Earning Management Practices and Tax Avoidance: 
An Empirical Evidence from Indonesia Banking Industry

S K Rahayu, R N Azizah, F H D Handaya
Department of Accounting, Universitas Komputer Indonesia, Indonesia

email siti.kurnia@email.unikom.ac.id

Abstract. The purpose of this research is to analyses earnings management practices and tax avoidance practices of banks in Indonesia. The research method used is quantitative method with data analysis adopting descriptive statistics and multiple linear regression analysis. Data collection techniques through document review. The population for this research is banking companies that are listed on the Indonesia Stock Exchange IDX during the period 2017 – 2021, with a total of 95 observations. The research sample was selected using a purposive sampling technique and obtained as many as 85 observations. The results showed that during the observation period, banking companies listed on the IDX that were used as research samples were involved in accrual earnings management practices and real earnings management and tax avoidance practices. The results of data analysis show that there is an effect of earnings management on tax avoidance. The results of this study emphasize the perspective of taxpayers in Indonesia which emphasizes the company's ability to manage finances for business continuity by taking advantage of the opportunities contained in tax laws and regulations.

1. Introduction
Tax avoidance is a common symptom that naturally occurs in taxpayers, especially for taxpayers who have large economies of scale. The greater the income earned will have an impact on the tax burden to be paid. Tax avoidance by taxpayers is justifiable, by utilizing the applicable tax provisions, so as to avoid greater tax imposition [1] [21]. For Large Taxpayers, Tax Management as a form of implementation of Tax Avoidance is carried out to avoid high Compliance Costs. Taxpayers who practice tax evasion are corporate taxpayers who experience intense business competition, with the aim of reducing expenses so that they can survive and compete continuously [2] [24]. The high level of understanding of tax regulations owned by taxpayers can be utilized to provide direct and indirect benefits for taxpayers in minimizing the Compliance Cost that must be incurred in fulfilling their tax obligations. This ability is considered as a form of performance for company management where the burden related to the interest of paying taxes is reduced. The manager as part of the employees will act in accordance with the interests of the shareholders, namely aiming to increase the company's income. The company's management establishes a systematically designed transaction scheme to be able to reduce the tax burden that does not violate tax regulations [1] [21].

Reviewing Tax Avoidance measures can use a positive accounting theoretical basis, because in principle they have the same practice, namely earnings management practices. Earnings management practices are based on positive accounting theory that gives company management freedom in choosing alternatives to be applied to minimize the burden incurred so that goals are achieved. Managers tend to
choose accounting methods that can maximize high profits to increase compensation; or an accounting method that can transfer next year's profit to the current year to reduce technical defaults in debt agreements; or implementing accounting procedures that defer current year's earnings to next year to avoid political costs [3] [25]. Based on Political Cost Theory, [3] [25] argues that companies with high income are very vulnerable to government regulations, especially in tax provisions which stipulate taxes that must be paid based on profits. This provides motivation for company managers to carry out earnings management to minimize the tax burden without violating tax provisions. Tax avoidance by taxpayers as a practice of earnings management has a relationship with future profitability for the company’s sustainability sustainability of the company [20] [4].

Taxpayers must be able to predict the possibilities that will occur if the financial performance reflects a decrease in the value of the company from an investment perspective, and the possibility of a profit level related to the amount of tax to be paid. The results of the study [5] [1] conclude that company management decision making comes from company financial information so that company managers can choose the appropriate alternative to minimize risk. According to [6] [17] company management must be able to predict the company's financial performance to obtain optimal returns for the sustainability of the company's business processes.

Taxpayers must be able to determine whether to carry out earnings management which has an impact on increasing profits or decreasing profits which has an impact on tax imposition. The results of the study [7] [6] concluded that companies with high efficiency of business operations tend to maximize the profits they earn so that they are more aggressive in avoiding taxes. The results of the study [22] concluded that tax avoidance strategies are related to firm value which gives confidence to the risk minimization motive. The results of the study [9] [27] concluded that corporate tax avoidance behaviours will reduce firm value and corporate governance has a moderator effect on the relationship between tax avoidance and firm value. The results of research [10] [7] conclude that tax avoidance affects firm value and financial performance strengthens the effect. The results of the study [11] [11] found that companies with high debt ratios choose aggressive tax reporting. Management decisions in debt management are the most important part of tax avoidance because there are differences in the handling of short-term debt and long-term debt. Short-term debt can cause liquidity risk so that it has an influence on the aggressiveness of companies in accounting reporting [12] [9]. Liquidity difficulties can encourage management to make aggressive financial accounting reporting decisions to gain creditors' trust [13] [8]. Long-term debt has a stronger relationship with tax reporting aggressiveness than short-term debt because the risk is lighter so that tax avoidance is carried out to reduce the tax burden [11]. The results of the study [14] [18] found that long-term debt influences the effective tax rate, the higher the long-term debt, the higher the company's tax avoidance. The results of the study [15] [15] provide the conclusion that companies that have more debt than their assets tend to do earnings management.

The purpose of this research is to analyse earnings management practices and banking tax avoidance practices in Indonesia. Many studies analyse the phenomenon of tax avoidance from the perspective of the potential for non-achievement of the target of tax revenue by the state, this research is from the perspective of taxpayers in Indonesia which emphasizes the ability of companies to manage finances for business continuity by taking advantage of the opportunities contained in tax laws and regulations. Profit Management Practices and Tax Avoidance are more common in developing countries than in developed countries [16] [12] because tax law enforcement still provides opportunities for financial performance settlements [17] [26]. Until now, the practice of tax avoidance is still difficult to detect because of bank secrecy. This happens because the bank is engaged in intermediation, so that the bank can function as a party that commits tax evasion and a party that is used as a channel for other parties in carrying out avoidance practices [18] [23]. in. The contribution of this research is to provide evidence that tax avoidance by taxpayers can be determined by the company's ability to manage finances in maintaining business continuity. It is hoped that this research will also provide benefits to stakeholders and regulators in Indonesia in identifying and making management decisions.
2. Method
This study uses quantitative methods with data analysis adopting descriptive statistics and multiple linear regression analysis. Testing the data using the classical assumption test as a condition of regression analysis. The focus of this research is to describe the practice of earnings management and tax avoidance, and as well as to examine the level of relationship and the magnitude of the influence of the two variables studied in the banking sector companies listed on the IDX. The population for this research is banking companies that are listed on the IDX during the period 2017 – 2021, with a total of 95 observations. The research sample was selected using a purposive sampling technique through a choice of characteristics: (a) the main financial sector banking companies that publish financial reports during the study period; (b) a sample of 5 years (2017-2021); (c) the financial statements contain information for measuring the variables studied in full. A sample of 85 observations was obtained (there are data with outlier characteristics of 10 data from the total population). The dependent variable of the study, namely Tax avoidance, is measured using the Current-ETR and Cash ETR, namely Current Tax Expense divided by pre-tax profit [19] [4]. If the value gets closer to zero, it shows tax avoidance activity [20] [16]. The independent variable of this study is earnings management which measures accrual earnings management (utilizing the freedom to choose accounting policies) including discretionary accruals and non-discretionary accruals. The average value of discretionary accruals shows the level of AEM for all samples. The measurement uses the equation used in research [17] [26] where the size of the DACC discretionary accruals, is estimated by the difference between TACC and NDACC regression estimates. The absolute value is an indicator of the level of accrual earnings management.

\[ \text{DACC}_{it} = \left( \frac{\text{TACC}_{it}}{\text{TA}_{it-1}} \right) - \text{NDACC}_{it} \ldots (1) \]

Where:
- \( \text{TACC}_{it} \) = Total accruals in year \( t \) are calculated as the difference between net income and cash flow from operating activities.
- \( \text{TA}_{it-1} \) = Total Assets at the beginning of the year \( t \)
- \( \text{NDACC}_{it} \) = Non-discretionary accruals

Earnings management is also measured by real earnings management. This study refers to the measure used in Wenfang’s research (2020), which applies a measurement basis based on abnormal cash flows

\[ \text{AB}_t = \frac{\text{CFO}_t}{\text{TA}_{t-1}} - \text{NORMAL}_t \ldots (2) \]

abnormal discretionary expenses \( \text{AB}_t = \frac{\text{DISEXP}_t}{\text{TA}_{t-1}} - \text{NORMAL}_t \ldots (2) \)

and abnormal production costs \( \text{AB}_t = \frac{\text{PROD}_t}{\text{TA}_{t-1}} - \text{NORMAL}_t \ldots (2) \)

Where:
- \( \text{CFO}_t \) = operating cash flow of company \( i \) in year \( t \)
- \( \text{PROD}_t \) = Production cost of company \( i \) in year \( t \) (COGS+\Delta\text{INVENTORY})
- \( \text{DISEXP}_t \) = Discretionary expenses of company \( i \) in year \( t \)
- \( \text{TA}_{t-1} \) = Total Assets at the beginning of the year \( t \)

3. Results and Discussion
3.1. Descriptive Statistics Data Analysis Results
Table 3.1 presents descriptive data on the earnings management and tax avoidance variables that were selected to be used in this study. Tax avoidance as measured using the Current ETR shows an average value of 0.97101 in the range of values from 0.7053 to 1.6456. The Current ETR value is closer to 0, the more likely it is that the company has the potential to take tax avoidance actions. With a standard deviation value of 0.71869 smaller than the average value, it indicates that the distribution of the Current ETR data does not have a large gap between the lowest value and the highest value or the data is called homogeneous data. The Cash ETR based on the results of descriptive statistics shows a value range of...
0.4041 to 1.8244 with an average value of 0.81234 which shows that it is getting closer to 0 so that it is possible for companies to have the potential to take tax avoidance actions. With a standard deviation value of 0.54233 which is smaller than the average value, it shows that Cash ETR has homogeneous data where the gap is not large between data with a minimum value and data with a maximum value, as seen on Table 1 data with a maximum value.

The average value of DA as a measure of AEM is 0.0258 with a range from 0.0024 to 0.0574 indicating that during the observed period the company's average revenue increased by 2.58%. With a total sample of 85 observations, it is shown that the processed data is homogeneous, this can be seen from the standard deviation value of 0.01955 which is smaller than the average DA value of 0.0258.

Abnormal cash flow (AB_CFO) shows the lowest average of 0.4152 (range -1.7741 to 1.1167) among the measures for REM indicating that companies are implementing a strategy of offering soft loans to increase revenue. Abnormal production costs (AB_PROD) show an average value of 1.1009 (in the range -1.7054 to 2.7174) which is higher than other REM measures indicating a greater average expenditure outside operational costs. Each REM measure shows a standard deviation value that is lower than the average value giving an understanding that the data is homogeneous.

### 3.2 Correlation And Regression Analysis Results

The results of the correlation between the variables in this study are presented in Table 3.2 indicating that there is a relationship between the variables. Between Current ETR and Cash ETR, DA, AB_CFO, AB_PROD show positive correlation. A positive correlation is also shown between Cash ETR and DA, AB_CFO, AB_DISEXP, AB_PROD. While the relationship is shown between Current ETR and AB_DISEXP; DA and AB_CFO, AB_DISEXP, AB_PROD; AB_CFO and AB_DISEXP; AB_DISEXP and AB_PROD are negatively related. A strong correlation (correlation 0.60-0.799) is shown by the relationship between Current ETR and DA; Current ETR AB_CFO; Cash ETR and DA. The correlation on the independent variable is lower than 0.75 and the average VIF <5 indicates that the data analysed is not in the multicollinearity category. category (Table 2).
Table 2. Pearson Correlation Coefficient

<table>
<thead>
<tr>
<th></th>
<th>Tax Avoidance Current ETR</th>
<th>Tax Avoidance Cash ETR</th>
<th>DA</th>
<th>AB_CFO</th>
<th>AB_DISEXP</th>
<th>AB_PROD</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Avoidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current ETR</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash ETR</td>
<td>0.5111</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DA</td>
<td>0.6004</td>
<td>0.6154</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>3.31</td>
</tr>
<tr>
<td>Earning Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AB_CFO</td>
<td>0.6012</td>
<td>0.4777</td>
<td>-0.5431</td>
<td>1.000</td>
<td></td>
<td></td>
<td>2.73</td>
</tr>
<tr>
<td>AB_DISEXP</td>
<td>-0.4106</td>
<td>0.3551</td>
<td>-0.3411</td>
<td>-0.2112</td>
<td>1.000</td>
<td></td>
<td>2.81</td>
</tr>
<tr>
<td>AB_PROD</td>
<td>0.5041</td>
<td>0.5312</td>
<td>-0.3211</td>
<td>0.2311</td>
<td>-0.4511</td>
<td>1.000</td>
<td>2.70</td>
</tr>
</tbody>
</table>

Sig.(2-tailed) 0.62 0.85 0.62 0.62 0.62 0.62
N 85 85 85 85 85 85

Source: Results of SPSS 20.0 data processing

The results of the regression analysis are presented in Table 3.3. The results of multiple linear regression which can be seen from the output table obtained an α value of 18.434, β1 of 1.847, β2 of 0.272 and β3 of 0.015. Thus, a multiple linear regression equation that shown in Table 3 formed:

Y = 18.434 + (1.847)X1 + (0.272) X2 + (0.015) X3.

Table 3. Coefficient Results of Multiple Linear Regression Model 1

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model (Constant)</th>
<th>DA</th>
<th>AB_CFO</th>
<th>AB_DISEXP</th>
<th>AB_PROD</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>18.434</td>
<td>2.331</td>
<td>1.847</td>
<td>0.272</td>
<td>0.015</td>
</tr>
<tr>
<td>Std. Error</td>
<td>1.070</td>
<td>.543</td>
<td>.635</td>
<td>.125</td>
<td>.007</td>
</tr>
<tr>
<td>Beta</td>
<td>.821</td>
<td>2.909</td>
<td>.613</td>
<td>.361</td>
<td>.420</td>
</tr>
<tr>
<td>t</td>
<td>2.375</td>
<td>2.786</td>
<td>2.909</td>
<td>2.180</td>
<td>2.294</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
<td>.001</td>
<td>.005</td>
<td>.033</td>
<td>.025</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Tax Avoidance (Current ETR)

Results of Regression Analysis On the independent variable earnings management, the results of testing Model 1 obtained a positive beta value of 0.821 for DA; beta value for AB_CFO of 0.613; beta value for AB_DISEXP of 0.361; and the beta value for AB_PROD is 0.420. Significance 0.000 on Current ETR (0.000<0.05 = significant). Effect of earnings management, from the results of the Model 2 test obtained a positive beta value of 0.526 for DA; beta value for AB_CFO of 0.217; beta value for AB_DISEXP of 0.463; and the beta value for AB_PROD is 0.327 (Table 4). Significance 0.000 on Cash ETR (0.000<0.05 = significant).
The magnitude of the contribution of earning management to tax avoidance is shown through the coefficient of determination in Table 3.5, which shows that the coefficient of determination (R square) is 0.257 or 25.7%. This means that earning management has a contributing influence on tax avoidance of 25.7% and the remaining 74.3% is influenced by other factors not examined.

### Table 4. Coefficient Results of Multiple Linear Regression Model 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>2 (Constant)</td>
<td>18,434</td>
<td>11,070</td>
<td>2.305</td>
<td>.000</td>
</tr>
<tr>
<td>DA</td>
<td>1,451</td>
<td>.352</td>
<td>.526</td>
<td>1.713</td>
</tr>
<tr>
<td>AB_CFO</td>
<td>1,847</td>
<td>.431</td>
<td>.217</td>
<td>1.909</td>
</tr>
<tr>
<td>AB_DISEXP</td>
<td>.272</td>
<td>.226</td>
<td>.463</td>
<td>1.110</td>
</tr>
<tr>
<td>AB_PROD</td>
<td>.015</td>
<td>.217</td>
<td>.327</td>
<td>1.014</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Tax Avoidance (Current ETR)

### Table 5. Earning Management Determination Coefficient Results for Tax Avoidance

<table>
<thead>
<tr>
<th>Model Summaryb</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.588</td>
<td>.257</td>
<td>.209</td>
<td>4,73691</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), earning management (DA, AB_CFO, AB_DISEXP, AB_PROD)
b. Dependent Variable: Tax Avoidance (Current ETR dan Cash ETR)

### 3.3 Discussion

The results of this study indicate that there is an interest in banking companies in Indonesia towards earnings management practices using AEM and REM techniques, where the application of REM is more dominant than AEM. Supporting the research results of [17] [26] and [21] [19], the results of this study conclude that values measured by AEM and REM have an average value greater than 0 (positive). This shows that the sample of banking companies in Indonesia in this study on average apply upward earnings management practices. If the value is less than 0 (negative) it indicates downward earnings management practices. Some research samples show downward earnings management practices which are indicated by negative values. The average value of AEM with DA recorded a positive value of 0.0258. This value indicates that the banking company sample in this study is involved in accrual earnings management (AEM) activities with Discretionary Accruals (DA) measures. The results of this study also show that earnings management practices are very common in companies in developing countries according to the results of research by [22] [5]. Banking companies in Indonesia are involved in increasing revenue to get the desired profit. The results of this study confirm the presence of REM in the AB_CFO, AB_DISEXP and AB_PROD measures in the study sample. All measures record positive average values for all research samples where there are earnings management practices to obtain the desired profit. The results of this study support [17] [26] by confirming that the average value on the REM measure is greater than the AEM. Some research samples show negative REM values, as an indicator of downward earnings management practices in the AB_CFO, AB_DISEXP and AB_PROD measures.

The research sample was selected based on the research results showing the potential to take tax avoidance actions with an average Current ETR and Cash ETR close to 0. The closer the CETR value is to 0, the smaller the reported income. Managers will report income in accordance with policies made based on company objectives. Several research samples recorded Current ETR and Cash ETR values of
more than 0, this indicates that the company does not apply tax avoidance. The results of this study confirm the research [23] [13] and [10] [7].

Earnings management practices by selected research samples in the study period confirm that there is a positive relationship and provide sufficient influence on tax avoidance practices. The results of the study showing the significant relationship and influence of DA on CETR also apply to the significant relationship and influence of AB_CFO, AB_DISEXP and AB_PROD together on tax avoidance. The results of the study found empirical evidence that earnings management has an effect on tax avoidance. These results confirm the results of research by [24] [14] and [25] [3]. The results of this study prove that tax avoidance practices are based on positive accounting theory, managers choose to minimize profits in order to avoid tax regulations. Managers reduce the tax burden paid in order to take advantage of the compensation that follows, by using accounting choices allowed by regulations to be able to reduce profits as a tax avoidance practice.

4. Conclusion
This study examines how tax avoidance practices can be influenced by earnings management techniques, namely accrual earnings management and real earnings management. Measurement of earnings management uses discretionary accruals as a parameter of accrual earnings management, and real earnings management uses parameters of abnormal cash flows, abnormal discretionary expenses and abnormal production costs. The existence of earnings management practices in banking companies in Indonesia that are listed on the IDX is shown by the average results of applying upward earnings management, although there are several companies that apply downward earnings management. During the observation period, banking companies listed on the IDX that were used as research samples were involved in accrual earnings management practices and real earnings management and tax avoidance practices. The results of the data analysis show that there is a positive relationship and sufficient influence between earnings management on tax avoidance. For company management, it is necessary to carry out careful planning in the application of earnings management and tax avoidance practices so that they do not have an impact on window dressing or lead to tax avoidance unacceptable actions. It is necessary to consider applying regulations to the relevant authorities in minimizing the abnormal level of earnings management practices in Indonesia that is acceptable to the banking industry and enforcing financial information transparency regulations to reduce data manipulation. For tax authorizations to contribute to the formulation of regulations to be able to anticipate tax avoidance practices in the long term. This research contributes to further research related to tax avoidance practices for academics to put more emphasis on the negative impact on company performance in the future.

References


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