The 4th ICIES2024 International Conference on Islamic Economics Studies

FACULTY OF ISLAMIC ECONOMIC AND BUSINESS

The Effect of Board Characteristics on Tax Aggressiveness

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Article Info

Article history:

Received July 23th, 2024
Accepted Oct 21th, 2024

Keywords:

Tax Aggressiveness; Board Size; Independent Commissioner; Board Compensation; Board Gender Diversity

ABSTRACT

This study was conducted to determine the influence of board size, independent commissioners, board compensation, and board gender diversity on tax aggressiveness. The companies studied were energy companies, as these companies are known to engage in significant tax avoidance according to the Directorate General of Taxes (DJP). Thus, the population in this study comprised all energy companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022, total 45 companies with 214 observations selected based on predetermined criteria. This research utilized secondary data by collecting annual reports accessible through www.idx.co.id or the respective company websites. The fixed effect model was chosen for data analysis. The results of this study indicate that board size has a significantly positive impact on tax aggressiveness because the number of directors in a company can influence corporate governance decisions regarding tax control. However, the variables of independent commissioners, board compensation, and board gender diversity do not have a significant effect on tax aggressiveness

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1. INTRODUCTION

Every company in various countries has the primary goal of achieving profits while conducting its business activities. As entities focused on generating profit, companies strive to reduce their expenses, especially their tax obligations. Paying taxes is a way for companies to fulfill their responsibility in supporting the country's finances, upholding national sovereignty, and contributing to national development (Priyatno, 2019).

In Indonesia, taxes represent the largest source of national income, surpassing all other revenue streams. Therefore, tax revenue is a top priority for the country's income. Taxes are an obligation that must be fulfilled by every individual or entity, with penalties for non-compliance and no direct compensation in return. The increase in tax payments encourages taxpayers to seek ways to make their tax payments more efficient, such as through tax avoidance, which can be detrimental and ultimately reduce national revenue (Tandean & Winnie, 2016).

According to a report from KompasTV Makassar (2022), the Directorate General of Taxes is focused on collecting taxes from the mining and plantation sectors in Indonesia, as these two sectors are prone to significant tax avoidance practices. At the time, Yustinus Prastowo, a Special Staff to the Minister of Finance responsible for Strategic Communications, conveyed this during a law enforcement meeting in Makassar, South Sulawesi, between the Directorate General of Taxes, the Attorney General's Office, and the Criminal Investigation Agency. He explained that high economic growth often leads to high risks of tax avoidance, especially in the mining and plantation sectors. In the South, West, and Southeast Sulawesi regions, 14 taxpayers from the mining and plantation sectors were under investigation, with total state losses reaching 41.6 billion rupiah. Four of these taxpayers were already under investigation, with state losses amounting to 26.9 billion rupiah.

Mining companies are entities whose activities contribute to economic growth by exploiting minerals from the earth's surface (Chakrabarti & Chakrabarti, 2019). Indonesia, as an archipelagic country, is known for its rich mineral resources, such as gold, silver, copper, oil and gas, coal, iron ore, and more. In this context, it has been observed that companies engage in aggressive tax avoidance practices. The primary objective of companies in avoiding tax payments is to maximize profits. Therefore, companies strive to avoid the taxes they are liable to pay. The approach taken by companies may involve aggressive tax avoidance strategies.

Tax aggressiveness is an action taken by companies to reduce their expenses in fulfilling tax obligations (Utaminingsih et al., 2022). This involves various strategies to minimize tax payments, using legal planning, but also includes activities to avoid taxes that can cause illegal state losses (Aswadi & et al, 2017). Therefore, companies should engage in legal tax planning by exploiting weaknesses in tax laws and regulations without breaking the law. The objective of tax aggressiveness is to enable companies to generate significant profits by reducing their tax burden.

According to OnlinePajak (2019), understanding tax aggressiveness is crucial because if a company engages in aggressive tax practices, it faces higher risks, such as sanctions or fines, and potential drops in stock prices that can negatively impact the company's reputation if their actions are found to violate regulations. This study identifies a phenomenon occurring in mining companies suspected of engaging in tax avoidance practices that could harm national revenue (KompasTV Makassar, 2022). Therefore, it is important to research this issue as it can help close tax avoidance loopholes. The independent variables used in this study include board size, as a larger board may influence high-risk corporate decision-making related to tax strategies; the second variable is independent commissioners, who play a role in overseeing tax strategies; the third variable is board compensation, which can support aggressive tax strategies to enhance company performance and stock value; and the fourth variable is board gender diversity, as women often provide different perspectives in evaluating company risks and compliance with tax regulations.

Several factors influence tax aggressiveness, including board size, independent commissioners, board compensation, and board gender diversity. The first factor, board size, was found in studies by Aburajab et al. (2019), Anggraeni & Kurnianto (2020), and Hoseini et al. (2019) to increase tax aggressiveness. Conversely, a study by Novita & Herliansyah (2019) stated that board size does not affect tax aggressiveness.

The second factor is independent commissioners, which, according to the studies by Loen (2022) and Ogbodo & Abusomwan (2021), have a negative influence on tax aggressiveness. However, in the research by Irianto et al. (2024), independent commissioners were found to increase tax aggressiveness.

The third factor, board compensation, was found by Saputra & Indawati (2023), Elnahass et al. (2022), and Usman et al. (2020) to increase tax aggressiveness. This finding is supported by Ngozi & Emeka (2022), who also stated that board compensation can enhance tax aggressiveness.

The fourth factor is board gender diversity. In the study by Anggraeni & Kurnianto (2020), board gender diversity was found to reduce tax aggressiveness. This is supported by research from Sjahputra & Sujarwo (2022), which also stated that board gender diversity has a negative influence on tax aggressiveness. However, Vacca et al. (2020) revealed that board gender diversity has a positive influence on tax aggressiveness.

The contribution of this research is valuable for companies in formulating the ideal composition of the board of directors to optimize tax-related policies. For investors, board size can be used as a risk evaluation tool, as tax avoidance practices are a risky corporate policy, serving as a consideration for making investments and assessing the potential for investment success. Additionally, for future researchers, this study aims to strengthen the literature on tax avoidance within the framework of agency theory.

Literature Review

Agency Theory

Agency theory is a theory that highlights the distinction between ownership and control in corporate governance (De Andres et al., 2005). This theory recognizes that the interests of owners and management can differ and establishes the basic principles of the working relationship between the owner and the agent. Both parties are expected to generate optimal performance to increase their own profits according to their individual interests. The concept of agency also pertains to the relationship between the principal and the agent (Leksono et al., 2019). Therefore, agency theory explains the relationship between the principal (shareholders) and the agent (management).

When principals and agents aim to maximize their respective profits without alignment, there is potential for agents to act contrary to the principals' interests. Principals strive to maximize profits as risk-takers, while agents act as executors of activities and tend to avoid excessive risk (Yunistiyani & Tahar, 2017). To address these differences, principals monitor the performance of agents, one method being the presentation of financial statements and other information to the public, which reduces agency costs. In the presentation of financial statements, there is information asymmetry between agents and principals, where agents have more access to information than principals. This is due to the agents' limitations in disclosing relevant information about the company's financial statements.

The connection between agency theory and tax aggressiveness lies in the agents' role in planning financial statements to minimize tax payments, while principals want agents to operate according to procedures. For example, in a company where shareholders act as principals and the CEO acts as the agent, the company employs the CEO to work in the principals' interests (Leksono et al., 2019).

Tax Aggressiveness

Tax aggressiveness is an activity primarily aimed at reducing a company's tax obligations (Saputra & Indawati, 2023). This can be achieved through two methods: tax planning (legal) or tax avoidance (both legal and illegal) (Utaminingsih et al., 2022). Legal tax avoidance involves reducing the company's tax burden by exploiting loopholes in tax regulations, while illegal tax avoidance involves reducing the company's tax burden by violating tax regulations. For companies, tax obligations represent a significant expense that reduces income, prompting investors and companies to seek ways to minimize the amount of tax paid (Christofel & Dewi, 2022). Companies view taxes as an additional cost that can reduce profits, thus motivating them to engage in tax aggressiveness.

On the other hand, the government has the legal right to collect corporate taxes, but companies often fail to fulfill their tax obligations. The opportunistic behavior of companies engaging in tax aggressiveness is due to the information asymmetry between tax authorities and companies (Alkausar et al., 2023). To reduce this asymmetry, effective corporate governance mechanisms are needed. The advantage of tax aggressiveness is that it allows companies to save on tax expenses and increase profits. However, tax aggressiveness also has drawbacks, such as fines from tax authorities and the potential decline in the company's stock price if shareholders become aware of these aggressive actions (Indradi D., 2018).

Board Size

The board of directors is a key structural element in corporate governance responsible for closely overseeing the core operations of the company (Sobhy & Megeid, n.d.). In this regard, the size of the board of directors is considered pivotal in facilitating decision-making, reducing operational costs, and influencing the efficiency of monitoring and control. Dhahri & Jarboui (2022) define board size as the number of directors serving on it. This dimension can affect tax aggressiveness because the board can make decisions aimed at reducing company operational costs, thereby potentially lowering tax liabilities. Increasing the number of board members is believed to enhance tax aggressiveness strategies, as there are incentives favoring decisions by the board that influence tax performance in the company, as noted by (Hoseini et al., 2019). The ideal number of board members should be chosen such that there are enough present to carry out board duties and perform necessary functions. Consequently, a larger board may slow down decision-making processes (Hoseini et al., 2019). Conversely, a smaller board size allows for discussion and leveraging diverse perspectives on issues and solutions within the company, ultimately enhancing efficiency.

Independent Commissioner

The board of commissioners acts as representatives of shareholders, typically providing guidance and oversight to directors to ensure effective governance implementation (Irianto et al., 2024). According to Alhady et al. (2021), independent commissioners are those who exhibit independence, meaning they have no financial, managerial, shareholding, or familial ties to the board of directors, other commissioners, or shareholders, and do not hold multiple positions. Independent commissioners, being outside the company's management, are less likely to be influenced by managerial actions and instead encourage management to disclose more information to shareholders and stakeholders (Novitasari et al., 2017). Based on OJK Regulation No. 33/POJK.04/2024, it is stipulated that at least 30% of commissioners must be independent, including both regular and independent commissioners (Alhady et al., 2021). The presence of independent commissioners acts as a balance within the board, strengthening corporate governance structures, potentially reducing actual tax rates, and promoting stringent tax policies (Aburajab et al., 2019).

Board Compensation

According to Saputra & Indawati (2023), compensation is the reward employees receive for their efforts or services rendered to the company, typically in the form of payment. Meanwhile, Idzniah & Bernawati (2020) state that director compensation serves as an incentive provided to directors for fulfilling their duties. Wahab & Pak (2011) research suggests that higher remuneration can align manager and shareholder interests, thereby boosting activities in taxation. Conversely, if payments are perceived to reduce managerial rent-seeking, higher remuneration tends to decrease taxation activities. According to Financial Services Authority Regulation No. 34/POJK.04/2014 (Otoritas Jasa Keuangan, 2014), the nomination committee has the authority to propose candidates for director and commissioner positions, while remuneration serves as a form of recognition given to directors and commissioners commensurate with their duties and responsibilities. The nomination and remuneration committee is also responsible for determining the compensation structure for board members and commissioners. Types of compensation include salary, allowances, bonuses, or a combination of these.

Board Gender Diversity

Gender diversity on boards may relate to gender differences that could lead to diverse attributes across companies (Eguavoen et al., 2023). According to Vacca et al. (2020), varying gender diversity influences a company's decision-making processes, enabling it to achieve effective corporate governance structures and enhance economic and financial efficiencies through improved transparency. The presence of women on boards positively impacts corporate tax aggressiveness strategies and promotes awareness to reduce tax burdens. Women are considered more attuned to changes in tax ethics, influenced by differing moral developments between men and women (Razali et al., 2023). Female directors can provide effective oversight and control over board affairs, akin to independent directors (Butar-Butar et al., 2024). Moreover, female directors tend to avoid risks more, as they uphold higher ethical and moral standards, demonstrating greater independence of thought and enabling more informative decision-making. This enhances transparency at the board level and increases the board's credibility (Lanis & Richardson, 2011).

Hypotheses Development

The size of the board of directors refers to the number of board members within a company. In the study by Abanum & Ebiaghan (2022), it is found that the larger the board size, the more aggressive the tax strategies, and conversely, smaller boards tend to be less active in tax planning due to coordination difficulties. This study explains that board size has a significant impact on tax aggressiveness. Similarly, research by Ogbeide & Iyafekhe (2018) and Eguavoen et al. (2023) also indicates that board size positively and significantly affects tax aggressiveness. Another study by Hoseini et al. (2019) reports a positive relationship between board size and tax aggressiveness. According to agency theory, a smaller board of directors tends to produce better performance and ensure more effective oversight. In contrast, larger boards are often associated with a decline in performance (Mala & Ardiyanto, 2021). Therefore, the proposed hypothesis is as follows:
H_1 : Board size has a positive effect on tax aggressiveness.

An independent commissioner is a board member who does not hold concurrent positions and has no direct relationship with the company's shareholders. The research by Khan & Tjaraka (2024) states that independent commissioners have a negative relationship with tax aggressiveness, as a higher number of commissioners is often associated with a higher tax burden. The role of independent

commissioners is to report the company's responsibilities based on the tax rates applied to corporate profits, while also overseeing and regulating the organization to ensure that strategic decisions and policies comply with regulations. This aligns with the studies by Pratomo & Rana (2021) and Loen (2022), which also found a negative effect on tax aggressiveness due to the independent commissioners' role in supervising and directing the company to operate within the bounds of the law. According to agency theory, there is a conflict of interest between management and the principal caused by information asymmetry, as management seeks to maximize profits. This asymmetry leads companies to try to present a positive financial report by paying or recording lower tax expenses Rusdiani & Umaimah (2023). Therefore, the role of commissioners is limited to overseeing the internal control system within a company (Putri, 2018). Therefore, the proposed hypothesis is as follows:
H_2 : Independent commissioners has a negative effect on tax aggressiveness.

Board compensation refers to the amount paid for the services or efforts provided by the board of commissioners and directors to the company. In the study by Idzniah & Bernawati (2020), it was found that director compensation can increase tax aggressiveness, as higher compensation may incentivize directors to improve their performance by engaging in tax avoidance or tax planning to boost profits. This research reveals that board compensation has a positive influence on tax aggressiveness. Similarly, studies by Razali et al. (2019) and Ngozi & Emeka (2022) also state that director remuneration positively affects tax aggressiveness. The relationship between board compensation and agency theory lies in the fact that agents or directors tend to exhibit opportunistic behavior, leading to agency problems such as information asymmetry, self-interested rational actions, and the potential for fraud (Panda & Leepsa, 2017). Therefore, the proposed hypothesis is as follows:
H_3 : Board compensation has a positive effect on tax aggressiveness.

Board gender diversity refers to the differences in concepts between men and women in terms of gender, culture, and behavior. The study by Yahya et al. (2021) found that board gender diversity has a negative influence on tax aggressiveness, as female directors are more capable of acting as efficient monitors to limit tax aggressiveness. This is also supported by the research of Sofianty et al. (2022) and Ma & Ma (2024), which revealed that female directors tend to be more cautious in decision-making, especially regarding tax avoidance. Women are generally more risk-averse, which influences the board's decisions to be more tax-compliant. According to agency theory, company owners prioritize their own interests and wealth, often viewing tax payments as unnecessary, while the presence of women on the board is believed to enhance the company's managerial monitoring and efficiency (Hoseini & Gerayli, 2018). Therefore, the proposed hypothesis is as follows:
H_4 : Board gender diversity has a negative effect on tax aggressiveness.

2. METHOD

Research Design

The chosen research method is secondary quantitative. According to Saha (2022), quantitative technique relies on numerical, objective, and reliable data, such as market and financial data evaluated using mathematical and statistical techniques. This secondary quantitative research method involves using historical market data or without directly interacting with the researched objects.

Participant/Sample Selection and Data Sources

The population in this study consists of all energy companies listed on the Indonesia Stock Exchange (IDX) that present annual reports for the period 2018-2022. Based on the website idx.co.id, there are 87 energy companies listed on the IDX during that period. The data source can be obtained through www.idx.co.id or by accessing each company's website to retrieve the annual reports of energy companies for the years 2018-2022.

The sampling technique used in this study is purposive sampling. Purposive sampling is a method of selecting sample members from a population based on specific criteria determined by the researcher (Sumargo, 2020). Therefore, the sample used in this study must meet the following criteria:

a. Energy companies listed on the IDX for the period 2018-2022.
b. Companies that provide annual reports for the period 2018-2022.
c. Companies that have tax expenses or tax benefits.
d. Companies that have research variable data (board size, independent commissioners, board compensation, and board gender diversity).

Out of the 87 energy companies listed on the Indonesia Stock Exchange (IDX), only 45 companies met the criteria to be included as samples, resulting in 214 observations.

The following outlines the method for measuring/calculating the dependent variable, tax aggressiveness (ETR), and the independent variables, board size (BODZS), independent commissioners (INDCOM), board compensation (COMP), and board gender diversity (DIVER):

Tabel 1.
Variable Measurement

CODE	Description	Formula
ETR	Effective Tax Payment	$\frac{Tax\ Expense}{Pre - Tax\ Income}$
BODZS	Number of Directors	Number of Directors
INDCOM	Number of Independent Commissioners	$\frac{Number\ of\ Independent\ Commissioners}{Number\ of\ Commissioners}$
COMP	Total Compensation of the Board of Directors and Commissioners	$\frac{Total\ Compensation}{Total\ Commissioners\ \&\ Directors}$
DIVER	Indicates the Presence of Gender Diversity	"1" indicates the presence of female directors and "0" if there are no female directors

The data presentation in this study was processed using Eviews version 12 software, employing a panel data regression model with several tests, including descriptive statistical analysis and classical assumption tests. Panel data regression consists of three models: Fixed Effect Model (FEM), Random Effect Model (REM), and Common Effect Model (CEM), which will be adjusted according to the model selected during the regression test. Descriptive statistical analysis is a statistical method used to analyze data by describing or illustrating the data collected as it is, without aiming to draw conclusions that apply generally or to make generalizations (Muhson, 2006). Meanwhile, the classical assumption tests consist of several tests, including the normality test, heteroskedasticity test, multicollinearity test, and autocorrelation test.

3. RESULT AND DISCUSSION

Result

Descriptive Statistic

Tabel 2.
Descriptive Statistic Analysis

	Observations	Mean	Median	Maximum	Minimum	Std. Dev.
ETR	214	-0.181171	-0.207381	1.235906	-1.498024	0.315541
BODSZ	214	4.457944	4.000000	11.00000	2.000000	1.897764
INDCOM	214	0.427009	0.400000	1.000000	0.250000	0.118889
COMP	214	4.99E+09	2.44E+09	5.53E+10	80000000	7.90E+09

VARIABLE	Dummy = 1		Dummy = 0	
	Observations	%	Observations	%
DIVER	135	63,08%	79	36,92%

The results of the descriptive statistical test in this study indicate that, based on the table, the average value of the ETR variable is -0.18, which shows that, on average, companies have an income tax burden of -18% of pre-tax profit. From this average, it can be seen that the companies' ETR is still below the corporate income tax rate of 22%. Meanwhile, the average value for the independent variables shows that the BODSZ variable is 4.457, the INDCOM variable has an average value of 0.427, and the COMP variable has an average value of 4.99 (with a table result of 4.99E+09, meaning that the result amounts to 4.99 billion). Additionally, for the DIVER variable, 63.08% of companies have female directors, while the remainder have no female directors.

Pearson's Correlation Analysis

Tabel 3.
Pearson's Correlation Analysis

Correlation Probability	ETR	BODSZ	INDCOM	COMP	DIVER
ETR	1.000000				

BODSZ	-0.116376	1.000000			
	0.0895	----			
INDCOM	0.042152	-0.147050	1.000000		
	0.5397	0.0315	----		
COMP	-0.169502	0.272005	-0.040897	1.000000	
	0.0130	0.0001	0.5518	----	
DIVER	-0.109831	0.045121	0.1055008	-0.070947	1.000000
	0.1091	0.5115	0.1257	0.3016	----

In this correlation test result, it shows the relationship between the dependent and independent variables. There are both negative and positive relationships observed, while the absolute value of the correlation coefficient indicates the strength of the relationship, where a higher value suggests a stronger relationship. The correlation coefficient on the main diagonal is 1.000000, indicating that each variable has a perfect positive linear relationship with itself. When tax aggressiveness (ETR) has a

value of 1.000000, board size (BODZS = -0.116376) and board compensation (COMP = -0.169502) show negative relationships, meaning that higher board size leads to lower tax aggressiveness, and similarly, higher board compensation leads to lower tax aggressiveness. Additionally, there is a positive relationship with independent commissioners (INDCOM = 0.042152), indicating that higher independent commissioners also lead to increased tax aggressiveness. In this case, there are both positive and negative relationships, although with low values since none of the values exceed 90%, indicating the absence of multicollinearity.

Regression Analysis

Tabel 4.
Regression Analysis

Variable	Coefficient	Prob.
C	-0.466037	0.0067
BODSZ	0.074122	0.0177**
INDCOM	-0.068217	0.7868
COMP	4.03E-13	0.9441
DIVER	-0.049970	0.5667
Adjusted R-squared	0.176063	
Prob(F-statistic)	0.001059	

Note(s): * significant at 0.1, ** significant at 0.05, ***significant 0.01

Based on the results of the regression analysis, the panel least squares (PLS) method showed that the selected model is the fixed effect model. Mardani (2023) states that when the fixed effect model is chosen, the classical assumption tests to be conducted are the heteroskedasticity test and the multicollinearity test. In this study, the heteroskedasticity test result was greater than 0.05, indicating that the model passes the heteroskedasticity test.

From these results, it is evident that board size (BODZS), independent commissioners (INDCOM), board compensation (COMP), and board gender diversity (DIVER) can explain approximately 17% of the total variation in tax aggressiveness (ETR), while the remaining 83% is explained by other variables. This implication suggests that explanatory variables can account for significant changes in ETR in the sampled companies, indicating that there are other variables that may also explain tax aggressiveness but were not included in this study. The F-statistic appears significant, as the calculated F value is 0.001, meaning that the F value is less than 5%. These results indicate that board size (BODZS) has a significant positive relationship with ETR because its probability value is 0.0177, which is less than the 5% significance level. On the other hand, other results show that independent commissioners (INDCOM), board compensation (COMP), and board gender diversity (DIVER) have non-significant positive relationships with ETR, as their probability values are 0.7868, 0.9441, and 0.5667, respectively, which are higher than the 5% significance level. These results indicate that board size aligns with the hypothesis of this study.

Discussion

The panel data test results show that board size has a positive effect on tax aggressiveness, which is supported by previous studies such as Ogbeide & Iyafekhe (2018), Abanum & Ebiaghan (2022), and Aburajab et al. (2019), aligning with the hypothesis proposed by this study. Board size can influence tax aggressiveness because the number of directors in a company can affect corporate governance in making tax control decisions. Meanwhile, independent commissioners do not affect tax aggressiveness, supported by studies such as Dhamara & Violita (2018) and Herawati et al. (2021), as the role of commissioners is primarily supervisory, leading to the rejection of this study's hypothesis. Additionally, board compensation does not affect tax aggressiveness, supported by studies from Saputra & Indawati (2023), Wahab & Pak (2011), and Puspita et al. (2020), as board compensation is not a crucial component for tax aggressiveness, leading to the rejection of the proposed hypothesis. For the variable of board gender diversity, there is no effect on tax aggressiveness, supported by studies from Dhahri & Jarboui (2022) and Boussaidi & Hamed-Sidhom (2021), as a higher percentage of women on the board tends to be less aggressive on tax issues, along with managerial and institutional ownership, resulting in the rejection of the proposed hypothesis.

The first implication relates to the size of the board of directors, which has a positive relationship with tax aggressiveness. This encourages companies to be more careful in determining the number of board members and more effective in making decisions regarding tax payment strategies. The second implication is that independent commissioners have no influence on tax aggressiveness, as their role is limited to oversight or monitoring, while decision-making authority remains with the board of directors, making independent commissioners less influential on tax policy. The third implication concerns board compensation, which does not affect tax aggressiveness because compensation is not the primary determinant of corporate tax policy but rather a reward for fulfilling their responsibilities. The final implication is that board gender diversity does not influence tax aggressiveness, as it is not a key factor in determining corporate tax strategies. Tax policy decisions are more driven by economic, legal, and regulatory factors, while gender diversity may play a greater role in other areas such as human resources or marketing strategy.

Robustness Analysis

Table 5.
Regression Analysis

Variable	Coefficient	Prob.
C	0.704056	0.0001
BODSZ	-0.072195	0.0220**
INDCOM	0.042319	0.8679
COMP	-1.05E-12	0.8560
DIVER	0.048249	0.5837
Adjusted R-squared	0.171769	
Prob(F-statistic)	0.001330	

Note(s): * significant at 0.1, ** significant at 0.05, ***significant 0.01

In this study, the researcher conducted a robustness test with a sample of 214 energy companies for the period 2018-2022. According to Hanlon & Heitzman (2010), tax avoidance occurs when a company reduces the taxes it is required to pay. Yorke et al. (2016) also state that tax avoidance is the difference between the statutory tax rate (STR) and the effective tax rate (ETR). Therefore, in this study, the variable ETR was modified to STRETR, measured by subtracting the corporate tax rate for year x from the ETR (tax expense/pre-tax income). The regression results are consistent with those obtained from the initial linear regression. The R-Squared value indicates that the variation in the tax aggressiveness variable can be attributed to the variation in the explanatory variables (board size, independent commissioners, board compensation, and board gender diversity) by about 17% across all models. This shows valid results for the board size variable, which is significant and less than 5% in relation to tax aggressiveness.

4. CONCLUSION

In this study, the researcher identified tax aggressiveness in energy companies. To achieve this, the researcher gathered data, including annual reports from energy companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022. The study employed panel data analysis, resulting in a linear regression test with the fixed effect model being selected, as well as correlation and descriptive statistical tests. These tests revealed that board size positively affects tax aggressiveness, while independent commissioners, board compensation, and board gender diversity have no effect on tax aggressiveness.

The researcher also provided insights into the independent variables that influence the dependent variable, with the aim of educating companies about tax matters, particularly legal and illegal tax aggressiveness.

The limitation of this study is that the R-squared value is only 17%, meaning that 17% of the variation is explained by the variables in this study, while the remaining 83% is explained by other variables not included in this research. The researcher hopes that future studies will achieve better results in analyzing tax aggressiveness. This study can serve as a framework for future researchers with updated data.

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