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Female Board Membership and Sustainability: Can they Mitigate Tax Avoidance in Indonesia and Malaysia?

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ABSTRACT

The objective of this study is to determine the effect of board gender diversity on tax avoidance through sustainability performance in non-financial companies in Indonesia and Malaysia for the 2014-2018 period. Currently, taxes are one of the largest sources of revenue for Indonesia and Malaysia. Due to the quite large role of taxes, the government seeks to increase revenue from the tax sector. However, there are obstacles in optimizing tax revenue, one of which is tax avoidance activities carried out by individual and corporate taxpayers. Taxpayers can reduce tax avoidance by increasing gender diversity and carrying out sustainability performance activities. This encourages researchers to verify the relationship between board gender diversity on tax avoidance through sustainability performance. This study uses WarpPLS 6.0 software and regression analysis methods to determine the relationship between variables. The result of the study has shown the positive effect on board gender diversity on tax avoidance through mediation of sustainability performance.

Keywords: Board gender diversity, Board structure, Sustainability performance, Tax avoidance

1. INTRODUCTION

Tax avoidance is one of the critical problems of a country. In the implementation process, the interests of the government as tax collectors are in contrast to the interests of companies as taxpayers. The government constantly tries to maximize their tax revenue to fund public interest, while the company tries to minimize tax payments. Companies perform tax avoidance in the hope of an increase in firm value [1]. However, previous literature shows a negative influence between tax avoidance activities and firm value, which means that more effective internal control and corporate governance are, it will be easier to reduce tax avoidance [2]. Tax avoidance is affected by many factors, such as board gender diversity and sustainability performance.

The gender diversity of the board of directors is a way for companies to support gender equality issues. Generally, men are known as a leader in a company, while women are considered inadequate for a leadership position. This view causes the presence of women is lower in a company, compared to men. However, women provide many advantages to companies with their extensive professional experience. Women highly value honesty in their work, and they can provide ethical values, transparency, and higher credibility [3]. In the decision-making process, women have different attitudes from men. Some women were more risk-takers than their male colleagues [4]. This current study aimed at determining whether the leadership of a company run by a woman can reduce tax avoidance. In addition, the researcher used a mediating variable for sustainability performance in the relationship between board gender diversity and tax avoidance.

Sustainability performance is a corporate activity environmental, social, and governance responsibilities[5]. Based on the previous literature, it was found that the more the proportion of women on a board of directors, the better a company's sustainable performance. This influence provides an impetus for companies to improve female recruitment and corporate governance [6]. The presence of women will contribute to the sustainable development of the company and make sustainability decisions. Not only can improve sustainability performance, the presence of women can also reduce tax avoidance through the sustainability performance itself.



The researchers are interested in examining the relationship of board gender diversity to tax avoidance through sustainability performance as a mediation because many previous studies have only examined the relationship between board gender diversity and tax avoidance directly. Therefore, the researcher added the sustainability performance variable as mediation to indirectly support the gender diversity of the board of directors with tax avoidance. This study will compare the influence of the variables on non-financial companies in Indonesia and Malaysia.

2. LITERATURE

2.1. Theoretical Background

2.1.1. Agency Theory

Agency theory is the concept of a contractual relationship between the principal and agent. This theory shows that shareholders as principals have the goal of maximizing firm value and involve management as agents in delegating decision-making authority [7]. There are often differences in interests in the relationship between shareholders and management. The difference in interests between shareholders and management can lead to agency problems caused by information asymmetry and conflict of interests. Information asymmetry occurs in an unbalanced condition when management has better access to information than shareholders, so that management tries to control the flow of information. In addition, conflicts of interest occur due to management behaviour that is not in accordance with the wishes of shareholders [8].

Previous literature suggested that decisions regarding corporate tax avoidance were made by management. Decisions made by management aim to fulfil their own interests. Apart from management, the board of directors in the company also acts as an agent [9]. The board of directors has strategic functions such as overseeing and advising the management decision-making process on behalf of shareholders, which is expected to improve company performance, so that gender diversity of the board of directors is very important [10]. The presence of women on the board of directors is more effective and resilient in monitoring decision making. Women also tend to ask more questions than men, so that women will be more active in monitoring activities in the company [11].

Reference [12] states that women's boards of directors have a significant influence on company performance, caused by the level of education and experience and quality they have continually increased. In addition, women also have unique traits, experiences, skills, and knowledge that help provide access to other resources. The presence of women on the board of directors provides better supervision of financial

performance [11]. Consequently, women's participation will help reduce tax avoidance in companies. Therefore, it is considered important to interpret how the presence of women on the board of directors can affect tax avoidance reduction through sustainability performance.

2.1.2. Stakeholder Theory

Stakeholder theory states that the company is responsible for creating benefits for stakeholders and serving the interest of the company. Stakeholders are parties who can influence or be influenced by the achievement of the party's organizational goals, and have an interest in the company, such as shareholders, suppliers, consumers, government, society, employees, banks or creditors, and other parties related to the company [13]. Therefore, the position of a company can be determined by stakeholder support for the company. Stakeholders have the right to obtain information about the company that will be used for decision making. The gender diversity of the board of directors is an important factor, because the high presence of women will maximize stakeholder value [14].

In stakeholder theory, the presence of women in leading the company can provide more innovative thinking and increase transparency. This can trigger the company to make changes that are motivated by outsiders. According to this theory, the board of directors occupies a central position, to balance interests and conflicts in various circumstances facing the company. The presence of women is considered to strengthen the company's commitment to stakeholders by showing the company's appreciation of gender equality issues, especially in the board of directors [15]. Therefore, the presence of women has a good and attractive influence for stakeholders in assessing the quality of the company.

2.2. Literature Review and Hypothesis

2.2.1. Board Gender Diversity and Tax Avoidance

The gender diversity of the board of directors can affect the decision making of a company, including in the field of taxation. That can be proven by the presence of women which can affect tax avoidance. Previous research has described the effect of women's presence on the board of directors on tax avoidance negatively and significantly, which means that the presence of women can reduce tax avoidance [16], [17].

Reference [18] shows that the presence of women on the board of directors can minimize tax avoidance. In terms of tax compliance and tax payment strategies, women have higher levels of compliance than men. The presence of women can also provide more effective supervision and increase transparency in disclosing financial information to shareholders [19]. Thus, the



presence of women on the board of directors can reduce tax avoidance.

H₁: Board gender diversity is negatively related to tax avoidance.

2.2.2. Board Gender Diversity and Sustainability Performance

Board gender diversity can affect corporate sustainability performance. Corporate sustainability is a business strategy to meet stakeholder needs by using best business practices. The business strategy that needs to be considered to achieve these goals is increasing accountability and transparency [20]. In practice, there are three aspects of sustainability that are commonly used, namely environmental, social, and corporate governance aspects.

In carrying out corporate governance, the presence of women on the board of directors gives a different impression to men. In leadership, women usually have a more honest and responsive attitude [3]. Women also have a higher sense of concern for the common welfare and more stakeholder-oriented [21]. Therefore, women can increase stakeholder trust better than men who are more shareholder-oriented [22]. Besides governance, sustainability is also influenced environmental and social aspects. The presence of women on the board of directors gives more attention to environmental and social problems in the company. [23] explained that women play an important role in determining positive values for social welfare and environmental preservation of the company, and give the greatest value to 'going green'. This shows that women can overcome and reduce the impact of environmental problems that occur within the company. Women tend to have a responsive and friendly attitude towards others, so usually the presence of women on the board of directors makes the company's interactions with both stakeholders and society better. The CSR (Corporate Social Responsibility) ranking will increase positively as the number of women on the board of directors increases [24].

Companies that have a woman on the board of directors are more likely to follow and improve corporate sustainability. The participation of women affects the involvement and reporting of CSR and the formation of ethical policies. The results of previous research indicate that the presence of women on the board of directors can positively affect the corporate sustainability performance [5], [6].

 $H_{2:}$ Board gender diversity is positively related to sustainability performance.

2.2.3. The Effect of Sustainability Performance as a Mediating Variable

The presence of women on the board of directors can sustainability performance. implementation, sustainability performance can be divided into two dimensions, namely the operational dimension and the management dimension. This variable dimension is operationally focused on aspects that have an impact on the company's environment and social aspects around the company, and the management dimension includes policies, structures, and processes for sustainability performance. [25] research concluded that management sustainability performance has a positive effect on tax avoidance, while operational sustainability performance has a negative effect on tax avoidance. This is supported by the fact that socially responsible companies avoid taxes less [26]. The presence of women on the board of directors can improve sustainability performance, both in the management and operational dimensions. This shows that the presence of women has positive effect on increasing sustainability performance, and sustainability performance will reduce corporate tax avoidance.

H₃: Board gender diversity is negatively related to tax avoidance which is mediated by sustainability performance.

3. METHOD

3.1. Sample Description

The sample of this study consists of 73 non-financial companies in Indonesia and Malaysia which are listed on the Indonesia Stock Exchange and the Malaysia Stock Exchange for the 2014-2018 period. Financial firms are excluded from the sample because of industry-specific accounting practices. All data to measure the dependent, independent, and control variables were obtained from the company's official website, the Indonesia Stock Exchange, the Malaysia Stock Exchange, and the Bloomberg database. The final sample includes 365 firm-year observations after eliminating firms that do not have complete data.

3.2. Model

Based on the literature reviews and hypothesis, the research model is presented as follows:

$$ETR_{it} = \beta_0 + \beta_1 BGD_{it} + \beta_2 SP_{it} + \beta_3 LEV_{it} + \beta_4 SIZE_{it} + \beta_5 ROA_{it} + \epsilon_{it}$$



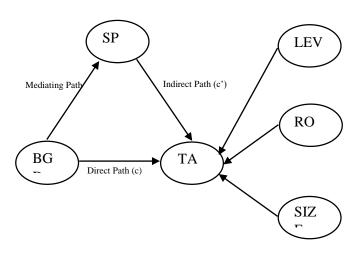


Figure 1. Visualization of Hypothesis

Where: ETR is the effective tax rate, BGD is the percentage of women on the board of directors, SP is the sustainability performance (ESG score), LEV is the leverage ratio, SIZE is the company size, ROA is return on assets that is profit before tax divided by total assets. and ε : error term.

3.3. Measurement of Board Gender Diversity

Board gender diversity is measured by calculating the percentage of women board of directors who serve in the company [20]. Data obtained from the company's official website, the Indonesia Stock Exchange, and the Malaysia Stock Exchange.

3.4. Measurement of Sustainability Performance

In this study, sustainability performance is a mediating variable. Sustainability performance is measured by an ESG score from three dimensions, namely environmental, social, and governance [6]. ESG contains information on sustainability performance by looking at whether the company is working to achieve sustainable goals. Data obtained from the Bloomberg database which is based on recommendations from the Global Reporting Initiative.

3.5. Measurement of Tax Avoidance

Based on previous research, tax avoidance can be measured by the Effective Tax Rate (ETR) [27]. ETR is a measuring tool used to determine the company's ability to avoid tax. Therefore, ETR can help companies to estimate the effectiveness of corporate tax avoidance planning activities. ETR is usually calculated by comparing total tax expenses with pre-tax income. The ETR value ranges from more than 0 and less than 1. The smaller the ETR value means the greater the tax

avoidance carried out by the company, and vice versa. Data obtained from Bloomberg database, the Indonesia Stock Exchange, and the Malaysia Stock Exchange.

3.6. Control Variables

In this study, there are three control variables used, namely Firm Size (SIZE), Leverage (LEV), and Return on Assets (ROA). Firm size is used to control for the effect of company size on tax avoidance. A company with relatively large size will be more aggressive towards tax avoidance than a company with a smaller size. Firm size can be measured using the natural logarithm of the company's total assets [28]. Leverage is measured by comparing total debt with total assets [5]. Leverage serves to measure the company's debt ability to finance company assets. ROA is a measure of profitability measured by dividing profit before tax by total company assets [29]. When company profits increase, income tax will increase, so companies tend to avoid taxes.

4. RESULTS AND DISCUSSION

4.1. Descriptive Statistic

Table 1 describes descriptive statistics for all regression variables. The mean ETR value is 0.239976 and the standard deviation is 0.126108. This value is close to the value described by [30]. The average SP value was 0.279785 and the standard deviation was 0.124163. The mean value of BGD was 17.54188 and the standard deviation was 15.71101. The mean value of BGD in Indonesian and Malaysian companies for the 2014-2018 period has increased significantly.

4.2. Outer Model Analysis

The outer model is used to test construct validity and instrument reliability. Construct validity consists of two parts, namely convergent validity and discriminant validity. Convergent validity can be considered valid with the criteria for the loading factor and AVE values above 0.7 and 0.5. The results in table 2 show that the lowest factor loading value is 0.750 and the lowest AVE value is 0.734 so that both of them have met the criteria

Table 1. Descriptive statistic

Variables	Min	Max	Mean	SD
BGD	0.000	62.500	17.542	15.711
SP	0.066	0.587	0.280	0.124
ETR	0.001	0.986	0.240	0.126
SIZE	19.293	33.916	30.033	2.886
LEV	0.000	0.579	0.211	0.143
ROA	0.002	1.020	0.133	0.138



Table 2. Reliability instrument and convergent

Variables	Indicators	Loading Factor	Composite Reliability	Cronbach's Alpha	AVE
BGD	BGD1	0.854	0.954	0.940	0.807
	BGD2	0.915			
	BGD3	0.942			
	BGD4	0.925			
	BGD5	0.853			
SP	SPef1	0.903	0.978	0.971	0.897
	SPef2	0.973			
	SPef3	0.972			
	SPef4	0.958			
	SPef5	0.926			
ETR	ETR1	0.894	0.932	0.908	0.734
	ETR2	0.870			
	ETR3	0.825			
	ETR4	0.933			
	ETR5	0.750			
SIZE	SIZE1	0.998	1.000	0.999	0.998
	SIZE2	0.999			
	SIZE3	1.000			
	SIZE4	0.999			
	SIZE5	0.998			
LEV	LEV1	0.929	0.977	0.970	0.894
	LEV2	0.954			
	LEV3	0.972			
	LEV4	0.953			
	LEV5	0.919			
ROA	ROA1	0.962	0.987	0.984	0.940
	ROA2	0.972			
	ROA3	0.989			
	ROA4	0.977			
	ROA5	0.946			

and are considered valid. Table 3 shows that the discriminant validity value has been achieved, where the value of root AVE above the value of correlation of the latent variables. Furthermore, the instrument reliability test can be measured with the criteria for each value being more than 0.7. Table 2 contains the reliability values that meet the criteria.

4.3. Inner Model Analysis

The tests that can be done for the inner model are the Goodness of Fit Model and Path Coefficient. The evaluation of model fit aims to measure the suitability of the model with the original data. Table 4 shows the results of the fit model indicate that the criteria have been met so that the inner model is accepted.



Table 3. Discriminant validity

Variable	BGD	SP	ETR	SIZE	LEV	ROA
BGD	(0.898)					
SP	-0.126	(0.947)				
ETR	-0.155	-0.204	(0.857)			
SIZE	0.220	0.008	-0.413	(0.999)		
LEV	0.035	0.042	0.073	0.296	(0.946)	
ROA	0.185	0.213	-0.065	-0.142	-0.249	(0.970)

Table 4. Model fit

Indicators	Index	P-value	Information
APC	0.257	0.005	Accepted
ARS	0.237	0.008	Accepted
AARS	0.207	0.016	Accepted
AVIF	1.122		Ideal
AFVIF	1.264		Ideal
GoF	0.456		Large
SPR	1.000		Ideal
RSCR	1.000		Ideal
SSR	0.833		Accepted
NLBCDR	0.750		Accepted

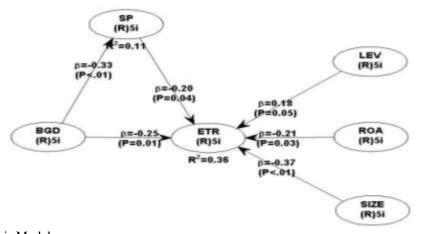


Figure 2. SEM Analysis Model

4.4. Hypothesis Testing

Hypothesis testing aims to prove the truth of a study or hypothesis. Hypothesis testing indicators are path coefficients, level of significance, and R-square. This study uses a significance level of 5%. Figure 2 shows the research results that have been obtained.

4.4.1. Board Gender Diversity and Tax Avoidance

The results of the first hypothesis test in Figure 2 show that the path coefficient value is -0.25 and a significance value of less than 0.01 which means significant at 5%. The results of this test indicate that the



effect given is negative. In addition, the test results in Figure 2 also illustrate a negative and significant relationship between ROA ($\beta = -0.21$; p-value = 0.03) and firm size ($\beta = -0.37$; p-value < 0.01) in terms of tax avoidance, while leverage ($\beta = 0.18$; p-value = 0.05) the relationship is positive and significant. The results of testing this hypothesis support agency theory and also support the research of [19] which explains that tax avoidance can be reduced by the presence of women on the board of directors. Women and men have their respective abilities so that not only men can occupy the position of the board of directors. Higher participation of women can increase the effectiveness of corporate oversight and thereby reduce tax avoidance. In addition, women were more successful than men when it came to taxation. Women also have different attitudes and levels of tax knowledge compared to men. Therefore, the presence of women on the board of directors can minimize tax avoidance.

4.4.2. Board Gender Diversity and Sustainability Performance

The results of second hypothesis testing in Figure 2 show the path coefficient value of -0.33 and a significance value of less than 0.01 which means significant at 5%. The results of this test indicate that the presence of a woman's board of directors has not been effective in improving sustainability performance, which indicates that the effect is negative. The results of this hypothesis testing are different from the results of previous studies which have had a positive effect [5], [6]. In many countries, the board of directors of companies is still dominated by men, and women are deemed inadequate for board positions. Even so, some companies are starting to recognize the importance of having women in these positions and slowly changing their views on women. [21] stated that one of the advantages of a company when women occupy the board of directors is a high level of concern for the welfare of others and being able to maintain transparency in their work. This can increase the confidence of investors who want to increase the accountability, transparency, and moral duty of the board of directors. However, in reality, the position of women and men on the board is still not balanced, so that women have not been able to maximize the sustainability performance of the company. Thus, these results cannot yet support our second hypothesis and previous studies.

4.4.3. The Effect of Sustainability Performance as a Mediating Variable

The result of third hypothesis testing in Figure 2show that the mediation relationship does not have a significant indirect effect between board gender diversity and tax avoidance, with a significance value of 0.21 which means more than 5%. That means that there is no mediating effect on this relationship. The mediation effect of

sustainability performance has a positive influence between board gender diversity and tax avoidance with a path coefficient value of 0.07. Sustainability performance itself has a significant and negative relationship to tax avoidance with a path coefficient value of -0.20 and a significance value of 0.04.

Previous research shows that the level of women's attendance on the board of directors is one of the dimensions of social sustainability performance [31]. Women are more sensitive and have better relational skills than men, so women tend to interact more easily with various stakeholders and more responsive in responding to stakeholder needs. Therefore, companies can improve sustainability performance by increasing women's presence and allocating unused resources to reduce corporate tax avoidance. Research by [25] states that there is a negative and significant relationship between sustainability performance and tax avoidance, which means that increased sustainability performance can provide more information to stakeholders regarding tax payments and corporate tax strategies.

The results of this study contradict the research of [30], which shows that sustainability performance is able to significantly and negatively tend to mediate between board gender diversity and tax avoidance. However, this study shows positive results, which means that mediation through sustainability performance will increase the presence of women on the board of directors and also increase corporate tax avoidance. The results of this test do not yet support our third hypothesis. That is because the sustainability activity itself has not been very popular with Indonesian and Malaysian companies, especially non-financial companies. Companies in Indonesia and Malaysia have not paid much attention to sustainability activities in their companies, so when compared to previous research, sustainability activities carried out in Indonesia and Malaysia have not been able to reduce corporate tax avoidance.

5. CONCLUSION

This research conducted to determine the effect of sustainability performance mediation on the relationship between board gender diversity and tax avoidance. The results of this study indicate a negative and significant relationship between board gender diversity and tax avoidance. The presence of women cannot increase the sustainability performance of a company. This is not in accordance with the results of previous studies which show a positive and significant influence between board gender diversity and sustainability performance [5], [6]. In addition, this study also shows that board gender diversity has a positive but insignificant effect on tax avoidance through sustainability performance as a mediation. These findings also contradict previous studies that showed a negative and significant influence [30].



This study provides a new sight of the relationship between board gender diversity and tax avoidance associated with sustainability performance, so that sustainability performance should be considered in the company. The result of this study shows different results from previous studies. Researchers estimate that the difference in results is caused by two factors: the minimum percentage of women on the board of directors and the minimum involvement of the women's board of directors in sustainability activities in non-financial companies in Indonesia and Malaysia for the 2014-2018 period. This study has limitations in terms of data samples, so it is suggested for further research to expand the reach of research countries to Southeast Asia. Therefore, further research is expected to concentrate more on the relationship between board gender diversity, the presence of women on the board of directors, sustainability performance reporting, and corporate tax avoidance.

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