2015) [17], which says that the effect of return on equity can be moderated by corporate size.

1.1.11. Net Profit Margins Related with the Smoothing of Income with Firm Size as A Moderating Variable

There is a close relationship and common goal between corporate size and net profit margins on income smoothing. According to Siregar (2015) [17], corporate size has a significant effect on the relationship between net profit margins and income smoothing. This shows that the larger the size of a corporate, the greater its net sales, the higher the possibility for corporates to practice income smoothing because in accordance with positive accounting theory, it proves that a large corporate size will be the center of attention for investors, the government, and the local community.

1.1.12. Hypothesis

Based on all the explanations above, the framework of this study will be described as follows:

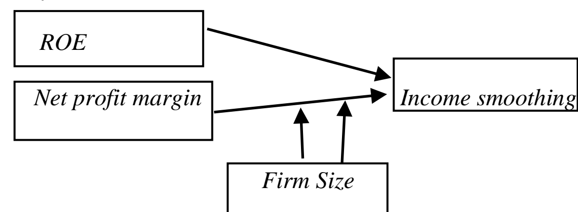

Figure 1 Research Framework

The hypotheses of this study were formulated as follows:

H_1 : Return on equity/ROE has a significant negative effect on the practice of income smoothing.

H_2 : Net profit margins have a significant positive effect on the practice of income smoothing.

H3 : Firm size has a significant positive effect on the relationship between return on equity and income smoothing practices.

H4 : Firm size has a significant positive effect on the relationship between net profit margins and income smoothing practices.

1.2. Our Contribution

Empirically, this research examines the effect of profitability on income smoothing practices with the moderating variable of firm size in the manufacturing industry during the 2017 – 2019 period which is listed on the Indonesia Stock Exchange. 75 data used in this research were selected 225 data using purposive sampling method with a total during the research period. Financial statements are the data used in this research. Econometric view software (EViews) version 10 was used to process the data. The results showed that net profit margin had a significant positive effect on income smoothing practices, return on equity had a significant negative effect. Moderating variable Firm size has no significant effect on the relationship between net profit margins and income

smoothing practices as well as on the relationship between return on equity and income smoothing practices.

1.3. Paper Structure

The methodology of this study is quantitative study with secondary data obtained from the Indonesia Stock Exchange in the 2017-2019 period. The sample selection, the method used is purposive sampling, namely manufacturing corporates with the criteria of 1) The period 2016 – 2019 for Manufacturing corporates listed on the Indonesia Stock Exchange. 2) Using the Rupiah currency value in their financial statements. 3) No loss from 2016 – 2019. 4) No Initial Public Offering (IPO), delisting, relisting period 2016-2019. 5) Using the financial year end of December 31. The total number of valid samples is 75 corporates and within a period of 3 years, 225 samples are collected.

2. METHODS

In this study using statistical descriptive tests, Coefficient of Determination Test (R2 McFadden), Test of Likelihood Ratio (LR Test), Test of Z Statistics and Test of Logistic Regression. Operational variables and measurements used are:

Table 1 Operational and Measurement Variables

Variable	Dimention	Formula	Scale
Variabel Dependen			
Income smoothing	Indeks Eckel	$\frac{CV\Delta I}{CV\Delta S}$ The Income smoothing index for non-income smoothing corporates is ≥ 1 , while for the profit averaging corporate is < 1.	Nominal
Independen Variable			
Return on equity	ROE	$\frac{Net\ income\ after\ tax}{Total\ equity}$	Rasio
Net profit margins	NPM	$\frac{Net\ income\ after\ tax}{Net\ sales}$	Rasio
Firm size	FS	$Ln\ Total\ assets$	Rasio

3. FINDINGS AND DISCUSSIONS

Descriptive statistical tests of 225 data that have been carried out, the income smoothing variable has an average value (mean) of 0.533333. This shows that the average income smoothing corporate sampled in this study has a value of 0.533333. The maximum of this variable is 1,000,000. The minimum value of this income smoothing variable is 0.000000. This variable has a standard deviation of 0.5000000. This shows the high distribution of the data in this study.

The return on equity variable has an average value (mean) of 0.147842. The maximum value (maximum) of this variable is 2.244585. The minimum value of this variable is -0.186627. The standard deviation of this variable is 0.242184, that indicates that the distribution of the data in this study can be said to be not too high.

The variable net profit margins hve an average value (mean) of 0.080584. The maximum value (maximum) of this variable is 1.900987. The minimum value of this variable is 0.000455. The standard deviation of this variable is 0.138898, which indicates that data distribution in this study can be said to be not too high.

Firm size variable in this study has an average value (mean) of 28,75190. The maximum value of the firm size variable is 33,49453. The minimum value of this variable is 25,21557. The standard deviation of the firm size variable is 1.539557. That means the distribution of data on this variable is fairly wide.

Table 2 Test Results with using Moderation of Logistics Regression Analysis

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-3.338742	6.070220	-0.550020	0.5823
ROE	69.63144	40.87360	1.703580	0.0885
NPM	-59.74817	80.93307	-0.738242	0.4604
FIRM_SIZE	0.143149	0.216792	0.660303	0.5091
MODERATE_ROE	-2.820736	1.455065	-1.938564	0.0526
MODERATE_NPM	2.455521	2.881935	0.852039	0.3942

McFadden R-squared	0.106432	Mean dependent var	0.533333
S.D. dependent var	0.500000	S.E. of regression	0.472204
Akaike info criterion	1.288107	Sum squared resid	48.83181
Schwarz criterion	1.379203	Log likelihood	-138.9120
Hannan-Quinn criter.	1.324874	Deviance	277.8241
Restr. deviance	310.9155	Restr. log likelihood	-155.4577
LR statistic	33.09141	Avg. log likelihood	-0.617387
Prob (LR statistic)	0.000004		

Based on the test results in the table above, the regression equation without moderation used for this study is as follows:

$$ln\left[\frac{Pis}{1-Pis}\right]=-3.338742+69.63144X1-59.74817X2+0.143149Z-2.820736X1.Z+2.455521X2.Z+\varepsilon$$

Based on the regression results, the return on equity moderated by firm size has a negative effect of -2.820736 and is not significant with probability of 0.0526 on income smoothing, judging from the test results, the third hypothesis (H3) which says that the size firm has a negative effect on the relationship between returns on equity (ROE) with income smoothing practice is unacceptable.

Net profit margins moderated by firm size have a positive effect on income smoothing with a coefficient of 2.455521, but not significant with a probability of 0.3942. Based on the results of this study, the fourth hypothesis (H4) which states that firm size has a positive effect on the relationship between net profit margins (NPM) and income smoothing practices cannot be accepted.

The results of hypotheses 3 and 4 indicate that this result is inversely proportional to the political cost hypothesis theory in positive accounting theory because the results explain that firm size has nothing to do with the relationship between ROE and income smoothing or NPM with income smoothing.

Based on the results of this study, the proxied profitability (return on equity and net profit margins) is a suitable variable and is closely related significantly to income smoothing, seen from its function for the public and stakeholders, the value of these variables is expected to have a high value for profit for themselves. Profitability is a reflection of the corporate's performance itself, therefore management practices income smoothing to control fluctuations in profit flows, with stable profit fluctuations, the corporate's performance looks good and has guaranteed business continuity. The size of the corporate cannot be a reference whether it is able to strengthen or weaken the relationship between return on equity and margins net profit with income smoothing practices. Large corporates do not indicate that they have high profitability, there are other factors that have a significant influence, such as management skills.

4. CONCLUSION

In this study, it still has several limitations, among others, the first is the relatively short study observation period, the second population is limited to only manufacturing corporates listed on the Indonesia Stock Exchange, the third is that there are only 75 corporates that meet the criteria, lastly this study only uses 2 variables. independent, namely net profit margins (NPM) and return on equity (ROE) whereas both variables belong to profitability, and these variables are widely used in previous study studies. Further studyers can expand the sector under study. Secondly, they can add independent variables or replace moderating variables, finally adding a

longer observation period so that the study results obtained are more accurate.

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