The Influence of Green Management, Stock Market Segmentation, Operating Cash Flow and Company Characteristics on Profit Management

Nico Valentino1

2042028_nico@uib.edu

1Batam International University, Business and Management,

ABSTRACT

The study examines the impact of green management, stock market segmentation, operating cash flows, and firm characteristics on earnings management. Earnings management is measured using the modified Jones Model. The study employs purposive sampling and includes 86 companies listed on the Indonesian Stock Exchange between 2018 and 2022. There are 285 observations used to test the hypothesis using the panel regression method.

The research findings indicate that green management has a positive effect on profit management, whereas corporate size has an adverse effect. However, factors such as stock market segmentation, operating cash flows, return on assets, and dividend yield do not have a significant impact on profit management. These findings indicate that companies implementing green management systems are more likely to uphold their reputation by generating higher income.

Keywords: Earnings Management, Green Management, Stock Market Segmentation, Operating Cash Flows, Firm Characteristic

INTRODUCTION

Earnings management is management's deliberate attempt to manipulate financial statements within the limits permitted by accounting principles. Earnings management practices can cause information disclosure in financial reports to not reflect actual conditions (Riswandi & Yuniarti, 2020). Earnings management is one of the most important topics that attracts great interest in business research because of the negative impacts it produces, such as publishing financial reports that are detrimental to economic decision makers (Humeedat, 2018; Tang & Fiorentina, 2021).
Recent years have seen several accounting scandals, mainly due to the manipulation of figures provided in financial reports (Yasser & Soliman, 2018).

Green management influences a company’s environmental performance. This influences the sustainability of the organization by saving resources due to promoting sustainable products. Green Management is a strategy that influences social change and allows companies to innovate, save costs, and have a competitive advantage. Meanwhile, environmental issues are interesting because they influence organizational performance. Earnings management practices are more common in the industrial sector because they manipulate and increase profits (Suripto et al., 2022).

In recent years, there has been increasing attention to the adoption and implementation of strategic decisions with high social and environmental impacts among companies, investors and capital market players. The topic of sustainable development is typically conceptualized at a macro-economic level and is based on three distinct principles generally known as the three pillars of sustainability: environmental integrity, economic prosperity, and social equality (Grimaldi et al., 2020). Corporate social and environmental responsibility is also increasingly receiving attention from regulators, market players, the public and the media (Santi Yopie, & Robin, 2023; Anita & Amalia, 2021; Wati & Malik, 2021).

The Financial Services Authority (OJK) issued Regulation Number 51/POJK.03/2017 concerning the Implementation of Sustainable Finance for Financial Services Institutions/LJKs, Issuers and Public Companies. Article 10 regulates that (1) LJKs, Issuers and Public Companies are required to prepare a Sustainability Report which is prepared separately from the annual report or as an inseparable part of the annual report. The Sustainability Report must be submitted to the OJK every year no later than the applicable annual report submission deadline for each LJK, Issuer and Public Company. Public company Sustainability Reports were first required to be submitted for the reporting period January 1 to December 31 2020. The disclosure initiative underscores the unprecedented growth in socially and environmentally responsible investing over the last twenty years (Grimaldi et al., 2020).

When running a company, it is very important to pay attention to environmental issues, especially mining and oil companies whose industrial activities explore natural resources. Continuous exploration activities can have a negative impact on the environment if there is no prevention and good handling (Evita & Syafruddin, 2019; Itan, Laudeciska, Karjantoro, & Chen, 2023). This phenomenon is important to study because the oil industry is one of the most important basic industries that supports other industries as an energy supplier (Mela & Putra, 2020).

The company issues restricted shares in a segmented market so that they can only be held by local citizens and unlimited shares that can be held by local and foreign investors. Various studies have found that unrestricted shares trade at a premium compared to restricted shares (Sun & Tong, 2000). One of the factors that can
influence sales in business is market segmentation due to the increasingly complex behavior or attitudes of consumers towards service products, especially tastes which are always changing. By understanding market segmentation conditions, it is hoped that companies can develop effective marketing strategies to continue to attract as many consumers as possible so that they can have a positive impact on the company’s performance. If a company does not divide a market into meaningful segments or groups, then the increase in sales volume will not be as we expected.(Gea, 2022). Geographical segmentation is usually used in market segmentation because considering that the market potential for a company's products can be influenced by market location where operating cost factors and the amount of demand from each region are different. For example Country, Region, Province, Regency and City(Luis et al., 2019).

Hastuti (2018) states that operating cash flow is an indicator of earnings management practices that can be detected. Where operating cash flow can provide a more complete view of the company's ability to create sufficient operating cash flow to cover liabilities, equity and asset purchase money. This shows that operating cash flow is more important to external parties than company income. They claim that operating cash flow is very important in assessing a company's credit and bankruptcy risks. Financing is one of the company functions that is important for the success of a company's business. This function is important because this function carries out efforts to obtain funds. Both large and small companies need funds to carry out their business activities. The funds needed can be obtained either through financing from within the company (internal financing) or financing from outside the company (external financing). The source of internal capital financing is the use of profits that are not distributed as dividends. External sources of financing are obtained by companies by making loans to other parties or selling their shares to the public in the capital market(Setyawan, 2020).

Based on the previous description, it can be seen that a lot of research on earnings management has been carried out, both in developed countries and in developing countries such as Indonesia. However, further studies are still needed to see the influence of green management variables, market segmentation, cash flow and company characteristics and performance on earnings management. Company characteristics in this case are indicated by company size, while performance is represented by return on assets (RoA) and dividend yield (DIYD).(Toumeh et al., 2020). Therefore, this research is entitled "The Influence of Green Management, Stock Market Segmentation, Operating Cash Flow, Company Characteristics and Performance on Profit Management".

**Profit management**

Nico.Valentino

ISSN: 2776-5644
Earnings Management is a partner accounting policy chosen by managers to win bound goals, personal interests, and company performance. This also prevents managers from breaching contracts that could affect them and the organization (Murniati et al., 2019, Santos-Jaén et al., 2021, Redaputri et al., 2021, Alexandri and Supriyanto, 2022).

**Green Management**

Achieving economic performance does not guarantee a sustainable company that needs to pay attention to ecological, environmental and social issues. Meanwhile, attention paid to social impact is becoming a strategic issue for organizations in ensuring long-term success. This is also a way to regulate the environment through certain methods (Assagaf et al., 2021).

**Stock Market Segmentation**

Stock Market Segmentation forms the division of the listing board into several segments based on the characteristics of the securities being traded, investors, or trading mechanisms. IDX Listing Board requirements depend on whether the company will be listed on the Main Board, Main Board-New Economy, Development Board, and Acceleration Board (Toumeh et al., 2020).

**Operating Cash Flow**

According to Banimadh and Aliabadi (2013), operating cash flow is a complete index for determining the performance of companies, analysts, investors, creditors and other stakeholders. The purpose of preparing an operating cash flow report is to provide relevant information regarding receipts and expenditures in a company for a certain period of time.

**Company Size**

Company size is a measure, scale or variable that describes the size of the company based on several provisions, such as total assets, log size, market value, total sales, shares, income, capital and others (Joe and Ginting, 2022).

**Return on Assets**

*Return on Assets* is the company’s ability to use total assets to generate company profits. This ratio is very important for company management to evaluate the effectiveness and efficiency of the company’s finances in managing the total assets it owns. The greater the Return on Assets results, the more efficient the use of company assets to generate company profits. (Rusdiyanto & Narsan, 2020)

**Dividend Yield**

Dividend policy can be used as a reason for managers to manage profits because it is determined by the GMS and not a management decision. This can create a conflict of interest between shareholders and managers. Conflict between management and
shareholders through dividend policy can cause managers to carry out earnings management to maximize the manager’s personal profits. (Padmini & Ratnadi, 2020)

RESEARCH METHODS

This research uses research objects in the form of non-financial companies listed on the Indonesia Stock Exchange (BEI) for the 2018-2022 period. The purposive sampling method was used to obtain samples so that 86 companies were obtained and a total of 430 data.

Discretionary accruals are part of total accruals that cannot be observed directly and can be easily manipulated by the company. They are used by managers to manipulate earnings by changing reported earnings between two fiscal periods. (Haykal, 2018) Discretionary accruals can be used to identify earnings manipulation which is considered a benchmark in earnings management. (Jamadar et al., 2021) Therefore, this study uses a modified cross-sectional Jones model to measure DAC as a proxy for earnings management. Two approaches are used to calculate total accruals: they are the balance sheet and the cash flow statement. The latter calculates total accruals as the difference between net income and cash flow from operating activities. However, the study uses a balance sheet approach rather than a cash flow approach because the latter does not include accruals related to the initial capitalization of property plant and equipment, which in turn makes it biased and incomplete. (Larson et al., 2018) Total accruals can be calculated as follows:

\[ TAC = NI - CFO \] (1)

where TAC is the total accruals of company i in period t (now); N is the net profit of company i in period t (now); CFO is the cash flow from the operating activities of company i in period t (now).

Then, a cross-sectional modified Jones model with constants is defined below to estimate non-discretionary accruals:

\[
\frac{\bar{u}_t}{TA_{t-1}} = a_0 + \hat{a}_1 \left( \frac{1}{TA_{t-1}} \right) + \hat{a}_2 \left( \frac{\Delta REV_t - \Delta REC_t}{TA_{t-1}} \right) + \hat{a}_3 \left( \frac{PPE_t}{TA_{t-1}} \right) + \varepsilon_t
\] (1)

where is the constant term; and and is alpha; is the total accrual in year t; is the lagged total assets; is the change in income between years t – 1 and t; is the change in receivables between years t – 1 and t; shows gross fixed assets in year t; and is an unspecified random factor. 

Nico.Valentino

ISSN: 2776-5644
\[ NDAC_t = \hat{a}_1 \left( \frac{1}{A_{t-1}} \right) + \hat{a}_2 \left( \frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right) + \hat{a}_3 \left( \frac{PPE_t}{A_{t-1}} \right) \]  
(2)

where \( NDAC_t \) is non-discretionary accruals divided by total lagged assets.

Finally, discretionary accruals will be estimated as follows:

\[ DAC_t = TAC_t - NDAC_t \]  
(3)

Green Management uses environmental, performance and disclosure management systems. The Green Management System is calculated using a dummy variable that assigns values of zero and one to organizations that do not have a certificate and those that are ISO 14001 certified. The Ministry of the Environment's Proper System helps in producing and maintaining certain communities for business. It is also measured using a proper system consisting of Gold (5), Green (4), Blue (3), Red (2), and Black (1).

Stock Market Segmentation is a great way to measure dummy variables. Then the dummy variable takes the value 1 if the company is listed on other markets (second and third markets), and 0 if the company is listed on the first market. This research includes the second and third markets as other markets for three reasons. First, both markets have no recording requirements with respect to revenue. Second, both markets have the same stock price threshold (± 5%). Third, the provisions of Article (29) of the Listing Guidelines for 2016 cancel the third market. (Toumeh et al., 2020)

Operating cash flow is a report that shows cash inflows and outflows related to company operations in a certain period. Operating cash flow is an indicator to determine whether the company's operational activities can generate sufficient cash flow to pay off short-term loans, maintain the company's operational capabilities and finance the company's operational expenses. Operating Cash Flow uses the formula: (Rizkiyana et al., 2022)

\[ CFO = \frac{Arus Kas Operasi}{Liabilitas jangka pendek} \]  
(4)

Company size is measured using the natural logarithm of the company's total assets with the formula from Fakhroni et al. (2018) as follows:

\[ CSIZE = \ln \text{Total Aset} \]  
(1)

\[ \text{Return on Assets} \] is considered to be the company's performance which this research uses as a control variable. Return on Assets in this research is calculated using the formula from (Karina & Sutandi, 2019) as follows:
Dividend Yields is a financial ratio that measures the percentage of a company's share price that is paid out in the form of dividends each year. Dividend Yield is an estimate of the dividend-only return from a stock investment, assuming dividends are not increased or decreased (Fernando, 2023). It shows how much return in percentage an investor gets by paying a certain fee for a stock using the formula:

\[
DIYD = \frac{Dividen Per Saham}{Nilai Saham}
\]

RESULTS AND DISCUSSION

Descriptive Statistics of Research Variables

Table 1. Descriptive Statistical Analysis

<table>
<thead>
<tr>
<th>Source: Data processed by Eviews 12</th>
</tr>
</thead>
</table>

Based on table 1 above, it can be described as follows: 1) Profit Management which can be seen that the minimum value of profit management is -41.63578 and the maximum value is 0.977545. The mean (average) value is -1.229026 and the standard deviation is 2.467416. 2) Green Management, which can be seen that the minimum green management value (ISO) is 0.000000 and the maximum value is 1.000000. The mean (average) value is 0.445614 and the standard deviation is 0.497908. 3) Green Management which can be seen that the minimum value of green management (PROPER) is 0.000000 and the maximum value is 4.000000. The mean (average) value is 0.575439 and the standard deviation is 1.206829. 4) Stock Market Segmentation which can be seen that the minimum value of stock market segmentation is 1.000000 and the maximum value is 2.000000. The mean (average) value is 1.547368 and the standard deviation is 0.498629. 5) Operating Cash Flow which can be seen is that the minimum value of operating cash flow is -532.1233 and the maximum value is 4.823288. The mean (average) value is -1.528813 and the standard deviation is 31.54774. 6) Company Size. It can be seen that the minimum
value of company size is 22.37663 and the maximum value is 33.65519. The mean (average) value is 28.0728 and the standard deviation is 1.954769.

7) Return on Assets which can be seen is that the minimum value of return on assets is -1.022523. and the maximum value is 2.071767. The mean (average) value is 0.022616 and the standard deviation is 0.193895.

8) Dividend Yield which can be seen is that the minimum dividend yield value is 0.000000 and the maximum value is 0.344023. The mean (average) value is 0.015088 and the standard deviation is 0.040765.

The results of regression testing on the variables studied can be seen in Table 2.

Table 2 Fixed Effect Model Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Prob.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>68.81771</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>GM_ISO</td>
<td>0.086744</td>
<td>0.9638</td>
<td>H1a is rejected</td>
</tr>
<tr>
<td>GM_PROPER</td>
<td>0.772640</td>
<td>0.0182</td>
<td>H1b is accepted</td>
</tr>
<tr>
<td>SMS</td>
<td>0.488219</td>
<td>0.8350</td>
<td>H2 is rejected</td>
</tr>
<tr>
<td>CFO</td>
<td>0.000441</td>
<td>0.9242</td>
<td>H3 is rejected</td>
</tr>
<tr>
<td>FIRMSIZE_LN</td>
<td>-2.541315</td>
<td>0.0000</td>
<td>H4a is accepted</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.281588</td>
<td>0.7166</td>
<td>rejected</td>
</tr>
<tr>
<td>DY</td>
<td>-2.784075</td>
<td>0.5483</td>
<td>H4c rejected</td>
</tr>
</tbody>
</table>

Adjusted R-squared = 0.280762
Prob(F-statistic) = 0.000000

Source: Data processed by Eviews 12

Based on the results of Table 2 above, it can be seen that the value of Adjusted R Square (\( R^2 \)) is 0.280762. This could mean that the independent variables, namely green management, stock market segmentation, operating cash flow, company size, return on assets and dividend yield have a role in explaining changes in earnings management variables of 28%, while 72% is explained by other factors not included in this research model.\( R^2 \)

Based on Table 2, the simultaneous significance test (F test) obtained a Prob (F-statistic) result of 0.000000 with a significance value smaller than 0.05. So it can be concluded that green management, stock market segmentation, operating cash flow, return on assets, company size, and dividend yield simultaneously have a significant effect on earnings management.

From Table 2, the above can be explained as follows: (1) The results of the direct influence test in Table 2 above, the green management variable (ISO) on earnings management does not have a significant influence as seen from the prob value of 0.9638 or more than the value 0.05. These results prove that hypothesis 1a can be rejected. (2) The results of the direct influence test in Table 2 above of the green management variable (PROPER) on earnings management have a significant influence
as seen from the prob value of 0.0182 or less than 0.05. These results prove that hypothesis 1b is acceptable. (3) The results of the direct influence test in Table 2 above show that the stock market segmentation variable on earnings management has an insignificant influence as seen from the prob value of 0.8350 or more than 0.05. (4) The results of the direct influence test in Table 2 above show that the operating cash flow variable on earnings management does not have a significant influence as seen from the prob value of 0.9242 or more than 0.05. These results prove that hypothesis 3 can be rejected. (5) The results of the direct influence test in Table 2 above show that the company size variable on earnings management has a significant influence as seen from the prob value of 0.0000 or less than 0.05. These results prove that hypothesis 4a is acceptable. (6) The results of the direct influence test in Table 2 above show that the return on assets variable on earnings management does not have a significant influence as seen from the prob value of 0.7166 or more than 0.05. These results prove that hypothesis 4b can be rejected. (7) The results of the direct influence test in Table 2 above show that the dividend yield variable does not have a significant influence on earnings management as seen from the prob value of 0.5483 or more than 0.05. These results prove that hypothesis 4c can be rejected.

CONCLUSION

Based on the results of this research, it can be concluded that green management has a significant positive effect on earnings management. Companies that have high levels of green management make companies tend to practice earnings management by increasing profits (income increasing) in order to maintain the company’s reputation in society. Company size has a significant negative effect on earnings management. These results explain that the larger the company size, the lower the earnings management will be. However, the stock market segmentation variables, operating cash flow, return on assets, and dividend yield have no effect on earnings management.

The limitation of this research is that it only uses six variables, namely green management, stock market segmentation, operating cash flow, company size, return on assets, and dividend yield as a direct test of earnings management. Another limitation lies in the research period of only 5 years, namely 2018-2022. During this period, many companies experienced losses so they did not meet the criteria for research samples. The data used is secondary data which allows for errors in entering data in numerical form. This research only focuses on the company’s internal performance variables in the form of financial ratios without paying attention to other economic risk factors.

SUGGESTION
For further research, it is hoped that green management will be carried out involving new dependent variables. For future research, it is possible to add samples in the industrial and transportation sectors by extending the observation time. These findings imply that government policies in the environmental sector do not cause companies to report valid financial reports. However, there are indications that there are large companies carrying out profit management, because the expenditure to maintain the environment is quite large. Therefore, adequate auditing of financial statements and auditing is necessary.

BIBLIOGRAPHY


Nico.Valentino

ISSN: 2776-5644


