

Financial Ratio and Company Characteristics Effect on Earnings Management

Vienna Marchellina¹, Friska Firnanti^{1*}

¹*Trisakti School of Management, Jakarta, Indonesia*

^{*}*Corresponding author. Email: friska@stietrisakti.ac.id*

ABSTRACT

This research aimed to acquire an empirical evidence regarding the effect of growth, financial leverage, fixed-asset turnover, profitability, firm size, firm age, audit quality, board independence, and managerial ownership as independent variables, on earnings management as a dependent variable. This research uses non-financial companies listed in Indonesia Stock Exchange (IDX) during 2016 to 2018 as population. Samples for this research were obtained through purposive-sampling method, in which 516 non-financial companies with 354 data were taken as samples. Multiple linear regression and hypothesis tests were used as data analysis method in this research. The results show that growth positively affects earnings management. This indicates that companies experiencing higher growth tends to improve earnings management practice. Meanwhile, the other variables do not have effect on earnings management.

Keywords: *Earnings Management, Financial Ratios, Audit Quality, Board Independence, Managerial Ownership*

1. INTRODUCTION

In recent decades, earnings management remains a problem in the company to be solved and reduced. Especially, in this era of globalization, the competition among companies become more stringent and inevitable. Newcomers in the industry do not only lead many innovations in goods but also create threats for the company's business. This competition spawns those companies to have well-developed firm characteristics in order to enhance their reputations. Besides a good firm characteristic, a favorable firm is measured by the good performance financial ratio as an indicator for other related parties (investors) in making decision and becomes the investor's knowledge about the company. However, the uncertainty in economic condition and competition in the market nowadays are making the management business activities to result in lower profit and bad financial reports. This provokes management to alter the financial data and change the accounting method for making a "delightful" financial report in order to attract related parties.

To help the company minimize earnings management, companies applied good corporate governance mechanism. Corporate governance mechanisms can be a tool for monitoring company performance and providing advice or suggestion for the management to carry out operational activities properly and not deviate from the company's vision [1]. But also, some studies say that some corporate governance factors also affect earnings management, like [2].

2. LITERATURE REVIEW

Earnings management becomes such a critical matter if it is not handled properly and supervised carefully. Many cases of earnings management occurred as resulted in distrust of other related parties on the financial statement. Earnings management can exist in 3 ways: (1) Structuring certain revenues and / or expense transactions; (2) Changing the accounting procedures; (3) Managing accruals [3]. Earnings management may be conducted by changing the accounting methods and estimates that affects the accounting number in financial statements [4]. This could happen because management is given the flexibility to apply any policy in using the accounting methods based on the accounting standard to deliver information about the company's performance to external parties and the flexibility to use judgement in arranging the accounting estimates. This right may result in creating or changing the accounting number which is presented in the financial statements.

One method that is mostly used by managers to manage the earnings in financial reports besides changing the accounting procedure is by the accrual management. Accrual accounting is an instrument between interested parties that gives company's management the opportunity to intervene in the preparation of financial statements. Accrual accounting changes how financial statement information is presented so that it may not be similar to the actual situation of the company [5]. There are three hypotheses that form the basis of motivation for managers to conduct earnings management [6]. Those are bonus plan hypothesis, debt-or-equity hypothesis, and political cost hypothesis.

2.1. Agency Theory

The agency relationship can be defined as a contract between the manager (called as agent) and the owner of the firm (called as principal). An agreement (called as nexus of contract) in the agency relationship containing one of the agent's aims, is to perform the service to increase the principal's wealth [7].

However, human nature cannot be denied, in which every human has his or her own goal. And usually, they all want to achieve their goals by themselves. The principals and the agents want to maximize their utility. The agents tend to maximize their own interest or profit they get. On the other hand, the principals want the company to grow according to their interest. And it becomes a good reason to believe, that the agent will not always act in the best interests of the principal because of the agency conflict [7]. Thus, it is necessary for the principal to make sure that the manager's decision leads to increase the shareholders' wealth and all information disclosed are accurate and transparent. Another cause arising the agency conflict is the information asymmetry whereas the information differences between principal and agent result in the manipulated financial statement [8].

2.2. Growth

Company growth shows the company's ability to maintain business continuity and the value of company from the time it was established to present time [9]. One measure of company growth is the asset growth [10]. If the company's asset grows consistently, then investors will tend to trust their funds to be invested in the company. In case the company has low of asset growth, investors will look at the profit side. One of the management's efforts to keep the company's profits stable from year to year and convince investors to keep investing their funds into the company, is the use of earnings management strategy. This shows that company experiencing growth tends to raise profit with the aim of attracting the attention of investors to keep investing their funds in the company. The bigger the development of the company is, the more likely the company will carry out the earnings management. Therefore, the first hypothesis was developed as follow:

H₁: Growth has an effect on Earnings Management.

2.3. Firm Financial Leverage

The ratio between total liabilities and total capital of the company is called leverage [11]. The higher the leverage ratio is, the higher the value of corporate debt will be. Earnings management may be conducted by companies with high leverage ratios [12], because the company who have distress in obtaining additional funding from the creditors and even is threatened that it cannot meet the debt payment obligations on time, will try to beautify their financial statements displayed. Management will act to increase the accrual income to avoid contravention of the debt limit and provide a relatively better bargaining position

in the negotiation or rescheduling of the company's debt. The high leverage owned by the company is in line with the motivation of managers to manage the earnings. The company will hope to show its best face to investors. Therefore, the second hypothesis was developed as follow:
H₂: Financial Leverage has an effect on Earnings Management.

2.4. Fixed-Asset Turnover

Fixed-asset turnover is a measure to see the extent to which the fixed assets owned by a company have an effective turnover rate and have an impact on the company's finances. Fixed-asset turnover ratio can reflect the efficiency of long-term investment which is used to generated profit to the company [9]. When the fixed-asset turnover ratio is reflected in small amount, it indicates that the company is not able to capitalize its fixed asset as well. So, the company "delights" their financial statements to improve the management performance, as well as to generated the higher fixed-asset turnover. The high company's fixed asset turnover makes the company try to manage its earnings. Therefore, the third hypothesis was developed as follow:

H₃: Fixed-Asset Turnover has an effect on Earnings Management.

2.5. Profitability

Profitability is the company's ability to earn profits derived from the assets or capital owned [13]. Because profitability shows the management's ability to manage profits, companies that earn big profits will struggle to maintain and increase the amount of earnings in addition to providing benefits for the company and investors [14]. The Bonus Plan Hypothesis theory states that when the company profit is under the requirements of actual performance for bonuses, then the management try to increase its profit by beautifying their financial statements in term to reach the minimum level of bonus rules [6]. In the opposite, when in a year the manager's performance results in a great number, managers will modify the reporting of earnings to be not too high. Therefore, the fourth hypothesis was developed as follow:

H₄: Profitability has an effect on Earnings Management.

2.6. Firm Size

Total assets, total sales, market value of stock, and others are several methods used to classify the size of a company [15]. One of motivation to conduct earnings management is to lower the political cost. Based on the agency theory, large firms witness higher agency cost, which means more opportunistic practices [7]. In the size hypothesis, the larger companies' profitability is supposed to choose an accounting method that can reduce the earnings, with the aim to reduce the political cost, to avoid the government's actions in implementing more regulations that can decrease

the company's revenue [16]. Therefore, the fifth hypothesis was developed as follow:

H₅: Firm Size has an effect on Earnings Management.

2.7. Firm Age

Firm age is used to show that a company can survive and compete in the economy of a country with others. A company that has been in the market for long period (well known) tends to have low earnings management than does a newer company [17]. An older company has a high value in the market and a reputation to protect. It is also aware of the codes of conduct and rules that govern its daily practices. Because an older company has a strong reputation to protect and try to enhance it, it has less tendency to conduct the earnings management. The older the company is, the less likely it will carry out the earnings management. But this has a different sight for a newer company that just begins in the industry and try to win the business competition. Therefore, the sixth hypothesis was developed as follow:

H₆: Firm Age has an effect on Earnings Management.

2.8. Audit Quality

Audit quality is fundamentally linked to the auditors' attributes of competence and independence. High quality audit has a higher probability to detect and report errors and irregularities in a company [17]. By being audited by The Big 4 Public Accounting Firm, a company is less likely to perform earnings management. The study by [18] found that audit quality doesn't affect the discretionary accruals. Thus, there is no difference in audit quality between the Big Four and non-Big Four Public Accounting Firms in limiting and reducing the earnings management practices. Therefore, the seventh hypothesis was developed as follow:

H₇: Audit Quality has an effect on Earnings Management

2.9. Managerial Ownership

According to [19], managerial ownership is the proportion of shares owned by the Board of Directors and Commissioners [19]. Managerial ownership is a controlling mechanism which can be done by shareholders to reduce earnings management. Managerial ownership is also perceived as the shares owned by management. If the shares owned by company's management is in high level, it will motivate the management to improve its performance to earn profits and not by practicing the earnings management, because the shareholders also want a tangible return from the company's performance [1]. With managerial supervision, it is hoped that it can suppress the management's desire to carry out earnings management. Therefore, the eighth hypothesis could be developed as follow:

H₈: Managerial Ownership has an effect on Earnings Management.

2.10. Board Independence

Board independence is the independent members of commissioners who are not affiliated with the management, other members of the Board of Directors, and controlling shareholders, as well as not having business and other relationships that can affect their ability to act independently and as the representative of minority interest [13]. With the independent control exercised by board independence, the management will be more reluctant to carry out earnings management. So, board independence is expected to reduce the earnings management practice in a company. Therefore, the ninth hypothesis was developed as follow:

H₉: Board Independence has an effect on Earnings Management.

3. RESEARCH METHOD

This research object is non-financial companies listed in the Indonesia Stock Exchange (IDX) during 2016 - 2018. The population of this research was taken from all non-financial companies listed in the IDX between 2016 and 2018 that excluded the financial institutions because of their specific and different corporate governance and disclosure requirements. The sample was selected using the purposive-sampling method. The criteria for the research sample are: 1) Published the financial statements and annual report as of December 31st in IDR; 2) Earned profits consistently from 2016 to 2018 and has managerial ownership consistently from 2016 to 2018. Through the criteria above, 118 companies were used as samples in this research, whereas multiple linear regression and hypothesis tests became parts of data analysis process.

Earnings management is every action taken by managers that can affect the reported earnings [5]. In this research, earnings management was measured by the use of discretionary accruals and applied Modified Jones as a continuation from the previous research conducted by [17] as displayed below:

$$TACC_{it} = Niit - OCF_{it} \quad (1)$$

$$TACC_{it}/Ait-1 = \beta_1 (1 / Ait-1) + \beta_2 (\Delta REV_t / Ait-1) + \beta_3 (PPE_t / Ait-1) + e \quad (2)$$

$$NDACC_{it} = \beta_1(1 / Ait-1) + \beta_2 (\Delta REV_t / Ait-1 - \Delta REC_t / Ait-1) + \beta_3 (PPE_t / Ait-1) \quad (3)$$

$$DACC_{it} = TACC_{it} / Ait-1 - NDCCA_{it} \quad (4)$$

Company growth shows the company's ability to maintain business continuity and the value of company from the time it was established to present time [9]. In this research, the variable of growth was represented by the change in company's total asset compared to the base-year amount [10]. Financial leverage is a ratio between total liabilities and total capital of the company. The variable is measured by dividing total debts by total assets [17].

Fixed-asset turnover is a ratio to measure the efficiency of long-term capital investment in a company [9]. Fixed-asset turnover reflects the ability of management to capitalize the company's assets as best as possible in the efforts to generate profit through sales. The measurement of this variable is defined as sales divided by fixed assets. Profitability is a ratio to measure the company's ability to obtain profits during a certain period or year. The profitability variable in this research was adapted by the previous research conducted by [5], which is the Return-on-Assets (ROA). Return-on-Assets measures the effectiveness of management to capitalize the best of assets in order to generate profits [5]. The higher the profits are, the more effective the assets are used.

Firm size is the size of a company, either it is small or large [20]. This variable can be measured by calculating the natural logarithm of total asset. Firm age is a variable that shows how long the firm has been in the market. Old firms tend to have low earnings management than do firms that only exist in the market for a short-time [17]. This research uses the measurement from previous research [17], in form of natural logarithm in the number of years since the firm was firstly established.

Audit quality is used to determine if the financial statements have high credibility to be a tool for making the right business decisions. Audit quality is measured by the proxy of the size of company that auditors work for, which is differentiated as the Big-Four Public Accounting Firm and the non-Big-Four Public Accounting Firm. In this research, this variable is in form of dummy variable, which is an indicator with the value of "0" if audited by the non-Big-Four Public Accounting Firm, and "1" if audited by the Big-Four Public Accounting Firm.

Managerial ownership is the proportion of shares owned by Board of Directors and Commissioners. Managerial ownership is a controlling mechanism which can be done by shareholders to reduce the management profits [19]. This research used a proxy in accordance with the research conducted by [19], in which managerial ownership is measured by the number of shares held by the directors and commissioners divided by outstanding shares.

Board independence or a Board of Commissioners is a group of people chosen or appointed to oversee the activities of a company or organization [13]. Board Independence is measured by the independent members of Board of Commissioners divided by total member of Board of Commissioners.

4. RESULTS

The growth variable influences earnings management. In this research, growth positively affects earnings management, which means that the higher level of growth shows the higher level of earnings management, because a company that experiences high growth tends to have more capital for their business and try to make their growth stable. One of proxies for growth is total asset. If a company's asset grows consistently, then investors will tend to trust their funds to be invested in the company [21].

The leverage variable does not influence earnings management. This is likely because of the amount of debt that can be confirmed in the audit process making the company's management unable to perform earnings management, and companies who has greater capital from loans, will be monitored more strictly by creditors, so it will be difficult for the company to conduct earnings management. The fixed-asset turnover variable does not influence earnings management, because fixed-asset turnover does not reflect all earnings that the company gets from sales to generate profit in conducting earnings management.

The profitability variable does not influence earnings management. This is due to the investors who invest not only to pay their attention to the company's profit. They know that the earnings listed in the income statement are accrued values that can be managed by the company's management. Other results indicate that there are other reasons and objectives in carrying out the earnings management [12]. Firm size does not influence earnings management. Large companies have stronger internal control and governance, so it can lower the information asymmetry in the companies. Large firms also have good reputation that attract investors and it results in the management that avoid conducting the earnings management practices.

The firm age variable has no influence on earnings management. It seems possible for companies that have been established long time ago to have a good and strong reputation, as it will attract the investors easily to get more capital than to perform the earnings management actions [4]. Besides, it can also be interpreted that companies that are just starting to operate are not recognized to be more aggressive in performing earnings management in order to avoid earnings losses.

The audit quality variable does not influence earnings management. This could happen due to both auditors from Big-Four and non-Big-Four Public Accounting Firm have limitation regarding the information in financial statements. They only audit the annual financial statements according to the auditor standard. Thus, the existence of the Big-Four or non-Big-Four Public Accounting Firm is unable to suppress the possibility of earnings managements practices [13].

The managerial ownership variable does not influence earnings management. This is due to the managers and shareholders are in the same level, as managers having ownership in the company tend to make decision like shareholders to increase the company's performance. Probably due to whatever number of shares owned by the company's management does not affect the occurrence of earnings management practices, because the managerial ownership in Indonesia on average is less than 5%. This causes the managers owning the company's shares, tend to make the policy to manage earnings with the viewpoint of investors' desire, one of which is by increasing the reported profits to attract more investors to invest and increase the company's stock price. Low managerial ownership also causes the company's management having the ownership to be unable to influence the policies, especially in terms of

the integrity of the company's financial statements. Thus, the size of managerial ownership in a company does not affect the likelihood of earnings management actions.

The board independence variable does not influence earnings management. It means that companies having large or small number of independent commissioners still have the possibility to conduct earnings management practices due to the appointment of independent commissioners is only done to meet the regulations and the provision that it has to be least 30% of the total commissioners, as this percentage is not high enough to dominate the policy-making, so the supervision will not be effective.

Independent commissioners also cannot limit the earnings management practices carried out by the management. There are other reasons such as independent commissioner does not have the integrity to be independent, and independent commissioner is selected by Board of Directors that may not have independent treats.

This research hypothesis-test results can be seen in Table 1 below.

Table 1 Hypothesis-Test Results

Variable	Coefficient	Sig.
(Constants)	-0.010	
Growth	0.100	0.000
Leverage	-0.041	0.073
Fixed-Asset Turnover	-2792E-6	0.943
Profitability	0.082	0.192
Firm Size	0.002	0.594
Firm Age	-0.009	0.636
Audit Quality	-0.018	0.069
Managerial Ownership	-0.002	0.954
Board Independence	-0.039	0.321

Source: Data Analysis Results (2020)

5. CONCLUSIONS

This research was conducted to get an empirical evidence about the effect of growth, financial leverage, fixed-asset turnover, profitability, firm size, firm age, audit quality, board independence, and managerial ownership on earnings management among non-financial companies listed in IDX from 2016 to 2018. Based on the hypotheses-tests, this research concludes that growth significantly affects earnings management, while the other variables do not. The financial development of the company during the Covid-19 pandemic will eventually enlarge and encourage the management's desire to carry out earnings management. The impetus for this case is because it can help companies to smooth its earnings and still be able to survive in difficult times.

This research also has some limitations, which are: 1) The period of this research is considered short, which consist of three years from 2016 to 2018; 2) The firms in this research are only in the non-financial sector that used the independent variables which could not explain the effect towards earnings management.

Based on the research limitations, suggestions for further research are: 1) Lengthen the period of research to get more accurate results; 2) Enlarge the sample data that includes the financial companies and other sectors listed in IDX in order to get more accurate results; 3) Replace other independent variables that are expected to have the effects on earnings management, such as Free-Cash-Flow (FCF).

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