
THE INFLUENCE OF TOBACCO EXCISE RATES AND DEBT COSTS ON TAX AVOIDANCE WITH AUDIT QUALITY AS A MODERATING VARIABLE (An Empirical Study on Cigarette Industry Companies Listed on The Indonesia Stock Exchange From 2010 to 2019)

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ABSTRACT

Tax avoidance in Indonesia's tobacco industry remains a pressing issue despite regulatory efforts through excise policies and audit oversight. The complexity of excise structures and companies' strategic use of debt creates opportunities for tax avoidance. This study examines the influence of tobacco excise rates and debt costs on tax avoidance, with audit quality as a moderating variable. A quantitative approach was applied, analyzing secondary data from 4 tobacco companies listed on the Indonesia Stock Exchange during 2010–2019, using panel data regression and Moderated Regression Analysis (MRA) via EViews 10. Results show that tobacco excise rates significantly influence tax avoidance, while debt costs do not have a significant effect. Audit quality moderates the relationship between excise rates and tax avoidance, acting as a quasi-moderator, but does not moderate the effect of debt costs. These findings support the Theory of Planned Behavior, highlighting that regulatory structures and audit oversight influence corporate intentions to minimize taxes. The study recommends strengthening audit quality standards and simplifying excise policies to mitigate tax avoidance practices, contributing to better fiscal sustainability and corporate governance in the tobacco sector.

KEYWORDS Tobacco Excise rates; Debt Costs; Audit Quality; Tax Avoidance; Theory of Planned Behavior; Quasi Moderator



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INTRODUCTION

Efforts to minimize expenses and maximize profits drive tax avoidance, whether through legal tax avoidance strategies or the more concerning tax evasion. According to (Mardiasmo, 2016:11), taxpayers engage in tax avoidance when they

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seek lawful methods to reduce their taxable income without violating the law (Pohan, Drs. Chairil Anwar, M.Si, 2018:372). This is often achieved by exploiting gaps or gray areas in tax regulations.

The tobacco industry is a significant contributor to tax revenue, as reflected in financial reports validated by the Directorate General of Customs and Excise of the Republic of Indonesia:

1. In 2017, tobacco excise revenue reached IDR 147,718,195,604,756, equivalent to 96.37% of total excise revenue.
2. In 2018, tobacco excise revenue increased by 10% to IDR 161,771,554,305,988, accounting for 96.07% of national excise revenue.
3. In 2019, tobacco excise revenue grew 7.22% to IDR 173,457,613,724,101, representing 95.83% of IDR 181,009,918,441,271.

As a regulator, the government imposes tobacco excise rates to regulate public consumption and mitigate tobacco's negative impacts while generating state revenue to support development. Tobacco products are subject to two excises: a fixed amount per stick or gram and a percentage of the retail price (*ad valorem*). Tobacco excise policies classify annual cigarette production into five categories, each with specific excise rates depending on the brand and retail price per stick/gram.

Under current laws, cigarettes made from tobacco are subject to excise and tax. However, due to differing definitions and tax levies, cigarettes are not subject to double taxation.

Indonesia's tobacco tax system is tiered, with 11 tariff levels for three primary cigarette categories: Machine-rolled Kretek Cigarettes (SKM), Machine-rolled White Cigarettes (SPM), and Hand-rolled Kretek Cigarettes (SKT).

According to (Prasetyo & Adrison, 2020), some producers can evade excise taxes due to weaknesses in the system caused by its complexity. Similarly, (Stehr, 2005) noted that changes in state cigarette taxes imply tax avoidance. (Nuvrianto, 2020) highlighted that stakeholders in the tobacco industry influence the formulation and implementation of these regulations, complicating government efforts to reach agreements among stakeholders, as exemplified by delays in simplifying the tax structure.

Tax avoidance in the tobacco industry can result not only from exploiting tobacco excise rules but also from other factors such as debt. Debt helps businesses lower their taxable income because interest payments are deductible, making this form of financing an attractive option for companies aiming to reduce their overall tax burden.

A notable case is PT. Bentoel, Tbk. According to Benedicta Prima on Kontan.co.id (Wednesday, 05/08/2019), the Tax Justice Network, a social organization originally founded in the UK with branches in various countries advocating for global tax justice, reported that PT Bentoel Internasional Investama, owned by British American Tobacco (BAT), was involved in tax evasion in Indonesia. This allegedly costs the country nearly \$14 million annually in lost revenue. The study detailed two methods BAT used to transfer funds out of Indonesia: internally, through loans from 2013 to 2015, and externally, by repaying the UK for various royalties, fees, and services.

This phenomenon raises questions about how tax avoidance indications were found, even though the financial statements had been audited beforehand. This leads to doubts about whether the audits were of high quality.

Thus, whether through tobacco excise or income tax, tax avoidance becomes a critical issue, and whether audit quality can prevent tax avoidance practices.

Several studies present differing results regarding debt costs. (Shin & Woo, 2018) the cost of debt capital increases with higher tax avoidance when corporate profitability is favorable. (Isin, 2018) observed a positive relationship between tax avoidance and loan spreads. (Cen, Tong, & Sun, 2017) (Zedadra et al., 2019) suggested that debt holders' perceptions influence tax avoidance behavior, while (Kovermann, 2018) reported that tax avoidance negatively impacts borrowing costs. Additionally, (Sadjiarto, Mustofa, Putra, & Winston, 2019) found that tax avoidance significantly and adversely affects debt costs.

Regarding audit quality, (Damayanti & Susanto, 2016) found no relationship between audit quality and tax avoidance. However, (Purba, 2018) demonstrated that audit quality is among several factors that strongly influence tax evasion. Partial data, however, indicate that audit quality does not affect tax evasion. Similar evidence suggests a negative relationship between CEO variables and tax avoidance in well-audited companies (Jihene & Moez, 2019), supporting the notion that audit quality moderates the relationship between CEOs and tax avoidance. These findings suggest that high-quality audits protect stakeholders from corporate leaders' exploitative practices.

Tobacco Excise Rates

Tobacco excise is defined as state revenue managed through the national budget mechanism. It is vital and strategic in funding government programs, performance, and development nationwide, as outlined in the Ministry of Finance Regulation No. 152/PMK.010/2019, amending Regulation No. 146/PMK.010/2017.

Tobacco excise rates are calculated based on fair and objective criteria, considering their impact on society and the national interest in pursuing benefits and advantages.

Regarding excise rates, previous research by (Prasetyo & Adrison, 2020) concluded that Indonesia's complex cigarette tax system has created opportunities for cigarette producers to avoid taxes, resulting in affordable cigarette prices. (Nuvrianto, 2020) found no indication that the implementation of Regulation No. 146/PMK.010/2017 affected tobacco consumption. It was also revealed that stakeholders in the tobacco industry interfered in the drafting and implementation of these regulations, partially hindering the government from achieving consensus among stakeholders, as evidenced by delays in simplifying the tax structure. Similarly, (DeCicca, Kenkel, & Liu, 2013) concluded that consumers avoid taxes by purchasing in neighboring jurisdictions with lower tax rates.

**Table 1. List of Minister of Finance Regulations in effect from 2010 to 2019
Concerning Tobacco Product Excise Tariffs**

No.	Year	Regulation of the Minister of Finance
1	2010	Peraturan Menteri Keuangan Nomor: 99/PMK.011/2010; Perubahan Atas Peraturan Menteri Keuangan Nomor 181/PMK.011/2009 Tentang Tarif Cukai Hasil Tembakau
2	2010	Peraturan Menteri Keuangan Nomor : 190/PMK.011/2010; Perubahan Kedua Atas Peraturan Menteri Keuangan Nomor 181/PMK.011/2009 Tentang Tarif Cukai Hasil Tembakau
3	2011	PMK No. 167/PMK.011/2011 tentang perubahan PMK 181 ke III
4	2012	PMK No.179/PMK.011/2012
5	2014	PMK No.205/PMK.011/2014 tentang perubahan PMK 179 Ke I
6	2015	PMK No.198/PMK.011/2015 tentang perubahan PMK 179 Ke II
7	2016	PMK No.147/PMK.011/2016 tentang perubahan PMK 179 Ke III
8	2017	PMK No.146/PMK.010/2017 Tentang Tarif Cukai Hasil Tembakau
9	2018	PMK No.156/PMK.010/2018 tentang perubahan PMK 146 ke I
10	2019	PMK No.152/PMK.010/2019 tentang perubahan PMK 146 Ke II

Source : Data processed from <https://jdih.kemenkeu.go.id/>

Debt Costs

The interest rate demanded by lenders for repayment of loans to corporations is referred to as the "Cost of Debt" (Yunika, 2017). The interest expense borne by companies over a year is divided by the average interest rate paid on long-term and short-term loans to calculate debt costs (Santosa & Kurniawan, 2016).

The interest companies pay on their loans represents the cost associated with acquiring debt or financing, which may come from one or multiple sources. This is significant as businesses typically owe money to more than one creditor, and the rates or interest levels set by these creditors may vary ((Kovermann, 2018)Debt costs are measured by dividing the total interest paid over one year by the weighted average of the company's interest-bearing loans (including long-term and short-term loans).

(Sadjiarto et al., 2019) and (Pittman & Fortin, 2004) also used proxies such as loan interest rates, company age, auditor choice, and capital costs to measure debt expenses.

Audit Quality

According to (Arens, Alvin, 2011:105), detection aspects represent auditor competence, whereas reporting aspects reflect ethics or auditor integrity, particularly independence, which constitutes "audit quality."

The Indonesian Institute of Accountants (IAI) defines high-quality audits as those that comply with the audit criteria established by the auditing profession. According to (Saputra, 2015), IFAC's "Framework for Audit Quality Indicators" outlines dimensions and indicators to assess audit quality, including Values, Ethics, and Attitudes.

(Donelson, Ege, Imdieke, & Maksymov, 2020) perceive restatements as "strong evidence of poor audit quality" since they represent instances where auditors incorrectly issued unqualified opinions. (Saputra, 2015) and (Harris & Williams, 2020) state that a public accounting firm (PAF) reputation reflects audit accuracy. Firms with strong reputations, such as Big Four firms, are perceived to deliver higher quality audits.

Big Four firms, known for their values, ethics, and professionalism, include:

1. Deloitte Touche Tohmatsu Limited (Deloitte),
2. Ernst & Young (EY),
3. Klynveld Peat Marwick Goerdeler (KPMG), and
4. Global PricewaterhouseCoopers Network (PwC).

In this study, companies audited by Big Four firms are assigned a value of 1, while those audited by non-Big Four firms are assigned a value of 0.

Tax avoidance has become a persistent concern in Indonesia, especially in the tobacco industry, which contributes significantly to national excise revenues. Despite regulatory efforts through excise tax policy, tax avoidance cases continue to emerge, raising concerns about the effectiveness of enforcement mechanisms and the role of audit quality. The complexity of the tobacco excise structure and the dual nature of tax levies (specific and ad valorem) create opportunities for legal tax avoidance, especially when firms strategically exploit loopholes or apply aggressive financing tactics such as leveraging debt.

The urgency of this issue lies in the potential erosion of state revenue and the credibility of the tax system. Persistent tax avoidance undermines fiscal sustainability and fair taxation principles in a sector that generates over 90% of total excise revenues. Moreover, public disclosures of multinational tobacco companies' tax evasion practices indicate gaps in audit oversight and highlight the need for stronger governance and regulatory mechanisms.

Another urgent concern is the inadequate role of audit quality in preventing tax avoidance. Despite external audits, questionable tax practices remain undetected or unchallenged, prompting a critical evaluation of the audit process. This situation calls for further empirical studies on whether audit quality can mediate between financial strategies, such as debt and excise manipulation, and tax avoidance.

Previous studies, such as those by Prasetyo and Adrison (2020), found that Indonesia's complex excise system allows producers to sell cigarettes at lower prices, enabling tax avoidance. DeCicca et al. (2013) also showed that consumers respond to tax differences by engaging in cross-border purchases, diminishing tax

policy effectiveness. These findings confirm that tobacco taxation requires a more robust and simplified structure.

Other scholars, including Sadjiarto et al. (2019) and Isin (2018), explored how the cost of debt influences tax avoidance, revealing that companies often use debt strategically to lower taxable income through deductible interest. However, the results are mixed, with some studies reporting positive correlations while others find no significant effect. This inconsistency suggests the need for further exploration, particularly in regulated industries like tobacco.

In terms of audit quality, studies by Saputra (2015) and Lestari & Nedya (2019) emphasized that firms audited by Big Four accounting firms generally exhibit lower levels of aggressive tax behavior. However, other research, such as Damayanti & Susanto (2016), found no significant correlation between audit quality and tax avoidance. This divergence in findings warrants a closer examination of audit quality as a moderating variable.

Despite numerous tax avoidance and audit quality studies, few have investigated their intersection within the tobacco industry using panel data over an extended period. Additionally, limited research has focused on how audit quality moderates the effect of tobacco excise rates and debt costs on tax avoidance, especially using empirical evidence from firms listed on the Indonesia Stock Exchange over a decade.

This study introduces novelty by using a panel data regression model to assess whether audit quality moderates the influence of tobacco excise rates and debt costs on tax avoidance in tobacco companies from 2010 to 2019. The research classifies audit quality using Big Four versus non-Big Four firm proxies and incorporates interaction terms to determine moderating effects—a comprehensive approach not previously applied in this context.

This study aims to empirically examine the direct effects of tobacco excise rates and debt costs on tax avoidance, and to analyze whether audit quality significantly moderates these relationships in publicly listed Indonesian tobacco companies during the 2010–2019 period.

This study is expected to contribute academically by strengthening the theoretical link between tax policy, corporate finance, and audit governance within the Theory of Planned Behavior framework. Practically, it offers recommendations for policymakers to refine excise tax policy and debt regulations, and encourages the adoption of higher audit standards to reduce tax avoidance practices in high-risk sectors like tobacco.

RESEARCH METHOD

The author conducted a quantitative study through a survey that describes and compares data. This method analyzes the effect of changes in information using numerical data.

From the population, the research sample consists of 4 companies listed on the Indonesia Stock Exchange (IDX), covering 10 years from 2010 to 2019. This results in a dataset of 40 financial reports, meeting the minimum data requirement of 30 (Ghozali, Imam, 2015). Data was collected by accessing the IDX website and

gathering secondary data relevant to this study (information from corporate websites was also included as part of the required data for this research).

Table 2. List of Research Population

No.	Stock Code	Issuer Emiten	IPO Date
1	GGRM	Gudang garam ,Tbk	27/08/1990
2	HMSP	Handjaya Mandala Sampoerna,Tbk	15/08/1990
3	ITIC	Indonesian Tobasco,Tbk	04/07/2019
4	RMBA	Bentoel International Investama,Tbk	05/03/1990
5	WIM	Wismilak Inti Makmur,Tbk	18/12/2012

Source : <https://www.idx.co.id/>

This study conducted the analysis and hypothesis testing using EViews software. This tool is highly appropriate as the data combines time series and cross-sectional data in a panel format. A panel data regression model was used to examine the influence of tobacco excise rates and debt costs on tax avoidance, with audit quality as the moderating variable.

Table 3. Variable Operationalization

No.	Variable	Proxy	Formula	Scale
1	Tobacco Excise Rates (X1) Source: (Prasetyo & Adrison, 2020)	Excise rates in the Minister of Finance regulations tobacco excise rates according to the relevant year	Amount of excise paid	Nominal
2	Cost of Debt (X2) source :(Yunika, 2017),(Santosa & Kurniawan, 2016),(Sadjiarto et al., 2019)	<i>Cost of Debt</i>	<i>Interest Expense / Average Interest Bearing Debt</i>	Ratio
3	Tax Avoidance (Y), Source :(Lestari & Nedy, 2019)	<i>Effective Tax Rate (ETR)</i>	<i>Tax Expenses / Earning before tax</i>	Ratio
4	Audit Quality (Moderation) Source (Lestari & Nedy, 2019),(Nugroho, Wicaksono, & Utami, 2018),(Harris & Williams, 2020)	Size of Public Accounting Firm	Value 1: Companies audited by Big Four Public Accounting Firms Value 0: Companies not audited by Big Four Public Accounting Firms	Ordinal

Source: Data processing

RESULT AND DISCUSSION

Results

Analysis Description

Tax avoidance, as the dependent variable proxied by the effective tax rate (ETR) (Lestari & Nedya, 2019), based on accounting, represents the percentage of current tax divided by profit before tax. This data is sourced from the financial information in the generated financial reports. The average current tax value is 10.58267, with a standard deviation 27.61955. The lowest value, -87.45587, was recorded in 2018 by PT. Bentoel International Investama, Tbk (RMBA) also held the highest value in 2019, at 73.69758.

The first independent variable (X1), excise rates, is proxied by the amount of excise. The highest value is 18.03838 in the natural logarithm of excise payments, recorded by PT. Gudang Garam, Tbk (GGRM) in 2019 with IDR 68,229,128 million, while the lowest value is IDR 191,598 million (natural logarithm of 12.16315) recorded by PT. Wismilak Inti Makmur, Tbk (WIIM) in 2010. The average excise value is 15.86179.

The second independent variable, cost of debt (X2), is proxied by the cost of debt, which represents the return expected by investors on their investment in the company (Mardiasmo, 2016:9). Measurements using the cost of debt variable (Yunika, 2017),(Santosa & Kurniawan, 2016),(Sadjiarto et al., 2019) indicate that this cost can reduce taxable income. The average cost of debt is 3.114%, with the highest value being 16.40870% recorded by PT. Bentoel International Investama, Tbk (RMBA) in 2016, and the lowest value being 0.0036% (natural logarithm of 0.0000181) recorded by the same company.

The moderating variable (Z) in this study uses the proxy of audit quality (Nugroho, Wicaksono, & Utami, 2018). Audit firm size is used as a proxy for audit caliber in evaluating a company. According to (Saputra, 2015) Auditor independence influences audit quality—the more independent an auditor, the higher the audit quality. Furthermore, (Harris & Williams, 2020) argue that in the audit quality literature, indicators such as personnel with specialized skills and knowledge, audit experience, and timely reporting of internal control issues are considered the most effective measures of audit quality. When considering the size of audit firms as a proxy for audit quality (Lestari & Nedya, 2019); (Nugroho et al., 2018), dummy variables are used: a value of 1 for companies audited by Deloitte, PricewaterhouseCoopers, Ernst & Young, and KPMG, and 0 for businesses audited by non-Big Four firms. This study found that only 11 out of 40 research objects used non-Big Four audit firms, resulting in an average audit firm size value of 0.716000.

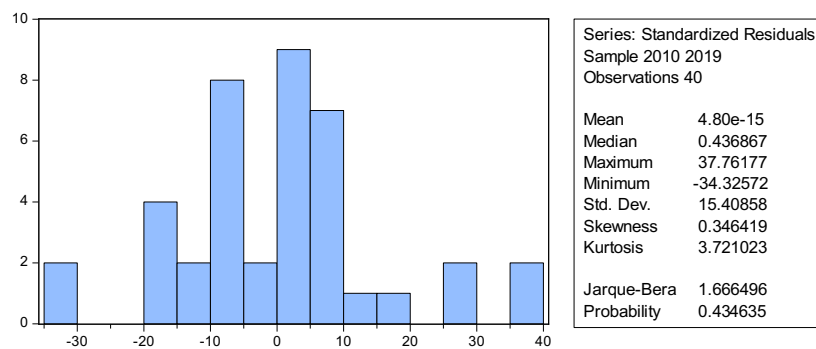
Table 4: Statistical Descriptive

	Tax Avoidance	Tobacco Excise Rates	Cost of Debt	Audit Quality
Mean	10.58267	15.86179	3.111549	0.716000
Median	24.39614	16.40810	3.015637	0.980000
Maximum	73.69758	18.03838	16.40870	0.980000
Minimum	-87.45587	12.16315	0,0000181	0.020000
Std. Dev.	27.61955	1.845772	2.989378	0.434114
Skewness	-1.268626	-0.636243	2.188068	-1.007807
Kurtosis	5.969333	1.969984	10.74216	2.015674
Jarque-Bera Probability	25.42432 0.000003	4.466921 0.107157	131.8193 0.000000	8.385989 0.015101
Sum	423.3066	634.4717	124.4620	28.64000
Sum Sq. Dev.	29750.75	132.8681	348.5189	7.349760
Observations	40	40	40	40

Source: Data Processed Using EViews 10

Normality Test Results

Using the EViews application, the probability value obtained is 0.434635 > 0.05, indicating that the data in this study is normally distributed, as shown in the graph below:

**Figure 1: Normality Test Results**

Source: Data Processed Using EViews 10

Hypothesis Testing

The T-test was used to determine how much each independent variable contributes to explaining the dependent variable. The T-test follows specific criteria: the hypothesis is rejected if the significance value of profitability is greater than 0.05. If the hypothesis is rejected, the independent variable does not influence the dependent variable. Conversely, if the significance value is less than 0.05, the

hypothesis is accepted, meaning the independent variable affects the dependent variable.

a. T-Test Analysis Without Moderating Variable

Table 5. t-test Results of Regression Without Moderating Variable

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	61.68218	16.95361	3.638291	0.0009
Excise Rates	-3.183499	1.051460	-3.027693	0.0047
Cost of Debt	-0.193958	0.289583	-0.669786	0.5075

Source: Data Processed Using EViews 10

From the table above, the probability value for excise rates is $0.0047 < 0.05$, indicating a significant effect, while the probability value for cost of debt is $0.5075 > 0.05$, indicating no effect. Thus, the T-test analysis without including the moderating variable shows that only excise rates significantly impact.

b. T-Test Analysis with Moderating Variable (Without Interaction)

Table 6. t-Test Results of Regression with Moderating Variable Without Interaction

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	158.1449	32.28250	4.898780	0.0000
Excise Rates	-4.797353	1.219939	-3.932452	0.0004
Cost of Debt	-0.285598	0.308371	-0.926151	0.3611
Audit Quality	-98.57392	35.49541	-2.777089	0.0090

Source: Data Processed Using EViews 10

From the table above, the probability value for excise rates is $0.0004 < 0.05$, indicating a significant effect, with a notable increase in probability compared to the previous T-test results in Table 4.23. The probability value for the cost of debt increased to $0.3611 > 0.05$, indicating no significant effect. For audit quality, the probability value is $0.0090 < 0.05$, showing a significant effect on tax avoidance before adding the interaction between the independent and moderating variables.

c. T-Test Analysis of Moderation Regression

1) Effect of Moderating Variable (Audit Quality) and Its Interaction with Excise Rates

Table 7. t-Test Regression Results of Excise Rates and Audit Quality on Tax Avoidance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	148.4310	30.75636	4.826027	0.0000
Excise Rates	-4.235454	1.171075	-3.616723	0.0010
Audit Quality	-98.69620	33.89420	-2.911890	0.0063

Source: Data Processed Using EViews 10

Table 8. MRA Results of Audit Quality and Its Interaction with Excise Rates

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	202.0224	31.57628	6.397917	0.0000
Excise Rates	-7.813820	1.493486	-5.231936	0.0000
Audit Quality	-213.0385	45.91129	-4.640220	0.0001
Excise Rates * Audit Quality	7.070194	2.153875	3.282547	0.0024

Source: Data Processed Using EViews 10

From Table 6, the probability value for the effect of excise rates on tax avoidance is $0.0063 < 0.05$ for audit quality, indicating significance. The probability value of excise rates is $0.0010 < 0.05$, indicating a significant effect. From Table 7, the probability value for the interaction between excise rates and audit quality is $0.0024 < 0.05$, indicating a significant effect. Thus, audit quality as a moderator on tax avoidance is categorized as a quasi-moderator variable.

2) Effect of Moderating Variable (Audit Quality) and Its Interaction with Cost of Debt

Table 9. t-Test Results of Regression on Cost of Debt and Audit Quality on Tax Avoidance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	80.09511	29.11475	2.751015	0.0095
Cost of Debt	0.004060	0.186046	0.021822	0.9827
Audit Quality	-97.10207	40.65842	-2.388240	0.0226

Source: Data Processed Using EViews 10

Table 10. MRA Results of Audit Quality and Its Interaction with Cost of Debt

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	79.59506	29.54489	2.694038	0.0110
Cost of Debt	0.145914	0.699218	0.208682	0.8360
Audit Quality	-96.56268	41.20679	-2.343368	0.0253
Cost of Debt * Audit Quality	-0.154855	0.743274	-0.208342	0.8362

Source: Data Processed Using EViews 10

The table above categorizes audit quality as a predictor moderator variable. Table 9 shows audit quality significantly affects tax avoidance with a probability value of $0.0226 < 0.05$. However, Table 10 shows that the interaction of audit quality with cost of debt does not significantly affect tax avoidance, with a probability value of $0.8362 > 0.05$.

3) T-Test Panel Regression Results with Interaction of Moderating Variable

Table 11. t-Test Results of Regression Without Moderating Variable Interaction

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	158.1449	32.28250	4.898780	0.0000
Excise Rates	-4.797353	1.219939	-3.932452	0.0004
Cost of Debt	-0.285598	0.308371	-0.926151	0.3611
Audit Quality	-98.57392	35.49541	-2.777089	0.0090

Source: Data Processed Using EViews 10

Table 12. t-Test Results of Panel Data with Moderating Variable Interaction

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	218.9358	32.52706	6.730882	0.0000
Excise Rates	-8.784674	1.506856	-5.829805	0.0000
Cost of Debt	-0.562799	0.326709	-1.722633	0.0949
Audit Quality	-229.2672	47.57767	-4.818798	0.0000
Excise Rates * Audit Quality	7.978792	2.194247	3.636232	0.0010
Cost of Debt * Audit Quality	0.439124	0.610205	0.719633	0.4771

Source: Data Processed Using EViews 10

The T-test analysis for panel regression with interactions for all independent variables is summarized as follows:

Excise rates have a probability value of $0.0000 < 0.05$, indicating a significant effect on tax avoidance. Similarly, Table 11 (T-test results without moderating interactions) shows a probability value of $0.0004 < 0.05$.

Cost of debt has a probability value of $0.0949 > 0.05$, indicating no significant effect on tax avoidance. Similarly, Table 11 shows a probability value of $0.3611 > 0.05$, confirming no significant effect.

The interaction of audit quality as a moderating variable with excise rates on tax avoidance has a probability value of $0.0010 < 0.05$, indicating a significant effect.

The interaction of audit quality as a moderating variable with the cost of debt on tax avoidance has a probability value of $0.4771 > 0.05$, indicating no significant effect.

Discussion

1. The Effect of Tobacco Excise Rates (X1) on Tax Avoidance (Y)

This study found that tobacco excise rates, proxied by the excise payments, significantly influence tax avoidance. The results support the Theory of Planned Behavior, which describes a relationship between planned intentions and behavior. Specifically, the excise tariffs, represented by the amount of excise paid, were shown to impact tax avoidance, proxied by the Effective Tax Rate (ETR). A lower ETR indicates a higher likelihood of planned tax avoidance. These findings align with previous research by (Nargis, Hussain, Goodchild, Quah, & Fong, 2019), (Van de Vijver, Cassimon, & Engelen, 2020), (Nuvrianto, 2020), (Chaloupka, Straif, & Leon, 2011), (Shang, Chaloupka, Zahra, & Fong, 2014), and (Adrison & Putranto, 2018), which suggested that Indonesia's mixed ad valorem and specific excise system allows companies opportunities for tax avoidance. Therefore, hypothesis H1: Tobacco excise rates significantly influence tax avoidance is accepted.

2. The Effect of Debt Costs (X2) on Tax Avoidance (Y)

The findings concluded that debt costs, represented by the cost of debt, do not significantly influence tax avoidance. Companies often resort to debt as an alternative funding source due to the tax benefits of interest deductibility, which reduces the net amount of tax owed. However, in this study, the respondents' debt levels remained within reasonable limits, and their activities adhered to Articles 6 and 9 of Law No. 6, Regulation of the Ministry of Finance No. 36 of 2008, 169/PMK.010/2015, and PSAK 57, suggesting no significant impact on planned behavior. These findings align with studies by (Sadjiarto et al., 2019), (Cen et al., 2017), and (Kovermann, 2018) but contrast with (Lastiati, Siregar, Diyanty, & Samingun, 2020), (Oktariani & Lembut, 2019), and (Santosa & Kurniawan, 2016), who argued that debt is an alternative company funding source by providing tax savings through interest deductibility. Consequently, hypothesis H2: Debt costs significantly influence tax avoidance is rejected.

3. The Moderating Effect of Audit Quality on Tobacco Excise Rates and Tax Avoidance

Empirical evidence shows that tobacco excise rates significantly influence tax avoidance. After incorporating audit quality as a moderating variable, the results remain significant, and the interaction between audit quality and tobacco excise

rates increases the probability of tax avoidance. The findings indicate that audit quality successfully moderates the relationship between excise rates and tax avoidance, classifying it as a quasi-moderator, as defined by (Solimun, 2010). Suppose the regression results for tobacco excise rates and audit quality yield significant probabilities for tax avoidance. In that case, the same applies to audit quality in a Moderated Regression Analysis (MRA) and its interaction with excise rates. This is consistent with (Stehr, 2005) and (Robert Branston & Gilmore, 2020), who noted that despite high excise rates on tobacco products, companies continue to generate significant profits and exploit loopholes for tax avoidance, especially in the face of dynamic and rising regulations. Thus, hypothesis H3: Audit quality moderates the effect of tobacco excise rates on tax avoidance is accepted.

4. The Effect of Debt Costs on Tax Avoidance with Audit Quality as a Moderating Variable

The regression results reveal that audit quality significantly influences tax avoidance. However, the interaction between audit quality and debt costs does not yield significant results, indicating that audit quality acts as a predictor moderator, functioning independently rather than moderating the relationship. Audit quality effectively mitigates tax avoidance related to debt costs, reinforcing the reliability of classifying firms based on high-integrity, independent, and skilled audit practices. Moreover, government regulations, such as the Ministry of Finance Regulation No. 169/PMK.010/2015, which governs debt ratios, further strengthen this finding. These results align with (Saputra, 2015) and (Harris & Williams, 2020), who argued that audit quality detects and reports material misstatements in financial statements caused by errors or fraud, enhancing trust in internal controls. However, the findings differ from those of (Dhawan, Ma, & Kim, 2020) and (Oktariani & Lembut, 2019), who claimed that debt costs can reduce tax payments. Thus, hypothesis H4: Debt costs significantly influence tax avoidance with audit quality as a moderating variable is rejected.

CONCLUSION

Tobacco excise rates, represented by the excise amount as a proxy, positively affect tax avoidance in studies involving audit quality as a moderating variable, aligning with the findings of. Meanwhile, in the same studies, the cost of debt, proxied by the debt-to-cost ratio, was found to have no effects on tax avoidance, consistent with the research of (Sadjarto et al., 2019), (Kovermann, 2018), and (Yunika, 2017), but contrary to findings by (Lastiati et al., 2020), (Oktariani & Lembut, 2019), and (Santosa & Kurniawan, 2016). Audit quality was shown to moderate the relationship between tobacco excise tariffs and tax avoidance, classifying it as a quasi-moderator and increasing the probability of tax avoidance when interacting with excise rates. However, audit quality did not moderate the relationship between the cost of debt and tax avoidance, categorizing it as a predictor moderator, a finding consistent with (Lestari & Nedy, 2019) and (Nugroho et al., 2018). Furthermore, tobacco excise tariffs, cost of debt, and the interaction of audit quality with these variables were found to have a simultaneous and significant effect on tax avoidance. This study supports the Theory of Planned

Behavior, which describes a relationship between planned intentions and behavior, demonstrating that tax avoidance, proxied by the effective tax rate (ETR), is influenced by tobacco excise rates, proxied by excise payments, cost of debt, proxied by the debt-to-cost ratio, and audit quality, proxied by the classification of Big Four versus non-Big Four accounting firms. The planning behind tax avoidance involves exploiting legal loopholes, from regulatory aspects to reporting practices, as a form of legal tax avoidance.

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