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THE IMPACT OF GREEN ACCOUNTING DISCLOSURE ON FINANCIAL PERFORMANCE OF PUBLIC LISTED FIRMS IN MALAYSIA

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ABSTRACT

Objective: The primary objective of this study is to evaluate the impact of green accounting disclosure on the financial performance of publicly listed firms in Malaysia.

Theoretical Framework: The theoretical framework of this study is based on Legitimacy Theory, which posits that firms engage in green accounting disclosures to align with societal expectations and enhance their legitimacy.

Method: This study employs a panel data analysis method, utilizing both fixed effects and random effects models to assess the impact of green accounting disclosure (GAD) on the financial performance of publicly listed firms in Malaysia. The analysis covers data from 248 firms across 13 sectors, spanning from 2019 to 2023, with key financial performance indicators including return on assets (ROA), return on equity (ROE), and return on sales (ROS), while controlling for firm size, stock performance, leverage, and board size.

Results and Discussion: The results indicate that green accounting disclosure (GAD) has a significant negative relationship with return on assets (ROA), suggesting that while companies engage in green disclosures to enhance their legitimacy, it may incur costs that reduce short-term profitability. However, GAD shows no significant impact on return on equity (ROE) and return on sales (ROS). The findings underscore that stock performance and leverage significantly influence the adoption of green disclosures, while firm size and board size were not significant factors.

Research Implications: Policymakers and regulatory bodies should recognize that while green accounting disclosures improve corporate legitimacy, their direct impact on financial performance, particularly profitability, may be limited in the short term.

Originality/Value: This study offers a unique perspective on the impact of sustainability reporting in a regulatory context, particularly within a developing market like Malaysia.

Keywords: green accounting, public listed firms, financial performance, Malaysia, panel data, sustainable development goals (SDG).

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1 INTRODUCTION

Businesses face increasing pressure to adopt sustainable practices in response to climate change, ozone depletion, biodiversity loss, and social issues like poverty and unemployment. In response, businesses have enhanced their commitment to sustainable development and corporate social responsibility (CSR) (Yusoff & Darus, 2012). This reflects the challenges in the global economy, leading corporations to disclose relevant information through environmental reporting to strengthen relationships with stakeholders. Managing the corporation's external relationships lies within the role of accounting (Sidarta *et al.*, 2023).

Green accounting addresses environmental concerns and conflicts between sensitive industries and society (Astari *et al.*, 2023). Business activities impact the economy, environment, and society, requiring disclosure in sustainability reports. This aligns with Industry 4.0's digitalized economy and supports the United Nations 2030 Agenda for Sustainable Development (Brier *et al.*, 2022; Pisciella & Melloni, 2023).

Green accounting, also called environmental accounting (Vaidya, 2023), emerged to address concerns over human activities' environmental influence. Gupta (2018) called it integrated or resource accounting, while Moorthy and Yacob defined it as identifying, tracking, and reporting environmental material and cost data. The United Nations (2020) considers green accounting part of accounting focused on quantifying environmental costs.

Green accounting aids in achieving several United Nations Sustainable Development Goals (SDGs). It supports SDG 12: Responsible Consumption and Production by helping businesses measure and reduce resource use, waste, and pollution. It also contributes to SDG 13: Climate Action by monitoring and reducing greenhouse gas emissions. Furthermore, it aligns with SDG 15: Life on Land by helping companies assess natural resources' worth and protect biodiversity. This methodology promotes transparency and accountability, leading organizations toward sustainable practices.

In Malaysia, green accounting became important in corporate governance following events like the Highland Towers collapse in 1993 and air quality







decline in 1997 (Smith *et al.*, 2007). Environmental information is part of corporate social responsibility (CSR) in sustainability reporting (Nor *et al.*, 2015). Initially voluntary, it was quickly adopted as a way to communicate commitments to stakeholders (Association of Chartered Certified Accountants, 2012). Green accounting faced resistance from small and medium-sized enterprises (SMEs) due to lack of awareness and education on green practices.

However, green accounting gained attention after the ACCA Environmental Reporting Guidelines and the ACCA Environmental Reporting Award were established in Malaysia in 2003 (Sulaiman & Nik Ahmad, 2006; Yusoh et al., 2023). A key factor was the 2015 mandate by Bursa Malaysia, requiring listed companies to include sustainability statements in annual reports (Malaysian Institute of Accountants, 2023). Bursa Malaysia allows flexibility in choosing sustainability reporting frameworks like Integrated Reporting (IR), Task Force on Climate-related Financial Disclosures (TCFD), and the Global Reporting Initiative (GRI) (Ernst & Young, 2022). According to Moh (2023), 67% of companies in the FBM KLCI Index use TCFD for environmental disclosures.

Listed companies that disclose sustainability statements show stronger financial performance (Johari & Komathy, 2019). Moreover, Zhou et. (2024) study found that environmental information leads to long-term success by reducing risks and attracting investors in sustainability-focused markets. However, the impact of such disclosures on financial performance, particularly for public listed firms in Malaysia, remains uncertain. This study examines the impact of green accounting disclosure on the financial performance of publicly listed firms in Malaysia, aiming to fill gaps in previous studies that used limited variables and focused on specific sectors.

2 LITERATURE REVIEW

2.1 GREEN ACCOUNTING DISCLOSURE AND LEGITIMACY THEORY

Green accounting disclosure has become a key topic due to environmental degradation. It has raised awareness in the public and industrial sectors about the importance of sustainable practices, which help improve a







firm's reputation (Tirayoh *et al.*, 2023). This aligns with legitimacy theory, which emphasizes meeting societal norms to gain stakeholder approval. According to Lee and Raschke (2023) and Corossley *et al.* (2021), legitimacy theory explains how organizations align their practices with societal values to gain approval from stakeholders like consumers, investors, and regulators. Companies adopt sustainable practices and CSR to show they are ethical and responsible (Silva, 2021; Abubakar *et al.*, 2022). Izwan *et al.* (2023) found that environmental reporting transparency improved over time, reaching 52.4% among manufacturing firms. Alrazi *et al.* (2019) reported that Malaysian publicly listed firms received average grades of C+ to B+, indicating moderate reporting levels. In 2005, environmental reporting showed a positive link between company size and report quality.

2.2 FINANCIAL PERFORMANCE

Financial performance indicators measure an organization's current development and growth potential (Nhung *et al.*, 2021). Common indicators include return on assets (ROA) and return on equity (ROE) (Qiu *et al.*, 2016; Chew *et al.*, 2019). Islam *et al.* (2014) used earnings per share (EPS) to examine the link between environmental disclosures and financial performance in Malaysian listed firms. Zainon (2020) used the weighted average cost of capital (WACC) to assess the impact of ESG on listed companies' performance, excluding the banking sector due to regulatory constraints, finding an inverse relationship. Ahmad *et al.* (2024) used ROA and Tobin's Q to show a significant link between CSR disclosure and firm performance in both static and dynamic models.

2.3 THE IMPACT OF GREEN ACCOUNTING DISCLOSURE ON FINANCIAL PERFORMANCE

Green accounting disclosure focuses on efficient resource use and promotes companies' social responsibility (Dura & Suharsono, 2022; Astari *et al.*, 2023). Several studies have explored the relationship between green







accounting disclosures and the financial performance of Malaysian listed firms, using ROA and ROE (Chew et al., 2019; Nor et al., 2015; Ong et al., 2015; Kasbun et al., 2016; Ismai et al., 2020). Tobin's Q is also commonly used and shows a strong link between green accounting and financial performance (Nor et al., 2015; Astari et al., 2023). Companies with green disclosures tend to improve their value and reputation by signaling their commitment to sustainability. Kasbun et al. (2016) found a positive relationship between environmental reporting and financial performance (ROA and ROE), with an upward trend in sustainability reporting. Yahya (2015) found a strong link between transparency in environmental reporting and profitability, using free cash flow as a variable. This suggests that profitable companies are more likely to invest in environmental reporting, as they have surplus funds for non-immediate profitmaking activities, which enhances their reputation and supports Legitimacy Theory. Ismai et al. (2020) found a moderate but significant correlation between financial performance (ROA) and sustainability performance in 39 Malaysian firms, indicating that higher-performing companies are more likely to disclose their sustainability efforts.

3 METHODOLOGY

This panel study examines the impact of green accounting disclosures on the financial performance of publicly listed firms in Malaysia. The total number of companies was 248 randomly selected from 13 sectors listed in Bursa Malaysia. Additionally, the data collected were retrieved from Orbis and annual reports published in Bursa Malaysia. The period of this study is 5 years from 2019 to 2023 as gathering data over longer periods yields more comprehensive results in understanding the variables influencing the company's performance as stated by Tze *et al.* (2019). Since panel data analysis is utilised in this study, the static panel model is employed through the fixed and random effects model estimates to investigate how green accounting disclosures affect the financial performance of publicly traded companies in Malaysia.

Fixed effects model estimates, and random effects model estimates are utilised to assess the impact of green accounting disclosures on the financial







performance of public listed firms in Malaysia. The distinction between the two models lies in whether, in the case of fixed effects, the unobserved individual effects are correlated with the regressors in the model, in the case of random effects, there is no correlation (Saleh *et al.*, 2008). Moreover, the fixed effects model estimates the parameter for each cross-sectional unit of the firms, whereas the random effect model accounts for the random distribution of firm-specific characteristics. This makes the model more effective and eliminates the need to estimate each parameter for each firm.

3.1 FIXED EFFECTS MODEL ESTIMATES

The fixed effects model is a conventional model for analysing macroeconomic panel data and it is only effective if the errors are homoscedastic and serially uncorrelated (Steiner, 2009).

$$ROA_{it} = (B_0 + \lambda_i) + B_1GAD_{it} + B_2SIZE_{it} + B_3SP_{it} + B_4LEV_{it} + B_5BS_{it} + u_{it}$$

$$\tag{1}$$

$$ROE_{it} = (B_0 + \lambda_i) + B_1GAD_{it} + B_2SIZE_{it} + B_3SP_{it} + B_4LEV_{it} + B_5BS_{it} + u_{it}$$
(2)

$$ROS_{it} = (B_0 + \lambda_i) + B_1GAD_{it} + B_2SIZE_{it} + B_3SP_{it} + B_4LEV_{it} + B_5BS_{it} + u_{it}$$
(3)

3.2 RANDOM EFFECTS MODEL ESTIMATES

The random effect model acknowledges the possibility of further parameter heterogeneity where all coefficients and the intercept change at random while maintaining the same variance-covariance matrix and mean.

$$ROA_{it} = B_0 + B_1GAD_{it} + B_2SIZE_{it} + B_3SP_{it} + B_4LEV_{it} + B_5BS_{it} + \lambda_i + u_{it}$$
(4)

$$ROE_{it} = B_0 + B_1GAD_{it} + B_2SIZE_{it} + B_3SP_{it} + B_4LEV_{it} + B_5BS_{it} + \lambda_i + u_{it}$$
(5)

$$ROS_{it} = B_0 + B_1GAD_{it} + B_2SIZE_{it} + B_3SP_{it} + B_4LEV_{it} + B_5BS_{it} + \lambda_i + u_{it}$$
(6)







Where ROA, ROE, and ROS are the dependent variables to measure the financial performance; GAD represents the independent variable and SIZE, SP, LEV, and BS represent the control variables; β_0 is constant and λ_i represents the unobserved firm effect however it varies by individual; β_k represents the coefficient of independent variable and control variables; u represented the error term; i indicates the firm number and t represents time. Return on assets (ROA) is determined by dividing the net income by total assets. Return on equity (ROE) is determined by dividing the net income by the average shareholders' equity.

Table 1
Variables, Measurement, and References

Variables	Measurement	Reference(s)
Independent: Green Accounting Disclosure (GAD)	Utilise content analysis on annual reports and disclosures checklist by giving a score which 0 = items that are not disclosed 1 = items that are partially disclosed 2 = items that are disclosed completely GAD = (Sum of items disclosed in annual report)/ (maximum disclosure score) 20 is the maximum disclosure score (10 items x 2)	Bursa Malaysia - Annual ReportAuthor's Calculation
Dependent:Return on Assets (ROA)	Return on assets (ROA) = (Net Income)/ (Total Assets)	
Return on Equity (ROE)	Return on equity (ROE) = (Net Income)/ (Shareholders' equity)	
Return on Sales (ROS)	Return on sales (ROS) = (Operating profit)/ (Net sales)	Orbis
Control: Size of Firm (SIZE)	Based on the total assets of the firm	
Stock Performance (SP)	Based on the stock market price of the firm	
Board Size (BS)	Total number of independent non- executive directors in the firm	Bursa Malaysia - Annual Report Company's Website
Leverage (LEV)	Long-term debt to total asset ratio	Orbis

Source: Bursa Malaysia

4 RESULTS AND DISCUSSIONS

4.1 FINDING

The result of this study is discussed by starting with the profiles of the publicly listed companies representing various sectors in this study sample. As







mentioned earlier, 248 companies were randomly selected, and five years of data for each company were collected from the annual reports and database in Orbis. Hence, the total number of observations for this panel data study is 1,240. Then, the descriptive statistics on the variables, and the results based on the static panel models employed. Table 2 illustrates the sectors profile of the 248 publicly listed companies. Based on the table, there are 13 sectors in which the industrial products & services sector accounted for the largest proportion of the sample at 31.85%, followed by the consumer products & services sector (21.37%), and the property sector at 12.50%. The healthcare and utilities sectors represented the smallest sample proportion at 0.81%. The remaining sectors were construction (4.84%), energy (3.23%), financial services (4.03%), plantation (4.84%), real estate investment trust (2.42%), technology (6.05%), telecommunications & media (4.03%), and transportation & logistics (3.23%).

Table 2Sectors Profile

Sectors	Frequencies	Percentage
Construction	60	4.84
Consumer products & services	265	21.37
Energy	40	3.23
Financial services	50	4.03
Healthcare	10	0.81
Industrial products & services	395	31.85
Plantation	60	4.84
Property	155	12.50
Real estate investment trust	30	2.42
Technology	75	6.05
Telecommunications & media	50	4.03
Transportation & Logistics	40	3.23
Utilities	10	0.81
TOTAL	1240	100

Source: Bursa Malaysia

Table 3 illustrates the fixed effects model for three dependent variables. In Model 1, the results showed that green accounting disclosure is significant with return on assets even though it is negatively correlated. The result of this study is in line with Ong *et al.* (2015) as green accounting disclosure is significant with return on assets (ROA). The control variables showed a positive correlation with ROA except for leverage (LEV) which is negatively correlated.





Among the four control variables, only SP and LEV were significant to ROA at a p-value less than 5%, where the firm size and BS were not significant to the dependent variable, ROA. Model 1 also showed a moderately strong relationship where 53.6% of the total variation by GAD, Size, SP, LEV and BS. Therefore, H1 is accepted as the p-value of GAD is less than 0.05 even though there is a negative correlation.

Furthermore, the results for Model 2 depicted that green accounting disclosure is negatively correlated with ROE and is not significant as the p-value 0.1171 is greater than the significance level of 5%. The control variables showed a positive relationship with ROE except for leverage. However, SP and LEV were the only control variables that showed a significant relationship with ROE. Size and BS were insignificant to ROE as the p-value was greater than 0.05 which stood at 0.6747 and 0.9405 respectively. Additionally, the R-square of this model illustrated a strong relationship at 64.55%. Hence, H2 is rejected as the p-value of GAD is greater than 0.05.

Moreover, the results depicted in Model 3 that GAD is not significant to ROS and both variables have a negative relationship. The control variables were insignificant to ROS except for SP with a p-value of 0.0120<0.05. Three control variables were positively correlated except for LEV which is negatively correlated with ROS. Model 3 showed that R-square has a strong relationship at 61.15% of its total variation explained by green accounting disclosure, size, stock performance, leverage and board size. The remainder 38.85% were inclusive of other factors that were excluded from the regression. Hence, H3 is rejected as green accounting disclosure is not significant with return on sales where its p-value is greater than 5% (0.3736>0.05).

Furthermore, the green accounting disclosure (GAD) has a significant negative relationship with return on assets (ROA) in Model 1, but is insignificant for other dependent variables (ROE and ROS). This indicates that GAD has a potential impact on how businesses are perceived by stakeholders, especially those concerned with financial performance and sustainability. According to Legitimacy Theory, businesses engage in such practices to maintain or improve their legitimacy with key stakeholders. However, if these green disclosures do not immediately translate into higher returns (as indicated by the negative







correlation with ROA), stakeholders may begin to question the effectiveness of these results. However, this result is closely similar with study by Dhar *et al*. (2021), mention that the asset-liability ratio has negative relationship with the element of sustainable.

On the other hand, the insignificant relationship of GAD with return on equity (ROE) and return on sales (ROS) in Models 2 and 3 reinforces the notion that green accounting disclosures may not immediately improve financial performance across all indicators. This result aligns with the idea that while organizations seek legitimacy by adopting green accounting practices, financial stakeholders may not view these disclosures as important drivers of profitability in the short term.

Table 3
Fixed Effects Model Estimates

•				•
Coefficient	Std. Error	t-statistic	Sig.	R-squared
2.3592	6.6117	0.3568	0.7213	
-0.0550	0.0207	-2.6795	0.0075	
0.0002	0.0003	0.6246	0.5324	
1.5956	0.5855	2.7254	0.0065	
-0.1829	0.0775	-2.3611	0.0184	0.5369
0.2991	1.7779	0.1682	0.8664	
4.5404		Prob (F-statistic)		0.0000
11.1580	17.6500	0.6322	0.9405	
-0.0868	0.0554	-1.5684	0.1171	
0.0003	0.0008	0.4198	0.6747	
4.1594	1.5629	2.6614	0.0079	
-4.5169	0.2068	-21.8388	0.0000	0.6455
0.3542	4.7461	0.0746	0.9405	
7.1322		Prob (F-statistic)		0.0000
-5.5066	14.4160	-0.3820	0.7026	
-0.0403	0.0452	-0.8902	0.3736	
0.0001	0.0007	0.1832	0.8547	
3.2116	1.2765	2.5159	0.0120	
-0.0736	0.1689	-0.4358	0.6630	0.6116
3.3476	3.8764	0.8636	0.3880	
6.1671		Prob (F-statis	tic)	0.0000
	2.3592 -0.0550 0.0002 1.5956 -0.1829 0.2991 4.5404 11.1580 -0.0868 0.0003 4.1594 -4.5169 0.3542 7.1322 -5.5066 -0.0403 0.0001 3.2116 -0.0736 3.3476	2.3592 6.6117 -0.0550 0.0207 0.0002 0.0003 1.5956 0.5855 -0.1829 0.0775 0.2991 1.7779 4.5404 17.6500 -0.0868 0.0554 0.0003 0.0008 4.1594 1.5629 -4.5169 0.2068 0.3542 4.7461 7.1322 -5.5066 14.4160 -0.0403 0.0452 0.0001 0.0007 3.2116 1.2765 -0.0736 0.1689 3.3476 3.8764	2.3592 6.6117 0.3568 -0.0550 0.0207 -2.6795 0.0002 0.0003 0.6246 1.5956 0.5855 2.7254 -0.1829 0.0775 -2.3611 0.2991 1.7779 0.1682 4.5404 Prob (F-statis 11.1580 17.6500 0.6322 -0.0868 0.0554 -1.5684 0.0003 0.0008 0.4198 4.1594 1.5629 2.6614 -4.5169 0.2068 -21.8388 0.3542 4.7461 0.0746 7.1322 Prob (F-statis -5.5066 14.4160 -0.3820 -0.0403 0.0452 -0.8902 0.0001 0.0007 0.1832 3.2116 1.2765 2.5159 -0.0736 0.1689 -0.4358 3.3476 3.8764 0.8636	2.3592 6.6117 0.3568 0.7213 -0.0550 0.0207 -2.6795 0.0075 0.0002 0.0003 0.6246 0.5324 1.5956 0.5855 2.7254 0.0065 -0.1829 0.0775 -2.3611 0.0184 0.2991 1.7779 0.1682 0.8664 4.5404 Prob (F-statistic) 11.1580 17.6500 0.6322 0.9405 -0.0868 0.0554 -1.5684 0.1171 0.0003 0.0008 0.4198 0.6747 4.1594 1.5629 2.6614 0.0079 -4.5169 0.2068 -21.8388 0.0000 0.3542 4.7461 0.0746 0.9405 7.1322 Prob (F-statistic) -5.5066 14.4160 -0.3820 0.7026 -0.0403 0.0452 -0.8902 0.3736 0.0001 0.0007 0.1832 0.8547 3.2116 1.2765 2.5159 0.0120 -0.0736 </td

Note: Significance level at 5%

Table 4 depicts the random effects model for Model 1 on ROA. The results showed that green accounting disclosure is not significant with return on assets and is negatively correlated. The control variables such as size and board size





(BS) are not statistically significant with ROA whereas stock performance (SP) and leverage (LEV) are significant with ROA. Additionally, leverage and size have a negative relationship with ROA in contrast with SP and BS which showed a positive correlation with ROA. Therefore, H1 is rejected as the significance of GAD is greater than the 5% significance level.

The results showed that green accounting disclosure is insignificant to return on assets and is negatively correlated for Model 2-ROE. The control variables such as size, stock performance (SP) and board size (BS) show a positive correlation with ROE, however, leverage (LEV) is negatively correlated. Also, three control variables namely size, SP and LEV are significant to ROE whereas BS is the only one that is insignificant to ROE. The R-square showed a weak relationship which indicates that only 31.25% of its total variation is explained by GAD, size, SP, LEV, and BS. Therefore, H2 is rejected as the significance of GAD is greater than the 5% significance level.

For Model 3-ROS, green accounting disclosures are negatively correlated with ROS and insignificant as the p-value (0.9191)>0.05. Besides, in two out of four control variables, only SP and BS showed a positive correlation and were significant with ROS. Firm size and LEV showed a negative relationship and were statistically insignificant with ROS. The R-square of Model 3-ROS indicates a very weak relationship which stood at 6%. Hence, H3 is rejected because green accounting disclosure is not significant with return on sales as the p-value is greater than the significance level of 5%.

There are consistent results between fixed and random effect, as the results show that GAD has a negative correlation with ROA but is insignificant for both ROE and ROS. This means that while companies may disclose their green practices to meet societal expectations, these efforts do not necessarily improve financial performance in the short term. From a Legitimacy Theory perspective, companies use green disclosures to align with societal norms, but the negative correlation with ROA suggests that these practices may involve costs that reduce the profitability. There are several studies to support this result, has been mention by Jang *et al.* (2022), He *et al.* (2023), and Muhiddin *et al.* (2023) the practice of certain green technology is still expensive and very costly to implement.







Table 4
Random Effects Model Estimates

Variable	Coefficient	Std. Error	t-statistic	Sig.	R-squared
Model 1-ROA					
Constant	1.4170	1.3086	1.0828	0.2791	
GAD	-0.0179	0.0174	-1.0293	0.3036	
SIZE	0.0000	0.0000	-0.3951	0.6929	
SP	0.9547	0.1618	5.9000	0.0000	
LEV	-0.2270	0.0734	-3.0903	0.0020	0.0360
BS	0.3615	0.2980	1.2130	0.2254	
F-statistic	9.2219		Prob (F-statistic)		0.0000
Model 2-ROE					
Constant	6.2130	3.3928	1.8312	0.0673	
GAD	-0.0252	0.0460	-0.5474	0.5842	
SIZE	0.0002	0.0001	3.3313	0.0009	
SP	4.3133	0.4175	10.3313	0.0000	
LEV	-4.3748	0.1953	-22.3960	0.0000	0.3231
BS	0.9282	0.7677	1.2091	0.2269	
F-statistic	117.7919		Prob (F-statistic)		0.0000
Model 3-ROS					
Constant	-0.3755	3.3892	-0.1108	0.7026	
GAD	-0.0041	0.0400	-0.1017	0.3736	
SIZE	-0.0001	0.0001	1.3082	0.8547	
SP	0.8354	0.4286	1.9489	0.0120	
LEV	-0.0760	0.1629	-0.4668	0.6630	0.0096
BS	2.0250	0.7991	2.5339	0.3880	
F-statistic	2.3863		Prob (F-statistic)		0.0363

Note: Significance level at 5%

4.2 ROBUSSNEST TEST

Based on the result of the Hausman Test Table 5 showed the results of p-value for each model where ROA (0.0113<0.05), ROE (0.0531<0.05), and ROS (0.2209>0.05). It showed that Model 1-ROA and Model 2-ROE have p-values less than the significance level of 5%, therefore the null hypothesis is rejected. As for Model 3-ROS, the p-value 0.2209 indicates that it is greater than the significance level of 5%. Therefore, the null hypothesis is not rejected. In conclusion, all the models are robust and the fixed effects model is appropriate for Model 1 and Model 2, whereas the random effect model is appropriate for Model 3.



Table 5
Hausman Test

Cross-section random	Chi-Sq Statistic	Chi-Sq. d.f.	Sig. (p-value)
Model 1-ROA	14.7959	5	0.0113
Model 2-ROE	10.9156	5	0.0531
Model 3-ROS	6.9970	5	0.2209

4.3 DISCUSSION

Based on the findings, the hypothesis for Model 1 where green accounting disclosures is significant to return on assets is accepted. This is because the result for Model 1-ROA showed that GAD significantly impacts return on assets even though it is negatively correlated as shown in Table 4. The result corroborates the previous studies (Ong et al., 2015; Kasbun et al., 2016; Tze et al., 2016; Ahmad et al., 2024). This is because green accounting disclosures increase expenses related with environmental compliance, sustainability initiatives, and transparency obligations. Furthermore, investors may interpret such disclosures as indicators of possible regulatory risks or operational inefficiencies, which could result in diminished stock valuations. Nevertheless, the long-term advantages, including enhanced reputation and increased efficiency, may surpass the initial financial disadvantages. However, size and board size showed that it does not influence the listed companies to disclose green accounting disclosures. In contrast, stock performance and leverage significantly influence the listed firms to disclose green accounting disclosures.

As illustrated in Table 4, the hypothesis for Model 2 where green accounting disclosures is significant to return on equity is rejected because it does not significantly impact the dependent variable (ROE). This result is similar to the study conducted by Nor *et al.* (2015) and Chew *et al.* (2019). Moreover, size and board size do not influence the listed companies to disclose their environmental information in their annual report as both showed p-values above the significance level. Stock performance and leverage significantly influence the listed firms to disclose information similar to Model 1-ROA.

Furthermore, the hypothesis for Model 3 in which green accounting disclosures are significant to return on sales is rejected since the independent variable was not impacted by the dependent variable (ROS). This result is







consistent with the findings as evidenced in the study of Qiu *et al.* (2016) as having a higher ROS does not influence the companies disclosing environmental information to the public compared to social disclosure. The listed firms publicly disclose such information regardless of whether they have the economic means since Bursa Malaysia mandated it back in 2016 to provide sustainability reports (Raj, 2022).

It can be deduced that publicly listed companies disclose such information in their sustainability reporting to uphold their position and respectable corporate reputation align with the Legitimacy Theory (Dura & Suharsono, 2022).

5 CONCLUSION

The Bursa Malaysia made it compulsory and mandated that all listed firms disclose the Sustainability Report in their annual report which started in 2016. Sustainability disclosure relates to the firm's environmental, social, and governance (ESG). This study supports the premise that green accounting disclosure has significantly impacted return on assets (ROA) even though there is a negative association between them, and it is consistent with previous studies. Green accounting disclosure is essential for promoting sustainability which it may present short-term financial difficulties for companies. Companies that engage in green initiatives and transparently disclose their environmental impact may encounter heightened expenses associated with compliance, sustainable practices, and reporting obligations, potentially diminishing their profitability. This may deter companies from truly embracing green accounting unless regulatory incentives or market advantages, such as enhanced reputation and increased stakeholder trust, surpass the financial disadvantages. Regulatory bodies such as Bursa Malaysia and Security Commission must carefully evaluate the need to reconcile sustainability objectives with economic viability in order to promote wider adoption while preserving financial stability.

Nevertheless, size and board size do not influence their decision to report environmental information. However, control variables such as stock performance and leverage do have a role in this regard. On the other hand, the







hypothesis on the other two dependent variables (ROE & ROS) was rejected due to insignificant impact. It can be deduced that green accounting disclosure in Malaysia has significantly improved over the years since Bursa Malaysia mandated in 2016 that all publicly listed firms were required to disclose such information in their annual report. The results of this study also align with the Legitimacy Theory as they used it as a tool of communication to their stakeholders and ensuring that the companies' commercial activities abide by the legislation and norms of the society and locality where they reside.

5.1 LIMITATIONS AND RECOMMENDATIONS

This study found that green accounting disclosures significantly impacted only ROA, while ROE and ROS showed no effect. Future research should use additional variables to assess financial performance for more favorable outcomes. The study focused on 248 publicly listed companies in the Main market from 2019 to 2023. Future studies should include more companies to achieve more reliable results. Additionally, future research should compare the impact of green accounting disclosures across different markets, such as the ACE and LEAP markets. Incorporating more years in longitudinal studies will help track trends in green accounting disclosures, as suggested by Tze *et al.* (2019).

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