Understanding the relationship between tax avoidance and earnings management is crucial to evaluating tax policies and ensuring transparent financial reporting. Prior research has highlighted complexities and inconsistent findings, particularly concerning the impact of tax-related reporting incentives. This study addresses these issues by examining the influence of tax incentive recipient status on tax avoidance and earnings management among firms listed on the Kuala Lumpur Stock Exchange (KLSE). It examines whether firms receiving tax incentives from the Malaysian Investment Development Authority (MIDA) exhibit different earnings management behaviours than non-recipient firms. This study employs the effective tax rate (ETR) as a measure of tax avoidance and discretionary accruals (DEM) for earnings management. The dataset includes manually extracted financial information from firms listed on the KLSE for the financial year 2017 and a listing of tax incentive recipient firms from MIDA. Analytical techniques include ANOVA, independent samples t-test, and multiple regression analysis. The findings of this study suggest that higher tax avoidance relates to higher earnings management. Additionally, firms receiving tax incentives exhibit significantly higher ETRs than non-recipients. They are less likely to engage in earnings management, suggesting that tax incentives may deter aggressive financial reporting practices due to compliance pressures. The additional analysis indicates that tax incentives do not significantly moderate the relationship between tax avoidance and earnings management, implying that other pressures still play a crucial role. This study contributes to existing knowledge by emphasizing the need for robust regulatory frameworks that balance economic growth and financial reporting integrity.

INTRODUCTION

Understanding the effects of tax avoidance strategies on corporate governance and financial reporting integrity is challenging due to the complexity of tax regulations and their widespread use. This complexity is further heightened by various factors, as reported by prior studies. For example, challenges in economic recovery post-COVID-19 (Karlinah et al., 2024), the influence of powerful CEOs and diverse boards on reducing tax burdens (Hooy & Phua, 2023), and international regulatory cooperation (Yu et al., 2024) all contribute to the complexity in understanding the effect of tax avoidance practices. Additionally, high non-tax costs, such as audit risks and operational frictions (McClure, 2023), along with the unique firm characteristics, agency costs, and objectives of tax avoidance strategies, such as lowering the debt costs (Sánchez-Ballesta & Yagüe, 2021), further complicate the landscape. On the other hand, Balakrishnan et al. (2019) emphasize that a lack of tax transparency also complicates this situation, making it difficult to evaluate how decreases in tax burdens due to tax avoidance affect reporting incentives. The potential for financial data manipulation related to avoidance strategies affects regulatory scrutiny and interferes with investor decision-making.

High-profile events like the Luxembourg leaks in 2014, the Panama Papers in 2016, and the Paradise Papers in 2017 have brought attention to the prevalent practice of corporate tax avoidance (Fitziibbon & Starkman, 2017). These disclosures underscore significant declines in government revenues on a global scale. For instance, corporate tax avoidance in the United States reduces tax revenues by around $70 billion annually, accounting for approximately 20% of total corporate tax receipts (Zucman, 2017). In underdeveloped countries, such as those in West Africa, the amount of tax income lost each year due to avoidance is substantial. Nigeria alone contributes $2.9 billion to the total loss of $9.6 billion (Shaxson,
Recent data from Malaysia reveal that tax avoidance resulted in a significant loss of RM6.34 billion in 2023, exceeding the annual budgets of critical ministries, including Health and Education, as Pfordten (2024) reported in The Star newspaper. These findings highlight the urgency of promptly addressing these difficulties.

Therefore, understanding the relationship between tax avoidance and earnings management has become a central study area for addressing these significant issues. This focus is motivated by the substantial impact on the quality of financial reporting and company conduct, which can affect users' decision-making. The considerable revenue losses due to tax avoidance recorded by the Inland Revenue Board in Malaysia underline the importance of this research. It is vital to understand the reasons that lead corporations in Malaysia to minimize tax liabilities and potentially engage in manipulative accounting methods and whether financial reporting can become a credible platform for both regulatory bodies and other users to anticipate such tax-related reporting incentives in firms' reporting in response to any tax policy change. These activities challenge the interests of shareholders and affect the integrity of financial statements. We can improve regulatory scrutiny and investor decision-making by addressing these issues.

Thus, this study aims to understand better the complex relationship between tax avoidance, earnings management, and tax incentives among publicly traded companies in Malaysia. More precisely, it seeks to investigate how tax incentives influence the actions of companies involved in tax avoidance strategies. This research seeks insights into optimizing tax policies to promote compliance and improve transparency in financial reporting by comparing the economic practices of organizations that receive tax incentives with those that do not. By doing so, the study aims to provide a comprehensive understanding of how tax policies can be structured to reduce tax avoidance and enhance the overall quality of financial reporting.

The remaining paper structure includes Section two, which reviews the literature on the relationship between tax avoidance and earnings management. Section three details the study's methodology, including the sample selection and data analysis techniques. Results and discussions are presented in Section four, and the study's conclusions are provided in Section five.

LITERATURE REVIEW

Effective Tax Rate and Discretionary Accruals Earnings Management

Investigating the relationship between tax avoidance, measured by Effective Tax Rate (ETR), and discretionary accruals earnings management (DEM) is crucial due to its complexity and the diverse findings in the literature (Akter, 2021; Blaylock et al., 2015; Desai & Dharmapala, 2006; Karjalainen et al., 2023; Seidman & Stomberg, 2017). Prior studies produce inconsistent results, partly (among other factors) due to various methodological limitations and the broad spectrum of tax avoidance activities that ETR alone cannot capture (Gupta & Newberry, 1997; Hanlon & Heitzman, 2010; Mills & Newberry, 2001). Research shows mixed findings regarding the relationship between ETR and earnings management. Guenther et al. (2021) provide a theoretical framework to identify when tax avoidance measures reflect tax avoidance related to and unrelated to earnings management. They highlight that alternative measures like the ratio of cash taxes paid to pretax operating cash flows can avoid attributing earnings management results to tax avoidance. In addition, while ETR serves as a standard proxy for tax avoidance, it fails to encompass the full spectrum of tax avoidance strategies (Gupta & Newberry, 1997; Hanlon & Heitzman, 2010; Mills & Newberry, 2001). Studies indicate that ETR primarily reflects the reduction of explicit taxes but does not capture if the practice is due to aggressive tax planning and tax sheltering activities (Blaylock et al., 2015; Hanlon & Heitzman, 2010). Methodological constraints limit ETR's ability to account for temporary differences and other tax timing strategies (Blaylock et al., 2015). Empirical findings, such as those by Karjalainen et al. (2023) and Seidman and Stomberg (2017), illustrate the varied results and challenges in measuring tax avoidance solely through ETR, suggesting it might underreport aggressive tax strategies, especially in multinational corporations with sophisticated tax planning capabilities (Ardyansah & Zulaikha, 2014).

Hanlon and Heitzman (2010) define tax avoidance as the deliberate reduction of explicit taxes but also acknowledge the challenges in capturing aggressive tax planning and tax sheltering through ETR alone. Dyreng et al. (2008) expand on this by including aggressive tax avoidance, tax sheltering, and tax risk in their definition, which may need to be adequately reflected in a simple ETR measure. This limitation is significant because it suggests that ETR, as a measure, might need to capture the complexities of corporate tax avoidance behaviours fully. Frank et al. (2009) explore how higher effective tax rates incentivize firms to manage earnings to align reported earnings with tax liabilities. They find that firms with volatile earnings are particularly prone to such manipulations as a means to present a stable financial outlook. This aligns with the findings of Desai and Dharmapala (2006), who note that complexities and ambiguities in tax codes provide fertile ground for earnings manipulation, especially for firms with sophisticated tax planning capabilities. Gupta and Newberry (1997) provide an international perspective, showing that firms in countries with stringent tax regulations and higher tax rates are more inclined to manage earnings to minimize taxable income. Their comparative analysis highlights the significant role that external tax environments play in shaping corporate financial behaviours. However, Guenther et al. (2017) find low tax rates usually stay low over time, with no substantial evidence that these tax-avoiding actions lead to more giant swings in future tax payments or stock prices. In other words, tax strategies, including tax incentives, can lower the amount of tax a company has to pay and make their financial reporting more transparent; they might not significantly affect the overall riskiness of the company's tax avoidance strategies.

Further, more recent studies also demonstrate the complex relationship between ETR and earnings management. For example, Delgado et al. (2023) find that discretionary accruals have a positive and statistically significant relationship with ETR indicators, suggesting that earnings management, measured by discretionary accruals, does not necessarily correlate with aggressive tax avoidance. Adding to the complexity, the geographical variability in research findings makes it difficult to draw definitive conclusions.
In the U.S., studies by Dhaliwal et al. (2004) and Blaylock et al. (2015) identify a strong link between aggressive tax strategies and aggressive financial reporting. However, Guenther et al. (2017) report a negative relationship, suggesting that different proxies for tax avoidance and earnings management can lead to divergent conclusions. Shim et al. (2022) examine the effects of earnings management on effective tax rates (ETR) and recommend using an alternative measure of operating cash flow-based effective tax rate (CFO ETR) to account for the robustness against earnings management. Their findings suggest that ETR might overestimate tax avoidance due to earnings management, emphasizing the need for a dual approach in empirical analysis. These conflicting results indicate that regional factors, such as regulatory environments, corporate governance practices, and cultural differences, also play a significant role in shaping these relationships, among other factors.

The above discussion shows that understanding these complexities and inconsistencies is essential for developing more effective tax policies and improving financial reporting quality. This study addresses these gaps by examining the relationship between DEM and tax avoidance in Malaysian listed companies. The unique regulatory environment and specific tax incentives in Malaysia provide a relevant and vital setting for such an investigation.

**Firm’s Tax Incentive Recipient Status (MIDA) and the Magnitude of Discretionary Accruals (Earnings Management)**

Tax incentives are a standard policy tool to promote economic growth, attract investment, and encourage innovation. However, it is argued that the receipt of the tax incentive can have mixed outcomes and sometimes lead to unintended consequences, especially in financial reporting and earnings management. The complexity arises because tax incentives can create pressure to comply with regulatory expectations while simultaneously aiming to minimize tax burdens. Given these dynamics, it is essential to design tax incentive policies thoughtfully. Prior studies offer varied insights, indicating a need for further investigation into how tax incentives impact corporate behaviour. Most studies on tax incentives focus on their impact on investment and job creation, but they often overlook their effects on financial reporting practices. Okoth (2023), for example, investigates tax incentives in emerging economies like Indonesia, Kenya, Malaysia, and Türkiye, finding that tax incentives for production, sales, transfers, profits, and capital gains may slightly boost investment but often have a non-significant or even negative effect on overall economic growth. This suggests that tax incentives might not consistently deliver the expected economic outcomes.

In contrast, Kang et al. (2023) reveal that fiscal subsidies and tax incentives can promote corporate innovation, but their effectiveness depends on broader economic conditions. Fiscal subsidies have a more significant impact during economic downturns, while tax incentives are more effective during periods of growth. This observation implies that the context in which tax incentives are applied plays a critical role in determining their success.

Additionally, Ghazinoory and Hashemi (2021) explore tax incentives and direct financial support, showing that both can encourage corporate growth, but their effectiveness varies, particularly in high-tech industries. Direct support for R & D investment is more effective for large companies, while tax incentives are more successful in promoting new product development. This finding underscores the need to tailor tax policies to specific industry needs and company sizes. On the other hand, Klemm and Van Parys (2012) examine tax incentives in over 40 countries and find that reduced corporate income tax (CIT) rates and extended tax holidays attract foreign direct investment (FDI) in some regions but not in others. This suggests that tax incentives can stimulate economic growth in specific contexts but do not explore their impact on financial reporting. This gap raises concerns about whether tax incentives encourage earnings management or financial misreporting to meet regulatory benchmarks. Adding to the complexity, Caiumi (2011) finds that regional investment tax credits in Italy's Piedmont region positively impact productivity and investment at the firm level. However, other studies, such as those by Kolko and Neumark (2010) and Bondonio and Greenbaum (2006), report mixed results, indicating that tax incentives only sometimes lead to consistent job growth or economic stability.

Moreover, the mixed results from studies on tax incentives raise concerns about their potential to pressure firms to engage in manipulative financial practices to meet regulatory expectations. This pressure could lead firms to adjust their financial reporting to satisfy specific regulatory benchmarks or avoid scrutiny. Given these risks, careful implementation and oversight of tax incentives are crucial to ensure they do not unintentionally encourage harmful financial behaviour. However, only some studies have examined this issue in depth, leaving significant gaps in our understanding. For example, Capras et al. (2024) examine whether tax avoidance is a purpose of financial data manipulation in Romanian companies. Their study indicates a negative association between effective tax rates and earnings management, suggesting companies manipulate earnings to reduce tax burdens. They also find that return on assets (ROA) negatively influences the effective tax rate, while firm size, growth, and Big4 audit have no significant effect.

Similarly, Tian et al. (2020) investigate China's super deduction policy, which allows firms with less than a 10% increase in prior-year R&D expenditures to claim a 50% tax deduction. Their findings indicate that firms newly eligible for these tax incentives catch up in R&D spending and product innovation without showing signs of financial manipulation or misreporting. Taxes are designed and implemented carefully, and tax incentives can promote positive corporate behaviour without triggering earnings management.

However, contrasting evidence comes from Wang et al. (2024), who study China's 2014 accelerated depreciation policy for fixed assets. This policy increases earnings management, implying that tax incentives sometimes encourage firms to manipulate financial statements. This might occur when firms feel pressured to meet regulatory expectations or seek ways to minimize their tax burden without resorting to aggressive tax avoidance. In addition, Wu (2024) investigates the interaction between incentive and opportunity in corporate tax planning, focusing on financially constrained firms. Wu's study reveals that financial constraints, as an incentive factor, strengthen the positive association between tax planning opportunities (TPOs) and tax avoidance. This highlights that firms with higher TPOs are more likely to engage in tax
avoidance when under financial constraints. Wu's findings underscore the importance of considering incentive and opportunity factors in understanding corporate tax planning behaviour.

These contradictory findings underline the complexity of tax incentives and their potential impact on financial integrity. The dual nature of tax incentives—as both a compliance tool and a tax relief mechanism—creates a challenging environment for policymakers. On the one hand, tax incentives can encourage positive corporate behaviour by promoting investment and innovation. On the other hand, they can inadvertently foster an environment where firms feel compelled to manipulate financial information to meet regulatory expectations. The uncertainty surrounding these outcomes emphasizes the need for additional research to understand the broader implications of tax incentives on corporate behaviour, especially regarding financial reporting and earnings management. Policymakers must know the risks and carefully design tax incentive programs that promote economic growth without compromising financial integrity. This balance is crucial for maintaining a healthy business environment and ensuring that tax policies do not create unintended incentives for financial misreporting. These varied outcomes suggest that tax incentives can have different effects depending on the context, industry, and specific design of the incentives. The dual nature of tax incentives—as both a regulatory benchmark and a tax relief mechanism—creates a complex environment where these incentives could either encourage or discourage earnings management. This ambiguity highlights the need for further research to guide the design of tax policies that promote economic growth while safeguarding financial integrity. Given the limitations in prior studies, this study aims to explore the relationship between tax avoidance, tax incentives, and earnings management, addressing both regulatory pressures and the opportunities for reducing tax burdens without resorting to aggressive avoidance strategies. This research seeks to clarify the role of tax incentives in corporate financial behaviour and provide policymakers with insights for creating compelling and balanced tax policies. In addition to the conflicting results, it is also unclear whether tax incentives generally lead to increased or decreased earnings management. The complexity of their dual role—acting as both a regulatory benchmark and a tax relief mechanism—implies that these incentives could encourage or discourage earnings management. This uncertainty reinforces the need for further research to understand these relationships and guide the design of tax policies that balance economic growth with financial reporting integrity.

**Effective Tax Rates between Malaysian Public Firms with MIDA Status and Those without MIDA Status**

Tax incentives in Malaysia, particularly those overseen by the Malaysian Investment Development Authority (MIDA), have shaped corporate tax behaviours. These incentives, designed to foster economic growth, include Pioneer Status, Investment Tax Allowance, and Reinvestment Allowance, among others. The effectiveness of these incentives in reducing tax burdens and promoting transparency in financial reporting has been a subject of significant debate.

Malaysia features a prevalent range of tax incentives, encompassing income exemptions, capital expenditure allowances, double deductions for expenses, preferential tax treatments for promoted sectors, and exemptions from import and excise duties. Although Malaysia does not fall under the classification of a tax haven or a low-tax jurisdiction, certain eligible firms can benefit from considerably reduced effective tax rates compared to the ordinary corporate tax rate of 24%. As an illustration, a manufacturing firm eligible for a pioneer status tax incentive experiences an effective tax rate of 7.2%. Furthermore, only 30% of its profits are liable to be taxed. Integrating tax incentives to mitigate growth risks or pursue economic and social objectives is a widespread fiscal mechanism, particularly in developing nations. These incentives, such as tax credits, aim to stimulate economic activities that might not occur or would occur to a lesser extent without such credits. This approach is widely embraced as an economic development tool in countries like Malaysia.

Facilitating these efforts, the Malaysian Investment Development Authority (MIDA) assumes a fundamental role, overseeing the promotion and facilitation of both foreign and domestic investments in Malaysia, including the administration of tax incentives. Collaborating with entities like the Ministry of Finance and the Inland Revenue Board, MIDA ensures an environment conducive to investment. Various tax incentives, such as Pioneer Status, Investment Tax Allowance, and Reinvestment Allowance, are offered to eligible companies and designed to foster investments in vital economic sectors. For instance, Pioneer Status grants a 70% tax exemption on the company's statutory income over five years, while Investment Tax Allowance allows a deduction of 60% for qualifying capital expenditure within five years from the first qualifying capital expenditure. Reinvestment Allowance offers a 60% deduction for qualifying capital expenditure within twelve years from the initial expenditure. In addition to these incentives, MIDA supports investors in obtaining necessary approvals and licenses, such as manufacturing licenses and expatriate posts, facilitating investments. This incentive-driven approach has proven successful in promoting investments in targeted sectors of the Malaysian economy.

Research indicates that tax incentives can impact firms' effective tax rates (ETRs) and financial reporting practices. For example, Bornemann et al. (2023) analyze the impact of intellectual property (IP) boxes on innovative activity and tax benefits. Their study shows that adopting IP boxes increases innovative activity, such as patent applications and grants, while also lowering effective tax rates for firms with patents. The findings suggest that IP boxes can lead to modest increases in innovative activity and significant tax benefits, particularly for multinational firms. Further, Zhang et al. (2023) explore the effect of local fiscal pressure on corporate tax avoidance behaviour using the abolition of agricultural tax reform as a quasi-natural experiment. They find that sudden loss of fiscal revenue reduces tax evasion by encouraging firms to improve productivity. Thus, firms with MIDA status often benefit from substantial tax reductions, potentially encouraging and discouraging the need for more aggressive tax avoidance. Several factors, including regulatory oversight, corporate governance, and the firms' strategic objectives, influence the relationship between tax incentives and ETRs. Noor et al. (2008) highlight that Malaysian tax reforms aim to attract foreign investment and stimulate economic growth by offering various tax incentives. These incentives are intended to reduce the effective tax burden on companies, thereby enhancing their financial performance and competitive edge. However, Derashid and Zhang (2003) argue that while these incentives
can stimulate investment, they might also encourage firms to engage in aggressive tax planning to maximize their tax benefits, potentially leading to less transparent financial reporting.

Moreover, Chien et al. (2021) find that tax incentives in Malaysia, such as the Pioneer Status and Investment Tax Allowance, are associated with lower ETRs for recipient firms. This reduction in tax liability provides these firms with additional resources to reinvest in their operations, theoretically promoting growth and innovation. However, the study also notes that the effectiveness of these incentives depends significantly on the firms’ adherence to compliance requirements and the rigour of regulatory enforcement. Ghazinoory and Hashemi (2021) explore the impact of tax incentives on corporate growth, noting that while these incentives can promote investment and economic development, they also create opportunities for earnings management. Firms may manipulate their financial statements to appear compliant with tax incentive requirements, thereby securing tax benefits while potentially obscuring their financial position. This dual effect underscores the complexity of tax incentives as both a tool for economic stimulation and a potential catalyst for financial manipulation.

Studies on the relationship between tax incentives, effective tax rates, and earnings management present a complex picture. While tax incentives can reduce tax burdens and promote investment, they also have the potential to either encourage or discourage earnings management and financial manipulation. This notion has yet to be fully understood in the existing literature. In the context of Malaysian public firms, the impact of MIDA status on effective tax rates (ETRs) and earnings management is particularly significant. While tax incentives can provide substantial financial benefits to recipient firms, ensuring these incentives do not lead to manipulative financial practices is crucial. This requires robust regulatory frameworks and effective corporate governance mechanisms to monitor and control managerial behaviour, thereby enhancing the transparency and reliability of financial reporting.

Thus, this study aims to examine the impact of the status of tax incentives received on earnings management and effective tax rates in Malaysian public firms. Specifically, it investigates the relationship between tax incentive status (MIDA), effective tax rates, and the magnitude of discretionary accruals. Building on insights from the literature, the following hypotheses are formulated:

**H1:** There is a significant and negative relationship between effective tax rate and discretionary accruals earnings management.

**H2:** There is a significant relationship between a firm’s tax incentive recipient status (MIDA) and the magnitude of discretionary accruals (earnings management).

**H3:** There is a significant difference in the effective tax rates between Malaysian public firms with MIDA status and those without MIDA status.

### MATERIALS AND METHODS

#### Research Design

This study investigates the relationship between tax avoidance and earnings management among Malaysian public firms listed on the Kuala Lumpur Stock Exchange (KLSE) for the financial year 2017. The stable financial reporting environment justifies the choice of 2017 before significant accounting changes (MFRS 15 and MFRS 16), political shifts in 2018, and the disruptions caused by the COVID-19 pandemic starting in 2020. By focusing on 2017, the study avoids these confounding factors, allowing for a more precise analysis of corporate behaviour and financial reporting practices.

#### Sample Selection

The study initially targeted all Malaysian public firms listed on the KLSE as of December 2017. From these, 390 firms across 11 sectors were randomly selected based on their core business activities, and utilities and financial firms were excluded due to their unique tax planning opportunities and incentives. Further exclusions were made for firms with net operating losses or negative cash flow (Gupta & Newberry, 1997; Kim & Limpaphayom, 1998), negative pretax income (Rohaya et al., 2010), effective tax rates (ETRs) exceeding one (Gupta & Newberry, 1997; Kim & Limpaphayom, 1998), and negative ETRs (Zimmerman, 1983). The final sample consisted of 202 firms. Table 1 presents the sample selection details, resulting in a final sample of 202 firms.

<table>
<thead>
<tr>
<th>Sample Selection</th>
<th>Number of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed firms in KLSE original sample</td>
<td>390</td>
</tr>
<tr>
<td>Exclude: Firms with net operating loss (or negative cash flow) and net operating loss carryforward</td>
<td>68</td>
</tr>
<tr>
<td>Exclude: Firms with negative pretax income</td>
<td>58</td>
</tr>
<tr>
<td>Exclude: Firms with an effective tax rate (ETR) exceeding one</td>
<td>47</td>
</tr>
<tr>
<td>Exclude: 2%–5% outlier procedure</td>
<td>15</td>
</tr>
<tr>
<td>Final sample</td>
<td>202</td>
</tr>
<tr>
<td>Firms in the list of top 500 MIDA tax incentive recipients (TR firms)</td>
<td>48</td>
</tr>
<tr>
<td>Firms not on the list of top 500 MIDA tax incentive recipients</td>
<td>154</td>
</tr>
</tbody>
</table>

To ensure the adequacy of the sample size, a power analysis was conducted using GPower software, considering an effect size of 0.15, an alpha level of 0.05, and a desired power of 0.95. The GPower analysis indicated a total sample size of 194 participants would be appropriate. Recognizing the importance of sample size in research design, this study opted to surpass the recommended minimum, recruiting 202 participants to ensure adequate statistical power and reduce the probability of Type II errors.
Data Analysis Tools and Software Used
The research question and objectives were analyzed through quantitative data analysis using SPSS software to perform multiple regression analysis and t-tests, as well as various validity tests to guarantee the accuracy and reliability of the data (Field, 2013). SPSS was chosen for its ability to handle complex data structures and multiple variables, making it ideal for running multiple regression analyses, thus increasing the accuracy and reliability of the findings (Salkind, 2017). SPSS provided various tools for testing the validity and reliability of the data. Normality tests were conducted to check if the data followed a normal distribution, and multicollinearity tests were conducted to ascertain the absence of significant correlations among the independent variables. These tests helped to ensure that the results were accurate and reliable and that the statistical assumptions underlying the analysis were met (Tabachnick et al., 2013). In conclusion, SPSS was justified in this study as it provided a powerful statistical analysis tool for examining the relationships between variables and allowed for various validity and reliability tests to be conducted. The results obtained from this analysis were statistically significant, contributing to a greater understanding of the research question and objectives (Pullant, 2020).

Measures of Earnings Management
This study focuses on discretionary accruals, identified using the modified Jones model, a widely applied and reliable method for detecting earnings management (Dechow et al., 1995; Xie, 2001).

\[
DEM_{[\tau]} = TA_{[\tau]} - NDA_{[\tau]} \tag{1}
\]

\[
TA_{[\tau]} = \alpha_1 \left( \frac{1}{[A_{[\tau-1]}]} \right) + a_2 (\Delta REV_{[\tau]} - \Delta REC_{[\tau]}) + a_3 (PPE_{[\tau]} + v_{[\tau]}) \tag{2}
\]

\[
NDA_{[\tau]} = \alpha_1 \left( \frac{1}{[A_{[\tau-1]}]} \right) + a_2 (\Delta REV_{[\tau]} - \Delta REC_{[\tau]}) + a_3 (PPE_{[\tau]}) \tag{3}
\]

\[
DA_{[\tau]} = [\alpha_1 \left( \frac{1}{[A_{[\tau-1]}]} \right) + a_2 (\Delta REV_{[\tau]} + \Delta REC_{[\tau]} + v_{[\tau]} + \epsilon_{[\tau]})] - [\alpha_1 \left( \frac{1}{[A_{[\tau-1]}]} \right) + a_2 (\Delta REV_{[\tau]} - \Delta REC_{[\tau]} + \epsilon_{[\tau]} + \epsilon_{[\tau]})] \tag{4}
\]

Where

- \( TA_{[\tau]} \) = Total accruals in year \( \tau \) scaled by lagged total assets in year \( \tau-1 \)
- \( DA_{[\tau]} \) = Estimated discretionary accruals in year \( \tau \)
- \( NDA_{[\tau]} \) = Estimated non-discretionary accruals in year \( \tau \)
- \( \Delta REV \) = Revenues in year \( \tau \) less revenues in year \( \tau-1 \) scaled by total assets at \( \tau-1 \)
- \( \Delta REC \) = Net receivables in year \( \tau \) less net receivables in year \( \tau-1 \) scaled by total assets at \( \tau-1 \)
- \( PPE_{[\tau]} \) = Gross property, plant, and equipment in year \( \tau \) scaled by total assets at \( \tau-1 \)
- \( \alpha_1, a_2, a_3 \) = Firm-specific parameters
- \( \epsilon_{[\tau]} \) = Measurement error in year \( \tau \)

Measures of Tax Avoidance
Effective tax rates (ETRs) are key indicators of tax burdens relative to gross profits, incorporating tax shelters and incentives (Harris & Feeny, 2003; Rohayya et al., 2010). The public and policymakers widely use them to assess tax system neutrality and differentiate firms based on tax burdens (Harris & Feeny, 2003). This study calculates ETRs as current income tax expenses (excluding deferred tax expenses) divided by pretax income derived from firm-level financial statements. Tax expenses represent the numerator, reflecting a firm’s income tax burdens, while pretax income is the denominator.

Measures of Tax Incentive Recipient Status as Moderator
This study used a dummy variable of “1” for the tax incentive recipient status and “0” for otherwise. MIDA’s top 500 tax recipient list in 2017 was used as a reference for this study to determine the tax incentive recipient status of each participating firm in this study.
Control Variables

Real Earnings Management

According to Roychowdury (2006), normal cash flow from operation (CFO) is expressed as a linear function of sales and change in sales. Abnormal cash flow from operation (CASHABS) refers to the subtraction of the actual CFO from the average level of CFO calculated using the estimated coefficient using the following cross-sectional regression for each industry and year:

\[
\frac{\text{CFO}_{i,t}}{\text{Assets}_{i,t-1}} = k_1 \left( \frac{1}{\text{Assets}_{i,t-1}} \right) + k_2 \left( \frac{\text{Sales}_{i,t}}{\text{Assets}_{i,t-1}} \right) + k_3 \left( \frac{\Delta \text{Sales}_{i,t}}{\text{Assets}_{i,t-1}} \right) + \epsilon_{i,t} \tag{5}
\]

Meanwhile, production costs refer to the sum of costs of goods sold (COGS) and inventory changes. The overall model for production costs is expressed in the following:

\[
\frac{\text{PROD}_{i,t}}{\text{Assets}_{i,t-1}} = k_1 \left( \frac{1}{\text{Assets}_{i,t-1}} \right) + k_2 \left( \frac{\text{Sales}_{i,t}}{\text{Assets}_{i,t-1}} \right) + k_3 \left( \frac{\Delta \text{Sales}_{i,t}}{\text{Assets}_{i,t-1}} \right) + k_4 \left( \frac{\Delta \text{Sales}_{i,t-1}}{\text{Assets}_{i,t-1}} \right) + \epsilon_{i,t} \tag{6}
\]

The equation model is then developed to estimate the normal level of production costs, where COGS is modelled as a linear function of contemporaneous sales:

\[
\frac{\text{COGS}_{i,t}}{\text{Assets}_{i,t-1}} = k_1 \left( \frac{1}{\text{Assets}_{i,t-1}} \right) + k_2 \left( \frac{\text{Sales}_{i,t}}{\text{Assets}_{i,t-1}} \right) + \epsilon_{i,t} \tag{7}
\]

In addition, inventory growth is modelled as follows:

\[
\Delta \text{INV}_{i,t} = k_1 \left( \frac{1}{\text{Assets}_{i,t-1}} \right) + k_2 \left( \frac{\Delta \text{Sales}_{i,t}}{\text{Assets}_{i,t-1}} \right) + k_3 \left( \frac{\Delta \text{Sales}_{i,t-1}}{\text{Assets}_{i,t-1}} \right) + \epsilon_{i,t} \tag{8}
\]

As for the curtailment of discretionary costs, the following cross-sectional models for each industry and year are estimated (Roychowdury, 2006):

\[
\text{SG&A}_{i,t} = \beta_1 + \beta_2 \left( \frac{1}{\text{Total Assets}_{i,t-1}} \right) + \beta_3 \left( \frac{\text{Sales}_{i,t-1}}{\text{Total Assets}_{i,t-1}} \right) + \epsilon_{i,t} \tag{9}
\]

\[
\text{R&D}_{i,t} = \beta_1 + \beta_2 \left( \frac{1}{\text{Total Assets}_{i,t-1}} \right) + \beta_3 \left( \frac{\text{Sales}_{i,t-1}}{\text{Total Assets}_{i,t-1}} \right) + \epsilon_{i,t} \tag{10}
\]

Empirical Model

A regression model was developed for this study to determine the influence of ETR (tax avoidance) on discretionary accruals (earnings management):

\[
\text{DEM} = a_1 \text{ETR} + a_2 \text{MIDA} + a_3 \text{AUDIT} + a_4 \text{DIRECTOR} + a_5 \text{INSTIT} + a_6 \text{NOMDIRECTOR} + a_7 \text{INDDIRECTOR} + a_8 \text{LEV} + a_9 \text{SIZE} + a_{10} \text{AGE} + a_{11} \text{ABSREM_PROB} + a_{12} \text{ABSREM_DIFFEXP} + a_{13} \text{ABSREM_CFO} + \epsilon \tag{11}
\]

Where

- DEM = The absolute value of discretionary accruals to measure earnings management
- ETR = The ratio of current income tax expenses divided by income before interests and taxes
- MIDA = A dummy variable of "1" for tax incentive recipient status and "0" for otherwise
- AUDIT = The dummy variable of "1" for Big Four audit firms and "0" for otherwise
- DIRECTORSHOLD = Managerial ownership by directors (in percentage)
- INSTIT = Institutional ownership (in percentage)
- NO DIRECTOR = Size of the board of directors
- INDDIRECTOR = Number of independent directors
- LEV = Leverage, or specifically, the total debt at the end of the year divided by the total assets at the end of the year
- SIZE = The natural logarithm of total assets
- AGE = Age of the firm from the year incorporated to the year 2017
- ABSREM_PROB = The absolute value of real earnings management measure for abnormal production
- ABSREM_DIFFEXP = The absolute value of real earnings management measure for abnormal discretionary expenses
- ABSREM_CFO = The absolute value of real earnings management measure for abnormal cash flows

As shown in Equation (11), earnings management (DEM) was measured as this study’s dependent variable. MIDA, ETR, and the interaction variable of MIDA*ETR represented the tax avoidance measures, specifically for this study to determine whether the incentives to manage tax would significantly influence earnings management by managers. Furthermore, the analysis was expected to yield empirical evidence on whether engagement in tax avoidance would compromise the quality of financial reporting and whether the receipt of tax incentives would weaken the relationship between tax avoidance and earnings management.

RESULTS

Descriptive Statistics

Table 2 presents the results of descriptive statistics for DEM (dependent variable), ETR and MIDA (main independent variables), and other control variables.
Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th>Correlations</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
<th>(10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) ETR</td>
<td>1</td>
<td>-0.19</td>
<td>-0.12</td>
<td>0.013</td>
<td>-0.011</td>
<td>-0.112</td>
<td>0.069</td>
<td>0.177*</td>
<td>-0.041</td>
<td>0.083</td>
</tr>
<tr>
<td>(2) DIRECTORSHOLD</td>
<td>-0.019</td>
<td>1</td>
<td>-0.110</td>
<td>-0.096</td>
<td>-0.178*</td>
<td>0.010</td>
<td>-0.133</td>
<td>0.024</td>
<td>-0.002</td>
<td>0.092</td>
</tr>
<tr>
<td>(3) INSTI</td>
<td>-0.120</td>
<td>-0.110</td>
<td>1</td>
<td>0.103</td>
<td>0.150*</td>
<td>0.242**</td>
<td>0.094</td>
<td>0.141*</td>
<td>-0.065</td>
<td>-0.013</td>
</tr>
<tr>
<td>(4) NOMDIRECTOR</td>
<td>0.013</td>
<td>-0.096</td>
<td>0.103</td>
<td>1</td>
<td>0.351**</td>
<td>0.086</td>
<td>0.132</td>
<td>-0.105</td>
<td>0.087</td>
<td>0.009</td>
</tr>
<tr>
<td>(5) INDDIRECTOR</td>
<td>-0.011</td>
<td>-0.178*</td>
<td>0.150*</td>
<td>0.351**</td>
<td>1</td>
<td>0.170*</td>
<td>0.170*</td>
<td>0.069</td>
<td>0.021</td>
<td>0.032</td>
</tr>
<tr>
<td>(6) LEV</td>
<td>-0.112</td>
<td>0.010</td>
<td>0.242**</td>
<td>0.086</td>
<td>0.170*</td>
<td>1</td>
<td>0.091</td>
<td>0.173*</td>
<td>0.022</td>
<td>0.088</td>
</tr>
<tr>
<td>(7) SIZE</td>
<td>0.069</td>
<td>-0.133</td>
<td>0.094</td>
<td>0.132</td>
<td>0.170*</td>
<td>0.091</td>
<td>1</td>
<td>0.059</td>
<td>0.367**</td>
<td>0.143*</td>
</tr>
<tr>
<td>(8) AGE</td>
<td>0.177*</td>
<td>0.024</td>
<td>0.141*</td>
<td>-0.105</td>
<td>0.069</td>
<td>0.173*</td>
<td>0.059</td>
<td>1</td>
<td>0.141*</td>
<td>0.130</td>
</tr>
<tr>
<td>(9) DEM</td>
<td>-0.041</td>
<td>-0.002</td>
<td>-0.065</td>
<td>0.087</td>
<td>0.021</td>
<td>0.022</td>
<td>0.367**</td>
<td>0.141*</td>
<td>0.416**</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: * denotes statistical significance at 0.05 level (two-tailed); ** denotes statistical significance at 0.01 level (two-tailed).

Table 3. Correlation matrix

Correlation Matrix
Table 3 displays the correlation matrix, revealing significant relationships among the variables. AGE correlates positively with ETR, LEV, and DEM, suggesting older firms tend to have higher effective tax rates leverage and engage in more earnings management. TOTALREM correlates positively with INSTI, SIZE, and DEM, indicating real earnings management links to institutional ownership, size, and earnings management. Institutional ownership may curb earnings management, while larger firms have more resources for real earnings management. Lower ETRs are observed among firms with higher institutional ownership and real earnings management, while higher leverage is seen in firms with more institutional ownership.

Additionally, firms with more non-executive directors tend to have more independent directors. Ownership appeared to engage in higher levels of real earnings management. The obtained results further indicated a higher number of non-executive directors among firms with higher levels of institutional ownership. Meanwhile, firms with more non-executive directors demonstrated a higher propensity to have more independent directors.

Table 4. Main Results

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Model</th>
<th>Items</th>
<th>Unstandardized Coefficients</th>
<th>Beta</th>
<th>Std. Error</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-0.710</td>
<td>0.142</td>
<td>-5.016</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETR</td>
<td>-0.004</td>
<td>0.002</td>
<td>-2.050</td>
<td>0.042</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIDA</td>
<td>-0.185</td>
<td>0.047</td>
<td>-3.904</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUDIT</td>
<td>0.060</td>
<td>0.040</td>
<td>1.510</td>
<td>0.133</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIRECTORSHOLD</td>
<td>-0.001</td>
<td>0.001</td>
<td>-0.028</td>
<td>0.618</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INSTI</td>
<td>-0.004</td>
<td>0.002</td>
<td>-0.115</td>
<td>-1.970</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOMDIRECTOR</td>
<td>0.020</td>
<td>0.010</td>
<td>2.056</td>
<td>0.041</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INDDIRECTOR</td>
<td>-0.013</td>
<td>0.015</td>
<td>-0.057</td>
<td>-0.903</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>-0.170</td>
<td>0.141</td>
<td>-1.205</td>
<td>0.230</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.049</td>
<td>0.009</td>
<td>5.767</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>0.002</td>
<td>0.001</td>
<td>2.821</td>
<td>0.005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABSREM_PROD</td>
<td>0.272</td>
<td>0.133</td>
<td>1.772</td>
<td>0.078</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABSREM_DISEXP</td>
<td>0.213</td>
<td>0.255</td>
<td>0.833</td>
<td>0.406</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABSREM_CFO</td>
<td>1.702</td>
<td>0.302</td>
<td>5.636</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Testing of H1
This section presents the results of the H1 testing, specifically on the relationship between tax avoidance (measured by effective tax rate) and earnings management. In other words, this study determined whether tax avoidance would motivate firms to engage in earnings management. The obtained results are presented in Table 4.
Table 5. Results of ANOVA (H1 and H2)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.657†</td>
<td>0.432</td>
<td>0.393</td>
<td>0.259</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ABSREM_CFO, NOMDIRECTOR, ETR, AUDIT, DIRECTORS_HOLD, INSTI, SIZE, AGE, MIDA, LEV, INDDIRECTOR, ABSREM_PROD, ABSREM_DISEXP

<table>
<thead>
<tr>
<th>ANOVA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: DEM

b. Predictors: (Constant), ABSREM_CFO, NOMDIRECTOR, ETR, AUDIT, DIRECTORS_HOLD, INSTI, SIZE, AGE, MIDA, LEV, INDDIRECTOR, ABSREM_PROD, ABSREM_DISEXP

Referring to these results, this study empirically demonstrated a statistically significant relationship between tax avoidance (ETR) and the magnitude of discretionary accruals (DEM) at the 0.01 level. The relationship was statistically and economically significant, with a negative correlation between ETR and the absolute value of discretionary accruals. In other words, lower ETR (indicative of higher tax avoidance) resulted in a higher magnitude of earnings management. Therefore, H1 was supported in this study.

These findings highlight the potential motivations and mechanisms of tax avoidance influencing managerial conduct and financial reporting outcomes. This is consistent with the results from previous studies by Putri et al. (2016) and Desai and Dharmapala (2006, 2009), which similarly reported a relationship between tax avoidance and earnings management. Managers often exploit various tax avoidance strategies to manipulate earnings to benefit their interests rather than shareholders (Desai & Dharmapala, 2009; Olaniyi et al., 2020). The significant influence of tax avoidance on managers’ adoption of earnings management strategies (Desai & Dharmapala, 2006, 2009; Desai et al., 2007) is highly plausible and justified. The incentive to engage in tax avoidance promotes the incentive to engage in earnings management, driven by the need for financial flexibility and risk mitigation (Desai & Dharmapala, 2006, 2009; Gunny, 2010).

Tax avoidance strategies typically involve obfuscating transactions to acquire tax benefits without detection by tax authorities (Christensen & Murphy, 2004; Desai & Dharmapala, 2009; Goncharov & Zimmermann, 2006). Shareholders find it challenging to monitor managerial conduct effectively due to the need for more transparency in transactions, resulting in tax evasion. Firms’ earnings are often manipulated to align with desired tax outcomes and yield favourable financial conditions for tax planning. Through earnings management, managers can cover up potential indications of aggressive tax planning and minimize the likelihood of scrutiny from tax authorities (Desai & Dharmapala, 2006, 2009).

Conditions for earnings management are facilitated by tax expenses (Schipper, 1989), making tax expenses more susceptible to manipulation as part of firms’ income management practices. These findings are statistically and economically significant, indicating substantial corporate governance and financial transparency implications.

Testing of H2

Referring to Table 5, this study observed a statistically significant negative relationship between tax incentive recipient status (MIDA) and the magnitude of discretionary accruals (DEM), supporting H2. The coefficient value of -0.237 indicated a 23.7% lower likelihood of tax incentive recipient firms engaging in earnings management than non-recipients. Control variables such as institutional ownership (INSTI), number of directors (NOMDIRECTOR), firm size (SIZE), firm age (AGE), and absolute value of discretionary accruals (ABSREM_PROD and ABSREM_CFO) were significantly related to discretionary accruals, consistent with previous studies (Beatty et al., 2002; Chen et al., 2010; Dechow et al., 1996; Fan & Wong, 2002; Klein, 2002). Managerial ownership (DIRECTORS_HOLD), leverage (LEV), and a number of independent directors (INDDIRECTOR) showed no significant influence on discretionary accruals (Augustine & Dwiianika, 2019; Park & Shin, 2004). This study demonstrates that tax avoidance negatively influences earnings management among Malaysian public firms, with tax incentive recipient firms showing a lower propensity for earnings management compared to non-recipients. This raises the question of whether tax incentives motivate tax avoidance for lower tax burdens, as increased agency problems, litigation risks, and reputational harm might offset improved cash flows from tax avoidance. Tax incentive recipients might avoid aggressive tax planning to prevent reputational damage and regulatory scrutiny. The following section tests H2, examining the difference in tax avoidance between tax incentive recipients and non-recipient firms in Malaysia.

Testing of H3

Table 6 presents the independent samples t-test results on the difference in the ETRs between firms with MIDA status and non-MIDA status. In particular, firms with MIDA status recorded an average ETR of 10.911%, whereas firms with non-MIDA status recorded an average ETR of 8.405%. Although both average ETRs were lower than the statutory tax rate of 25%, it was evident that the receipt of tax incentives lowered the tax burdens for firms with MIDA status. However, the reduction in tax burdens was less substantial than that observed for firms with non-MIDA status.
Thus, providing tax incentives effectively reduces firms' tax burdens, making them less likely to engage in aggressive tax avoidance due to associated costs and risks. Tax incentive recipients achieve substantial tax savings with lower costs and risks than tax avoidance. These results highlight the relationship between tax incentives, tax avoidance, and earnings management, offering valuable insights for policymakers and regulators in designing tax incentive initiatives and monitoring tax avoidance practices.

### Additional Analysis: Modifying Effect of Tax Incentives

The costs and risks of aggressive tax avoidance are typically higher than those associated with tax incentives. However, whether tax incentives strengthen or weaken this relationship remains unresolved. Hanlon and Slemrod (2009) found lower tax avoidance among firms receiving R&D tax incentives, suggesting that such incentives drive R&D spending and future earnings, reducing tax avoidance. Similarly, Goerke (2019) found that firms with robust CSR initiatives are less likely to engage in tax evasion due to reputational risks. These findings imply a potential moderating effect of tax incentives on the relationship between tax avoidance and earnings management. The moderating effect of tax incentives on the tax avoidance-earnings management relationship has yet to be thoroughly explored. Tax incentive recipients manipulate earnings to meet incentive requirements, or the incentives mitigate this relationship due to lower costs and risks. This study examines this effect among Malaysian public firms, focusing on the interaction between ETR and MIDA and MIDA's influence on the ETR-DEM relationship.

Three possible outcomes are considered: (1) tax incentives weaken the relationship between tax avoidance and earnings management; (2) tax incentives strengthen the relationship; (3) tax incentives do not affect the relationship. The third outcome may occur if firms face high pressure for both practices, weakening the influence of tax incentives. The study hypothesizes that tax incentives significantly moderate this relationship, as tax incentive recipients may view tax avoidance practices unfavourably. Additionally, firms might manipulate accounting figures to demonstrate strong financial performance for future tax incentives. Despite receiving tax incentives, the pressure to meet both requirements may motivate firms to engage in tax avoidance and earnings management. Using the following empirical model, additional analysis on the moderating effect of tax incentives was conducted:

\[
DEM = a_1ETR + a_2MIDA + a_3MIDA \times ETR + a_4AUDIT + a_5DIRECTOR + a_6INSTI + a_7NOMDIRECTOR + a_8INDDIRECTOR + a_9LEV + a_{10}SIZE + a_{11}AGE + a_{12}ABSREM_PROD + a_{13}ABSREM_DISEXP + a_{14}ABSREM_CFO + \varepsilon
\]  

Table 6 presents the results of this study's additional analysis. With the coefficient value of -0.258, MIDA as a dummy variable exhibited a statistically significant influence on DEM at 0.01 level. With all other independent variables as control variables, the results revealed a significantly lower tendency to engage in discretionary accruals (earnings management) among firms classified as tax incentive recipients (MIDA = 1) than those classified as non-tax incentive recipients (MIDA = 0) by a magnitude difference of 2.851 in DEM. These results reaffirmed the results of hypothesis testing for H2 and demonstrated the potential influence of tax incentives on firms' earnings management. Besides that, the results revealed the significant influence of control variables, specifically AUDIT, SIZE, and AGE, as well as ABSREM_PROD and ABSREM_CFO, on DEM, which were found to be in line with the results reported by prior studies (Park & Shin, 2004). The remaining control variables of DIRECTORSHOLD, LEV, INDDIRECTOR, and INSTI did not significantly influence DEM, which extended the current understanding of factors that influence earnings management.

### Table 7. Results of ANOVA on the relationship between ETR and absolute value of discretionary accruals conditional to MIDA as dummy variable

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>9.629</td>
<td>14</td>
<td>0.688</td>
<td>10.173</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>12.643</td>
<td>187</td>
<td>0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>22.272</td>
<td>201</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: DEM

Note: Significant at 0.10 level (two-tailed)
The results on the interaction between ETR and ETR_MIDA further revealed the statistically significant and negative relationship between ETR and DEM (beta coefficient of -0.127) at 0.05 level. Thus, this study did not obtain adequate evidence to support the proposed hypothesis that the receipt of tax incentives significantly moderates the relationship between tax avoidance and earnings management. In other words, providing tax incentives has little impact on firms’ engagement in tax avoidance and earnings management. The complexities of tax incentives, tax avoidance, and earnings management, the effects of different factors on various firms, sectors, and industries, as well as the strategic behaviours and conduct of businesses, have contributed to the difficulty of accurately determining the relationship of tax incentives, tax avoidance, and earnings management. Moreover, institutional pressures may compel firms to engage in tax avoidance, regardless of whether they receive tax incentives. On a similar note, Sánchez-Ballesta and Yagüe (2021) contended the discrete effects of the pressures associated with tax avoidance. They reported earnings on the relationship between tax avoidance and earnings manipulation.

**DISCUSSIONS**

This study investigates the relationship between tax avoidance, measured by the effective tax rate (ETR), and earnings management, measured by discretionary accruals (DEM), among Malaysian public firms. It also examines the impact of tax incentive recipient status on this relationship. The findings confirm a significant negative relationship between tax avoidance and earnings management, indicating that higher tax avoidance is associated with increased earnings manipulation.

The negative relationship between tax avoidance and earnings management suggests that managers engage in opportunistic behaviour to maximize their utility at the expense of shareholders. These findings align with prior research by Desai and Dharmapala (2006), who highlight that tax avoidance strategies allow managers to manipulate financial outcomes in ways not immediately apparent to shareholders or regulators. By reducing the firm's tax liabilities, managers can free up resources for short-term financial targets or increased compensation, creating opportunities for earnings management. This pattern is consistent across different contexts, as observed in studies by Putri et al. (2016) and Desai and Dharmapala (2006). However, this study contradicts such studies as Delgado et al. (2023), who find a positive relationship between ETR indicators and discretionary accruals, suggesting that higher ETRs do not necessarily correlate with reduced earnings management. This contradiction may stem from differences in sample selection, measurement methods, or regional economic conditions. Additionally, geographical variability in research findings further complicates the understanding of the relationship between tax avoidance and earnings management. For example, Dhalwai et al. (2004) and Blaylock et al. (2015) in the U.S. find a strong link between aggressive tax strategies and financial reporting, while Guenther et al. (2017) report a negative relationship, indicating different outcomes based on regional factors such as regulatory environments, corporate governance practices, and cultural differences.

Further, the study reveals that tax incentive recipient firms are less likely to manage earnings than non-recipients. This finding is statistically significant and economically meaningful, suggesting that tax incentives may deter aggressive earnings management due to increased regulatory scrutiny and compliance requirements. This finding contributes to the literature on the impact of tax incentives, such as those by Okoth (2023) and Wang et al. (2024), but shows varied outcomes. While some studies find that tax incentives promote positive corporate behaviour and reduce tax avoidance, others suggest that tax incentives lead to increased earnings management to meet regulatory benchmarks. These compliance requirements encourage conservative accounting practices and improved internal controls, reducing the likelihood of earnings manipulation. This is supported by research from Guenther (1994) and Lin et al. (2016), as well as aligns with Armstrong et al. (2016) and Bauer et al. (2018), who found that external monitoring and oversight can mitigate earnings management.

Nonetheless, the additional analysis shows that tax incentives do not significantly moderate the relationship between tax avoidance and earnings management. Firms may still face pressure to manage earnings, so work on managing tax incentives is needed. The findings imply that while tax incentives can reduce earnings management, they are not strong enough to moderate the relationship between tax avoidance and earnings management. This suggests that other pressures, such as regulatory scrutiny and the need to present favourable financial outcomes, influence managerial behaviour. This study highlights the complex relationship between tax avoidance, earnings management, and tax incentives. While tax incentives can reduce earnings management, they are insufficient to moderate the relationship between tax avoidance and
CONCLUSIONS

This study explores the relationship between tax avoidance, measured by the effective tax rate (ETR), and earnings management, measured by discretionary accruals (DEMA), among Malaysian public firms while examining the impact of tax incentive recipient status on this relationship. The findings reveal a significant negative relationship between tax avoidance and earnings management, suggesting that higher tax avoidance is associated with increased earnings manipulation. This aligns with existing literature indicating that tax avoidance strategies allow managers to manipulate financial outcomes, thereby maximizing their utility at the expense of shareholders.

A notable contribution of this study is that firms receiving tax incentives are less likely to engage in earnings management than non-recipients. This suggests that tax incentives deter aggressive earnings management due to increased regulatory scrutiny and compliance requirements. However, tax incentives do not significantly moderate the relationship between tax avoidance and earnings management despite this deterrence. This indicates that other pressures, such as regulatory scrutiny and the need to present favourable financial outcomes, continue to influence managerial behaviour.

The unique contribution of this paper lies in its detailed analysis within the unique setting of Malaysian public firms, explicitly considering the tax incentive recipients’ status data. This context provides new insights into how tax incentives can influence managerial behaviour regarding earnings management and tax avoidance. The study provides empirical evidence that, while tax incentives can reduce earnings management, they must be sufficiently strong to discourage the practice entirely when firms face significant pressures to reduce tax burdens and manage earnings. The theoretical implications of this study suggest that while tax incentives can reduce earnings manipulation to some extent, they are not a potent remedy for mitigating the adverse effects of tax avoidance in influencing earnings management. From a managerial perspective, the findings highlight the need for robust regulatory frameworks and effective corporate governance mechanisms to control managerial behaviour and enhance the transparency and reliability of financial reporting. Policymakers should carefully design tax policies that balance promoting economic growth with the need for financial integrity.

This study’s limitations include its focus on Malaysian public firms, which may limit the generalizability of the findings to other contexts. Additionally, the study does not account for potential industry-specific effects or differences in corporate governance practices across firms. Future research could address these limitations by exploring the relationship between tax avoidance and earnings management in different countries and industries. Longitudinal studies also provide insights into how changes in tax policies and economic conditions influence this relationship over time.

REFERENCES


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