Asian Journal of Accounting and Governance 22(2024) ISSN2180-3838
e-ISSN2716-6060
(http://dx.doi.org/10.17576/AJAG-2024-22-13)

# Navigating the Nexus of Ownership Structures and Corporate Sustainability Performance: The Amplified Role of Corporate Governance

NORMARLIANA LAILI, MOHAMAT SABRI HASSAN, ROMLAH JAFFAR, SHUHAIMI JAAFAR & AHMAD MONIR ABDULLAH

*ABSTRACT*

*Firm ownership structures in emerging economies possess unique institutional arrangements and influence firm decisions in various ways. Firm decisions and investments are essential for a company to sustain. Primarily driven by the economic dimension, the traditional economic performance of companies is no longer sufficient in the modernised and competitive business environment. Focusing on short-term profits often ignores social and environmental impacts, giving rise to social problems, pollution, environmental degradation and global warming, among others. Corporate governance is a mechanism that can align the interests of various stakeholders and ensure a firm's long-term success. This study investigates the effect of family (FOWN) and government ownership (GOWN) on corporate sustainability performance (CSP) and the moderating role of corporate governance (CG), using data from 762 annual reports of Malaysian Public Listed Companies from 2020 to 2022. Results indicated a significant negative relationship between FOWN and CSP, while GOWN presented a significant positive relationship with CSP. The CG was also found to play an amplified role in the relationship between FOWN and CSP. However, the moderating role of CG failed to prevail in the association between GOWN and CSP. Additional analysis demonstrated that FOWN significantly and positively affected economic and environmental performance. In contrast, GOWN affected the environmental and social dimensions. The current study enriches people's understanding of how ownership and governance interact to drive sustainability outcomes, underlining the need for robust governance practices to improve sustainability in family and government-owned enterprises.*

*Keywords: Ownership structures; family ownership; government ownership; Corporate sustainability performance; corporate governance; agency theory*

## INTRODUCTION

Firms' engagement in sustainability practices can significantly contribute to societal and environmental improvements by mitigating adverse effects and reducing greenhouse gas emissions. Corporate sustainability performance (CSP) is crucial for enhanced returns, organisational resilience and stakeholder trust, as it improves non-financial performance and enhances shareholders' wealth by aligning with firm economic objectives (Kamarudin 2021). Investors consider non-financial performance integral to their investment decision-making (Radu et al. 2022). A 2021 EY investor survey revealed that post-COVID-19, 90% of respondents emphasised the importance of corporate Environmental, Social and Governance (ESG) performance in their investment strategy and decision-making.

Unique institutional arrangements shape ownership structures in emerging economies (Panicker 2017). The ownership structure significantly impacts corporate strategic decisions, particularly on a firm's ability to engage in socially responsible activities (Pareek & Sahu 2022). Therefore, the firms in the emerging markets require attention different from that of the developed economies. The ownership structure in Malaysia is usually concentrated, with approximately 10-12 family groups controlling a range of companies and holding 44.7% shares in Malaysian companies, while government-linked companies hold around 30% of market capitalisation (OECD 2017).

Family ownership is a significant form of business ownership playing a crucial role in developed and developing economies for a country's economic development (Saidat et al. 2022). However, conflicts of interest may arise in family-owned firms, as managers might prioritise personal interests over the company's long-term performance. Family-owned businesses often appoint family members to managerial positions, which potentially leads to misuse of control for personal gain, thus reflecting a Type II agency problem where controlling families may exploit minority shareholders (Kumala & Siregar 2021). Despite this, agency theory suggests that family firms generally incur lower agency costs due to centralised control to reduce agency-principal conflicts when ownership and management are within the family (Amidjaya & Widagdo 2019). In contrast, government-owned companies face unique challenges, as government ownership grants permanent political powers over the public (Haider et al. 2018). Such companies may experience additional pressure to generate high profits for legitimacy and must meet heightened public accountability expectations. This increased public scrutiny may drive government-controlled companies to fulfil national expectations diligently (Mohd Ghazali 2020).

The Malaysian government encourages corporate sustainability, as evidenced by the revised Malaysian Corporate Governance Code (MCCG), aligning with global best practices (Ismail et al. 2020). The updated code

emphasises the board's consideration of sustainability challenges in planning and strategy to ensure long-term value and stakeholder trust (MCCG 2021, Guidance 4.1). The Securities Commission of Malaysia, in the Corporate Governance Strategic Priorities 2021-2023 report, further highlighted the need for listed companies to address stakeholder pressures, create societal value and evaluate environmental impact (Securities Commission Malaysia 2021a). This strategic plan includes five thrusts, which include enhancing the CG Regulatory Framework, strengthening the CG ecosystem, promoting greater diversity on boards, embedding CG early in the life cycle of companies and youth, as well as leveraging technology to enhance CG monitoring and 11 strategic initiatives in improving board capacity for addressing sustainability, which indicates Malaysia's commitment to sustainable development through improved corporate governance mechanisms.

The study examines the impact of ownership structures, specifically family and government ownership, on sustainability performance in the Malaysian context. The Malaysian business environment is unique in that the concentrated ownership of family and government owners might influence firm sustainability performance. Diverse owners with distinct principles and priorities can lead to varied investment choices. Therefore, this study provides insights into the influence of ownership structures beyond previous studies focusing on emerging countries.

The second objective of this study is to investigate whether CG can strengthen the relationship between OS and CSP. CG plays a monitoring role in ensuring effective management and reducing agency conflicts. The primary goal of the corporate governance mechanism is to increase transparency in how agents conduct business and align their interests to increase value for all stakeholders. Therefore, CG can potentially strengthen the relationship between OS and CSP as the firm with an effective CG may influence owners to direct their business sustainably to guarantee business longevity.

Research findings indicated that FOWN negatively affects CSP, while GOWN is positively associated with CSP. Additionally, this study revealed that CG moderated the relationship between FOWN and CSP, strengthening the relationship between FOWN and CSP when implementing robust governance practices. This moderating effect, however, was not observed in GOWN. Further analysis demonstrated that FOWN does not significantly engage with social and environmental aspects, thus suggesting a primary focus on financial goals, while GOWN showed contrary results.

This study enriches theoretical and practical dimensions. Firstly, it presents a comprehensive overview of Corporate Sustainability Performance (CSP) in Malaysian business settings that encompasses financial and non-financial performance, offering additional insights into measuring corporate sustainability. Additionally, it investigates ownership's impact on CSP. This study also sheds light on corporate governance's interplay with stakeholder demands, acknowledging potential conflicts with owners and their role in sustainability performance. Practically, this study contributes by clarifying the current state of CSP and how ownership structures may shape it. It offers valuable insights for firm management to identify gaps in sustainability performance and implement necessary improvements. Besides, it aids firms in understanding the role of Corporate Governance (CG) in minimising owner dominance and control.

Data for this study was collected from the annual reports of publicly listed companies in Malaysia. The rest of the paper is structured as follows: Section 2 reviews the literature and the development of the hypotheses; Section 3 includes the methodology; Section 4 reflects the results and discussion and, finally, the conclusions.

## LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

Ownership structures refer to the distribution of shares among major shareholders and their involvement in firm decisions and policy-making (Javeed et al. 2021). Ownership structure is a key governance mechanism influencing corporate strategic decisions and, more specifically, a firm's ability to engage in socially responsible activities (Pareek & Sahu 2022). Common ownership structures in developing nations include government and family ownership. The debate over the relative performance of family-owned and government-owned companies stems from differing ownership structures and management approaches (He et al. 2021). The traditional emphasis on financial performance is increasingly inadequate as companies grow larger and must address the needs of shareholders and other stakeholders. CSP has gained importance as it evaluates a company's integration of economic, environmental, social and governance factors, thereby influencing the firm and society (Artiach et al. 2010). Financial and non-financial performance are essential to ensure sustainable business practices (Searcy 2016). Therefore, the impact of family and government ownership structures on firm sustainability performance is examined in this study.

### FAMILY OWNERSHIP AND CORPORATE SUSTAINABILITY PERFORMANCE

Family ownership refers to the percentage of shares owned by a family or its members, encompassing equity, management and operational rights (Al Amosh & Khatib 2021). In this context, a family firm denotes the primary shareholder in a family, be it an individual or an unlisted entity (Faccio & Lang 2002). Family and business are

intimately connected in family-owned firms and remain culturally indivisible. In other words, a business profoundly influences the family and vice versa (Cabral & Sasidharan 2021). Such firms tend to enhance relationships with stakeholders, aspiring to leave a legacy through business success. Family involvement in management and shareholding facilitates effective monitoring, control and succession planning, resulting in lower agency costs (Amidjaya & Widagdo 2019). Hence, controlling family members on the board enhances the firm's ability to sustain itself as family firms demonstrate superior resilience, mainly owing to their ability to leverage the family's social capital, which can be crucial during crises (Daniele et al. 2022).

Studies on ownership structures in the Middle East, Indonesia and Thailand revealed positive relationships between family ownership and firm performance (Al-Janadi 2021; Al Farooque et al. 2020; Musallam et al. 2019). However, Muntahanah et al. (2021) discovered a negative impact in the Indonesian context, attributing it to the family pursuit of personal gain. Furthermore, Aksoy et al. (2020) as well as Al Amosh and Khatib (2021) also provided contradictory evidence on family ownership's association with corporate sustainability practices, suggesting potential opportunism and diversion from stakeholder expectations. Ng et al. (2015) indicated that increasing families' ownership is related to better firm performance in the Malaysian business environment. Family ownership in emerging markets differs from developed markets as the family members stay in the top position for an extended period after the company goes public (Wang & Shailer 2017).

Consequently, there will be greater control over management decisions in family-owned companies. The family managers put effort into further increasing family wealth since it will also benefit them (Mosbah et al. 2017). For this reason, Mahto et al. (2019) asserted that transgenerational intention in family firms makes the company progress towards sustainability initiatives.

Stakeholder theory advocates that organisations must consider the interests of a broader stakeholder group for success (Jadoon et al. 2021). Agency theory posits that family-owned firms often outperform non-family ones owing to the alignment of family members in ownership and management, mitigating conflicts of interest and fostering a shared goal (Koji et al. 2020). Therefore, this study hypothesises that:

$H_1$ Family ownership is positively associated with corporate sustainability performance

## GOVERNMENT OWNERSHIP AND CORPORATE SUSTAINABILITY PERFORMANCE

The subsequent ownership structure under consideration is government ownership, which refers to government control or ownership of enterprises at various levels, federal or local (state, provincial, municipal) (Liu 2018). In the Malaysian context, companies affiliated with the government are called government-linked corporations (GLCs), constituting nearly 40% of the total market capitalisation and playing a crucial role in the Malaysian stock market (Mohd Ghazali 2020). GLCs feature government-appointed boards making significant decisions, including contract awards and restructuring. While enjoying special advantages, these entities are required to adhere to government policies and fulfil social obligations, prioritising political and economic responsibilities over profit maximisation (Bapuji et al. 2020). Government-owned companies aim to maximise social welfare and promote sustainable development, emphasising non-financial aspects (Dong et al. 2022). Increased public scrutiny necessitates transparency and responsiveness to stakeholders. Government support provides favourable conditions for survival, with financial assistance to enhance business operations (Nugroho 2019).

Studies in China, Saudi Arabia and India suggested positive relationships between government ownership and environmental and social performance, sustainability disclosures, and sustainability disclosure performance, respectively (Boshnak 2021; Liu et al. 2019; Mal et al. 2022). Similarly, Fauzi and Musallam (2015) found a similar result in the context of Malaysian business with a result indicating that the government, a major company shareholder, has an efficient monitoring role, leading to better performance. Conversely, a study in India displayed an insignificant relationship between government ownership and CSP, attributing it to the government's status as a minority shareholder (Pareek & Sahu 2022). The hypothesis posits that government ownership, as a minority shareholder, prioritises stakeholder value over financial goals as they are more required to comply with government policies, including additional social obligations (Bapuji et al. 2020). The agency issues, often seen with large shareholders, can be worse for GOWN due to conflicts between the government and private investors apart from the state's limited ability to oversee management (Iwasaki et al. 2022). Government monitoring mitigates agency costs and boosts firm value, particularly in developing economies. Stakeholder theory emphasises the government's role as an influential stakeholder, potentially influencing sustainable business practices (Habtoor et al. 2019). Therefore, this study hypothesises that:

$H_2$ Government ownership is positively associated with corporate sustainability performance

## THE MODERATING ROLE OF CORPORATE GOVERNANCE

Corporate governance is crucial in overseeing interactions among management, shareholders and stakeholders

(Alkaraan et al. 2022). The pursuit of shareholder wealth maximisation often triggers agency problems from conflicting interests between owners and managers. Addressing such issues necessitates the implementation of robust corporate governance practices, which can minimise agency problems and align managers' actions with stakeholders' interests. As a result, it fosters a more adequate formulation of vision and strategies for sustainable development. In family-owned companies, a type II conflict may arise between majority and minority shareholders, as family owners might prioritise the majority's interests (Mai & Hamid 2021). The conflicting needs of meeting the family's affective requirements and preserving socio-emotional wealth contribute to the low survival rates of many family businesses (Kamaludin et al. 2020). Meanwhile, family agency problems, such as hiring inadequately skilled family members, can impact overall company performance, jeopardising the objective of ensuring family security (Amran & Che Ahmad 2014). Additionally, since most of the family managers are family members, no separation of power and control takes place, which will jeopardise the overall operation and direction of the firms. Therefore, effective governance is needed to mitigate the issues further, ensuring sustainable firm growth.

$H_{3a}$ Corporate governance mechanisms strengthen the relationship between family ownership and corporate sustainability performance.

Government dominance in corporate ownership structures is typical in Malaysian businesses, particularly in government-linked corporations (GLCs) (Mohammed et al. 2017). GLCs, with government-appointed boards, make significant decisions, including contract awards and restructuring (Bhatt 2016). Government-owned firms are often perceived as less efficient due to political considerations prioritising income and political power over profit or firm value maximisation (Liu 2018). According to agency theory, firms with good governance outperform those with poor governance, engaging in eco-friendly activities for long-term benefits (Issa & Zaid 2021). On the other hand, stakeholder theory emphasises the contractual nexus between stakeholders and executive managers, highlighting the need for effective governance to set firms' strategic direction toward sustainability. Companies with effective corporate governance structures ensure sustainable wealth creation, contribute to better sustainability performance, avoid irregularities, protect stakeholders' interests and manage excessive risks (Al-Shaer & Hussainey 2022). As a result, the following hypothesis is suggested:

$H_{3b}$ Corporate governance mechanisms strengthen the relationship between government ownership and corporate sustainability performance.

## RESEARCH DESIGN AND METHODOLOGY

### SAMPLE AND DATA COLLECTION

This study investigates the CSP among firms listed in the Main Market of Bursa Malaysia. Listed companies were chosen for this study due to the legal requirements to publish corporate governance, financial performance information and sustainability reports (Barroso-Castro et al. 2020). Consistent with previous studies by Aksoy et al. (2020), firms from the financial sector were excluded in light of the difference in regulations, which may influence the study result. Financial institutions, for example, are supervised by the Central Bank of Malaysia, while firms from REIT and closed-end funds are regulated under a collective investment scheme framework (Jamil et al. 2020).

The sample for this study included firms listed on the Malaysia stock exchange from 2020 to 2022. The reasons are as follows: 2021 was the first year of the revised version of the Malaysian Code on Corporate Governance (MCCG) 2021. Hence, the year 2020 was classified as the transition year. Secondly, the revised MCCG 2021 strengthened the board structure and composition. The revised MCCG ensures more active and responsible board members (MCCG 2012).

There are 785 public companies listed in Bursa Malaysia as of 19 January 2023. However, in keeping with previous studies (Aksoy et al. 2020; Barroso-Castro et al. 2020; Juniarti 2020), firms from the financial-related sector were excluded as they may potentially affect the results. The omission was due to the differences between the excluded firms in terms of nature and regulatory environments, making the total population 734 firms. The sample size was determined based on Krejcie and Morgan's table, which showed the sample size of 254 firms for this study. The number was based on the stratified sampling procedure and subgrouped into 11 industries categorised by Bursa Malaysia. This technique involved taking a random sample from each subgroup, ensuring comprehensive representation across 11 industries and yielding 762 observations (254 firms x 3 years).

The CSP information was collected through content analysis assessed from the firm's annual reports. The corporate governance variables, board of directors, risk management committees, audit committee and the presence of sustainability committees were manually collected by examining directors' biographies in annual reports. Control variables data were extracted from the Eikon database.

## VARIABLES MEASUREMENTS

The dependent variable for this study was sustainability performance (CSP), which was measured based on an index incorporating financial and non-financial performance. Constructing the CSP index involved several steps, including adopting categories and items from prior studies (Zaid et al. 2020; Ali & Jadoon 2022). Three dimensions, namely economic, environmental and social with 13 items were selected, as highlighted in Table 1 highlights. To ensure the relevance of these items to the Malaysian context, they were aligned with the common themes observed in Malaysian firms, as guided by the Bursa Malaysia Sustainability Reporting Guide 2016. To assess the indicators' reliability and internal consistency, Cronbach's coefficient alpha was employed, resulting in a value of 0.7275.

This study adopted a dichotomous scoring methodology consistent with previous research (Zaid et al. 2020). This approach assumes equal importance for each item, following an unweighted principle (Cooke 1989). In the scoring process, a score of one (1) is assigned to a firm that discloses actual performance improvement, or zero (0) if the firms merely report sustainability activities without demonstrating evident improvement. The overall corporate sustainability performance was calculated by adding the disclosed actual performance and dividing it by the maximum number of CSP indicators. With 13 items, a particular firm may attain a maximum of 13. The details of CSP are in Table 1.

## INDEPENDENT VARIABLES

In this research, the independent variable under investigation encompassed ownership structures, specifically family and government ownership. Both ownership types were quantified based on the actual percentage of ownership, with data obtained from the Profile of Directors and Analysis of Shareholdings sections in the firms' annual reports. Meanwhile, family ownership was measured based on the percentage of family-controlling shareholder representatives on the board (Amidjaya & Widagdo 2019). A firm is classified as a family firm when its predominant shareholder is a family, individual or an unlisted firm (Faccio & Lang 2002). This study also included direct and indirect family ownership firms, given that indirect ownership through complex structures is common. The second ownership structure under scrutiny was government ownership, which refers to the percentage of ownership held by government institutions, agencies and Government-Linked Companies (GLCs), as explained by Ting and Lean (2015). This category encompasses state and federal governments, with the computation based on the proportion of government shares (Mohd Ghazali 2020).

## MODERATING VARIABLE

Corporate governance was incorporated in this study as the moderating variable assessed through a corporate governance index. The index comprised four dimensions: board of directors (BOD), risk management committee (RMC), audit committee (AC) and sustainability committee (SC). The board attributes included board independence, board size, female directors on board and board meetings, RMC characteristics involving RMC size, independence of RMC members, financial literacy and RMC meetings. Meanwhile, AC attributes encompassed AC independence, AC size, financial literacy of AC members and AC meetings. A score of one (1) is assigned for the presence of the board attributes in the firm and 0 otherwise. The overall corporate governance score, ranging from 0 to 13, is derived by summing the BOD, RMC, AC and SC attributes. The corporate governance index is a ratio between the actual governance score and the maximum possible score (13). Table 1 presents the details of CG.

## CONTROL VARIABLES

In addition to the explanatory variables, the present regression model incorporates control variables. The variables aim to prevent model specification issues and reduce potential bias in our results. Various firm characteristics, namely firm size (FSIZE), firm age (FAGE), leverage (LEV), and Growth (GROWTH) are theoretically considered factors that may impact corporate sustainability performance. All variables are expected to have a positive and significant relationship with corporate sustainability performance. FSIZE was positively and significantly associated with a CSP, which is consistent with previous studies (Amosh 2021; Argento et al. 2019). Large organisations interact with a broader range and different types of stakeholders, thus experiencing greater demand for sustainability concerns. This study expects the older company to be involved in sustainability activities, leading to better performance than newly established companies; hence, FAGE is predicted to have a positive and significant relationship with CSP. Generally, previous studies believe that a firm with higher debt (LEV) than lower debt entails higher risk. Therefore, higher debt firms must instil confidence among stakeholders by disclosing more information. Hummel and Schlick (2016) stated that creditors are interested in its sustainable performance as it points forward future risks related to sustainability issues. Lastly, a more outstanding firm's

growth may have additional resources to invest in sustainable activities that positively and significantly influence sustainability performance.

TABLE. 1 Variable measurements and score

| Variable Name | Dimension/attributes | Measurement | Score | Source |
|---|---|---|---|---|
| Corporate Sustainability Performance | Economic | Return on Aset= EBIT/Total Asset | "1" if the ROA is above the industry average ratio and 0 otherwise. | (Cancela et al. 2020) |
| | | Tobin's Q= Market value of equity+Total Debt/Total Asset | 1 if Tobin's Q is above the industry average ratio and 0 otherwise. | (Cancela et al. 2020) |
| | Environment | Resources reduction | 1 if there is a disclosure of a reduction in resource consumption and 0 otherwise. | (Colakoglu et al. 2021)<br>(Mal et al. 2022) |
| | | Waste minimization | 1 if there is a disclosure of a reduction in total waste generated and 0 otherwise. | (Ali & Jadoon 2022) |
| | | Emission reduction | 1 if there is a disclosure of a reduction in emissions by the firm and 0 otherwise. | (Colakoglu et al. 2021)<br>(Colakoglu et al. 2021) |
| | | Award or recognition | 1 if there is disclosure of a firm receiving an award or recognition relating to the environment and 0 otherwise. | (A.A. Zaid et al. 2020)<br>(Colakoglu et al. 2021) |
| | | ISO/EMS | 1 if there is disclosure of a a firm with ISO/EMS certification and 0 otherwise | (Bursa Malaysia 2015)<br>(Nikolaou et al. 2019) |
| | | Community | 1 if there is disclosure of a firm has community involvement and 0 otherwise. | (Bursa Malaysia 2015)<br>(Colakoglu et al. 2021) |
| | Social | Health & Safety (HSE) | 1 if there is disclosure that a firm has an employee health and safety program and 0 otherwise. | |
| | | Discrimination | 1 if there is a disclosure of the existence of a discrimination policy and 0 otherwise. | |
| | | Grievance mechanism | 1 if there is a disclosure of the existence of a grievance mechanism and 0 otherwise. | |
| | | Supply chain | 1 if there is disclosure on assessments of new and existing suppliers in the supply chain and 0 otherwise. | |
| | | Award or recognition | 1 if there is the disclosure of the firm receiving an award relating to social and 0 otherwise. | |
| Ownership structures | Family ownership | Actual shares owned by the family in companies. | | (Aksoy et al. 2020) |
| | Government Ownership | Actual shares owned by the government in companies, including GLC | | (Amidjaya & Widagdo 2019) |
| Corporate governance | Board Independence | The number of independent directors divided by the total number of directors on the board | 1 if at least half of the board members are independent directors and 0 otherwise. | (Aksoy et al. 2020) |
| | Female director | The number of female directors divided by the total number of directors on the board | 1 if at least 30% of board members are women directors and 0 otherwise. | (Kouaib et al. 2020) |
| | Board size | The total number of directors on the board | 1 is given if the board members are between 5 and 14 members and 0 otherwise. | (Kouaib et al. 2020) |
| | Board meetings | The number of board meetings held in a year | 1 if the board meetings conducted throughout the year are 6 or more and 0 otherwise. | (Yakob & Hasan 2021) |
| | Independence of | The number of | 1 if at least half of the members in an | (Jia & Bradbury 2020) |

| | | | | |
|---|---|---|---|---|
| | RMC's members | independent directors in RMC is divided by the total number of directors on the board | RMC are independent and 0 otherwise. | |
| | Size | The total number of directors in RMC | 1 if the number of committee members is greater than the sample median and 0 otherwise. | (Jia & Bradbury 2020) |
| | Qualification | Directors hold an academic or professional qualification in finance or accounting | 1 if at least one director on the RC has an academic and/or professional qualification in finance/ accounting and 0 otherwise | (Jia & Bradbury 2020) |
| | Meetings | The number of RMC meetings held in a year | 1 if the number of meetings held by the RMC during the year is greater than the sample median and 0 otherwise. | (Malik et al. 2020) |
| | Independence of AC's members | The number of independent directors in AC is divided by the total number of directors on the board | 1 if the audit committee members comprise solely of independent members and 0 otherwise. | (Securities Commission Malaysia 2021b) |
| | Size | The total number of directors in AC | 1 if the number of audit committee members is at least three and 0 otherwise. | (Jia & Bradbury 2020) |
| | Financial literacy | Directors hold an academic or professional qualification in finance or accounting | 1 if all audit committee members are financially literate and 0 otherwise | (Securities Commission Malaysia 2021b) |
| | Meetings | The number of AC meetings held in a year | 1 if the number of meetings the AC holds during the year is at least four and 0 otherwise. | (Katmon et al. 2019) |
| | Sustainability Committee | The presence of a sustainability committee. | 1 if the firm has a sustainability committee and 0 otherwise. | (Biswas et al. 2018) |
| Firm Age | Natural log of the number of years since the firm's incorporation. | | | (Zaid et al. 2020) |
| Firm Size | Natural log of Total Asset | | | (Zaid et al. 2020) |
| Leverage | Total debt over total asset | | | (Zaid et al. 2020) |
| Growth | Market-to-book equity ratio | | | (Zaid et al. 2020) |

## EMPIRICAL MODELS

There are two empirical models in this study. The first model is specifically used to test hypotheses 1. Meanwhile, model 2 tests hypotheses 3a and 3b.

Model 1:

$$CSP_{it} = \beta_0 + \beta_1 FOWN_{it} + \beta_2 GOWN_{it} + \beta_3 CG_{it} + \beta_4 FAGE_{it} + \beta_5 FSIZE_{it} + \beta_6 LEV_{it} + \beta_7 GROWTH_{it} + \varepsilon_{it}$$

Model 2:

$$CSP_{it} = \beta_0 + \beta_1 FOWN_{it} + \beta_2 GOWN_{it} + \beta_3 CG_{it} + \beta_4 FOWN * CG_{it} + \beta_5 GOWN * CG_{it} + \beta_6 FAGE_{it} + \beta_7 FSIZE_{it} + \beta_8 LEV_{it} + \beta_9 GROWTH_{it} + \varepsilon_{it}$$

Where,

*i* : firm
*t* : year
$\beta_0$ : Intercept
CSP : Corporate sustainability performance
FOWN : Family Ownership
GOWN : Government Ownership
CG : Corporate Governance
FOWN*CG : Interaction term between family ownership and corporate governance
GOWN*CG : Interaction term between government ownership and corporate governance
FAGE : Firm Age
FSIZE : Firm size
LEV : Leverage

GROWTH : Firm growth

### DATA ANALYSIS, REGRESSION ASSUMPTIONS AND MODEL SPECIFICATION

This study employed STATA software to examine the influence of corporate governance on corporate sustainability performance. This study tested for normality, multicollinearity, heteroscedasticity and serial correlation. The Hausman test recommends the fixed effect (FE) since the model provides consistent estimates over the random effect (model 1- the overall statistics $chi^2$=42.61 is statistically significant (prob>$chi^2$=0.000); Model 2 – the overall statistics $chi^2$=30.80 is statistically significant (prob >$chi^2$=0.0035).

Examining collinearity issues among the data sets in the model involved implementing the Pearson correlation test and the VIF test. These tests served the dual purpose of assessing the direction and strength of the relationship among corporate sustainability performance, ownership structures, corporate governance and other control variables. Table 2 displays the Pearson correlation matrix alongside the VIF test statistic. According to the table, none of the correlation coefficients exceeded the 0.80 cut-off, indicating the absence of a significant multicollinearity concern. Additionally, the VIF values, with a mean of 1.221 and all below 10, suggested that multicollinearity was not a prominent issue in elucidating the results (Gujarati 2003).

TABLE 2. Pairwise Correlations and VIF table

| Variables | VIF | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|---|
| (1) CSP | | 1.000 | | | | | | | |
| (2) FOWN | 1.19 | -0.112 | 1.000 | | | | | | |
| (3) GOWN | 1.47 | 0.354 | -0.365 | 1.000 | | | | | |
| (4) CG | 1.09 | 0.205 | -0.058 | 0.188 | 1.000 | | | | |
| (5) FSIZE | 1.53 | 0.553 | -0.106 | 0.451 | 0.221 | 1.000 | | | |
| (6) FAGE | 1.04 | 0.054 | -0.088 | 0.035 | -0.075 | 0.119 | 1.000 | | |
| (7) LEV | 1.19 | 0.302 | -0.106 | 0.133 | 0.172 | 0.369 | -0.015 | 1.000 | |
| (8) GROWTH | 1.04 | -0.010 | 0.086 | -0.052 | 0.043 | -0.185 | -0.105 | -0.114 | 1.000 |

## RESULTS

### DESCRIPTIVE STATISTICS FOR ALL VARIABLES

Table 3 provides descriptive statistics for all variables. The Corporate Sustainability Performance (CSP) encompassed economic, environmental and social dimensions, contributing to a composite index with a maximum score of 13. Overall, CSP averaged 5.921, which is equal to 45.5% and thus was considered acceptable, indicating an early stage of sustainability compared to other countries.

TABLE. 3 Descriptive Statistics results for all variables

| Dimension | Mean | S.D | Min | Max |
|---|---|---|---|---|
| Panel A: Dependent variable | | | | |
| Corporate sustainability performance | 5.921 | 2.545 | 1.000 | 12.000 |
| Corporate Sustainability Performance Index (%) | .455 | .196 | 0.770 | 0.923 |
| Panel B: Independent variables | | | | |
| Family | 29.511 | 19.934 | 0.000 | 85.690 |
| Government | 6.098 | 16.102 | 0.000 | 83.400 |
| Panel C: Moderating variable | | | | |
| Corporate governance mechanism | 7.911 | 2.274 | 3.000 | 12.000 |
| Corporate governance mechanism index | .609 | .175 | .231 | .923 |
| Panel D: Control variables | | | | |
| Firm Size | 13.402 | 1.553 | 10.273 | 19.141 |
| Firm Age | 32.009 | 15.620 | 5.000 | 76.000 |
| Leverage | .206 | .170 | 0.000 | .676 |
| Growth | .007 | .097 | -2.156 | .857 |

Table 3 also details ownership structures, encompassing family and government ownership. Family ownership averaged 29.51%, slightly surpassing previous studies (Hashim et al. 2021). Government ownership averaged 6.10%, marginally lower than Fauzi and Musallam (2015). Corporate governance, a moderating variable, scored 60.9%, with a mean index value of 8. Panel D displays the descriptive analysis of control variables. The average firm size (log) was 13.402, with a minimum value of 10.273 and a maximum value of 19.141. The average firm age (log) was 32.009, ranging from 5 to 76 years. Regarding leverage, the mean value was 0.206, while the minimum value was 0 to 0.676. Growth showed a mean value of 0.007 with a minimum value of -2.156 and a maximum value of 0.857.

## REGRESSION RESULTS

### FAMILY OWNERSHIP AND CORPORATE SUSTAINABILITY PERFORMANCE

Hypothesis 1 proposed a positive relationship between family ownership and CSP. Table 4 presents the regression results between family ownership and corporate sustainability performance. The coefficient value for FOWN was -0.242 ($t=-2.197$, $p<0.05$). The findings failed to indicate that the involvement of family members in the management and shareholding encourages monitoring and control of the firm's activities, which results in lower firm performance. These findings contradict those of Musallam et al. (2019). Mussalam et al. (2019) indicated that family ownership significantly and positively impacts corporate performance. The findings imply that this type of ownership significantly impacts firm performance. The positive relationship is also linked to the company's wealth, which is a strong motivator for family members involved in management to enhance firm performance. This finding reflects that they stand to benefit directly from such improvements.

Nevertheless, this study supported previous findings that family members on the board are adversely linked to corporate performance (Aksoy et al. 2020; Amos 2021; Boshnak 2021). Significant family interference would focus on the family's interests rather than the best outcome for the firm. Aksoy et al. (2020) asserted that the firm owners under study were motivated to meet their interests and less compliant with social and environmental responsibility standards. They were not afraid of their position due to family business inheritance, which can be one reason for not pursuing the non-profit agenda. In family-controlled firms, families can place a family member on the management board, influencing decision-making processes for their benefit, which is the entrenchment effect. As the controlling shareholder, families gain control over companies and can misuse the control for their benefit. Therefore, Hypothesis 1, which proposed a positive impact of FOWN on CSP, was rejected.

### GOVERNMENT OWNERSHIP AND CORPORATE SUSTAINABILITY PERFORMANCE

Hypothesis 2 proposed a positive relationship between government ownership and CSP. Table 4 displays the regression results illustrating the relationship between government ownership and corporate sustainability performance. The coefficient value for GOWN was 0.390 ($t= 2.442$, $p<0.05$). Higher government ownership increases the likelihood of achieving higher environmental and social performance, explaining the positive relationship. It signals their commitment to social and environmental requirements that could secure their existence and survival. This finding implies that the government has a robust monitoring role for the firm, which diminishes conflict of interest. Al-Janadi (2021) supported the findings and found a positive relationship between government ownership and performance in the Middle East.

Furthermore, this positive association indicates that firms use their power to control company management to secure good performance. Al Amosh and Khatib (2021) also concluded that state ownership pushes companies towards sustainability. Therefore, Hypothesis 2, which proposed a positive impact of government ownership on CSP, was supported.

### THE MODERATING ROLE OF CORPORATE GOVERNANCE

Table 4 displays the results on the role of corporate governance in the relationship between family and government ownership on corporate sustainability performance. Model 1 showed a direct relationship between FOWN and CSP, and the interaction of CG and FOWN showed a positive and significant relationship with a coefficient value of 0.323 ($t= 1.909$, $p<0.10$). It suggests that with effective CG, family involvement in the management of firms becomes effective, which improves sustainable performance. Effective corporate governance is essential in balancing the interests of family owners, other stakeholders and the broader sustainability objectives. Implementing corporate governance mechanisms is pivotal in mitigating potential conflicts of interest among family members who concurrently own and manage the business. This function is vital for upholding principles of transparency, equity and accountability in the decision-making processes associated with sustainability performance. Hence, Hypothesis 3a was supported. In Model 2, the findings demonstrated that the interaction between CG and GOWN revealed an insignificant relationship, with a coefficient value of -0.309 ($t= -1.327$, $p>0.05$). These results suggest that the CG mechanism has not effectively exerted GOWN firms to meet CSP goals. Thus, Hypothesis 3b was rejected.

TABLE. 4 Regression results

| | Model 1 | Model 2 |
|---|---|---|
| | CSP | CSP |
| Intercept | 0.408*** | 0.412*** |
| | (5.413) | (6.031) |
| FOWN | -0.242** | |
| | (-2.197) | |
| CG*FOWN | 0.323* | |
| | (1.909) | |
| GOWN | | 0.390** |
| | | (2.442) |
| CG*GOWN | | -0.309 |
| | | (-1.327) |
| CG | 0.017 | 0.112*** |
| | (0.240) | (3.047) |
| FSIZE | 0.069*** | 0.062*** |
| | (16.598) | (14.003) |
| FAGE | 0.008 | 0.011 |
| | (0.744) | (1.045) |
| LEV | 0.014*** | 0.014*** |
| | (3.292) | (3.577) |
| GROWTH | 0.560*** | 0.555*** |
| | (3.742) | (3.720) |
| R2 | 0.3715 | 0.3820 |
| Adj.R2 | 0.3554 | 0.3662 |
| n | 762 | 762 |
| F-stat | 31.239 | 29.926 |
| Prob>F | 0.0000 | 0.0000 |

*, ** and *** represent significance at p<0.10, <0.05 and <0.01, respectively. The t-statistics are reported in parentheses

CSP= Corporate Sustainability Performance comprises three dimensions, economic, environmental and social; CG= Corporate Governance comprises a board director(BOD), risk management committee(RMC), audit committee characteristics(AC), and Sustainability Committee(SC), FOWN=Family ownership represented by total shares owned by family, CG*FOWN= The interaction term comprising family ownership multiplied by CG; GOWN=Government ownership represented by total shares owned by the government, CG*GOWN= The interaction term comprising government ownership multiplied by CG; FAGE=Firm Age is years since firm's incorporation, LEV= Debt ratio is calculated as total debts divided by total assets, FSIZE= Firm size is measured by natural logarithm of total assets, GROWTH=Growth is market value divided by Total Asset minus total liabilities.

## ADDITIONAL ANALYSIS

### RELATIONSHIPS BETWEEN OWNERSHIP STRUCTURES AND INDIVIDUAL DIMENSIONS OF CSP

Additional analyses were performed to understand how FOWN and GOWN affect CSP in its three dimensions: economic, environmental and social. Table 5 shows that FOWN positively and significantly influenced the economic dimension with a coefficient of 0.153 (t= 2.274, p<0.05). This result revealed that companies prioritise profit generation over non-financial performance considerations. However, FOWN seemed insignificantly associated with social and environmental dimensions. This finding reflects that firms often disregard social sustainability (Disli, Yilma & Mohamed 2022) and reinforces the perspective that social sustainability tends to receive insufficient attention among the three identified dimensions.

Table 5 also displays that GOWN positively and significantly influenced CSP in the environmental and social dimensions. Firms characterised by a greater degree of government ownership are inclined to perform in the environmental and social aspects. This practice indicates their commitment to meeting social and environmental standards, seeking endorsement for their continued existence and viability (Habtoor et al. 2019). In line with the agency theory, the GOWN tends to engage and pursue social performance rather than financial performance (Sahasranamam et al. 2019). The implication of this finding suggests that government companies have a better understanding of their public responsibility and accountability and the need for social actions (Kumar et al. 2022). It also confirmed the government's role in promoting community development (Al Amosh & Khatib 2021) rather than focusing solely on profit; thus, it aims at different strategic objectives and is more oriented towards better public services (Laporšek et al. 2020).

TABLE 5. Regression results of ownership structures on economic, environmental and social dimensions

| | Model (1) | Model (2) | Model (3) |
|---|---|---|---|
| | ECO | ENV | SOC |
| Intercept | 0.067 | 0.618*** | 0.221*** |
| | (0.418) | (5.579) | (2.728) |
| FOWN | 0.153** | -0.002 | -0.052 |
| | (2.274) | (-0.041) | (-1.362) |
| GOWN | 0.082 | 0.360*** | 0.075* |
| | (0.953) | (4.824) | (1.747) |
| FSIZE | 0.057*** | 0.076*** | 0.055*** |
| | (5.671) | (10.136) | (11.051) |
| FAGE | -0.012 | 0.012 | 0.009 |
| | (-0.508) | (0.704) | (0.748) |
| LEVERAGE | 0.076*** | 0.008 | 0.001 |
| | (8.908) | (1.393) | (0.240) |
| GROWTH | 0.605* | 0.741*** | 0.443*** |
| | (1.790) | (2.681) | (2.941) |
| R2 | 0.2563 | 0.3301 | 0.2486 |
| Adj.R2 | 0.2383 | 0.3138 | 0.2304 |
| n | 762 | 762 | 762 |
| F-stat | 16.060 | 28.783 | 18.354 |
| Prob>F | 0.0000 | 0.0000 | 0.0000 |

*, ** and *** represent significance at p<0.10, <0.05 and <0.01, respectively. The t-statistics are reported in parentheses

THE MODERATING IMPACT OF CG ON CSP DIMENSIONS

Additional analyses were carried out to investigate the impact of corporate governance on the relationship between family ownership and government ownership on three dimensions of CSP. Table 6 shows the interaction of CG and FOWN that positively and significantly influenced the relationship between FOWN and social dimensions with the coefficient value of 0.663 (t= 3.755, p<0.01). In contrast, CG and GOWN positively and significantly influenced the environmental dimensions at the coefficient value of 0.556 (t= 1.663, p<0.10). These results imply that the family and government-owned firms may direct their business directions towards non-financial dimensions with an effective CG. They also show that effective corporate governance creates a framework that encourages responsible and sustainable business practices. By aligning the interests of various stakeholders and integrating non-financial considerations into decision-making processes, firms can contribute to social and environmental goals while ensuring long-term success.

TABLE 6. The moderating role of corporate governance

| | Model (1) | Model (2) | Model (3) | Model (4) | Model (5) | Model (6) |
|---|---|---|---|---|---|---|
| | ECO | ECO | ENV | ENV | SOC | SOC |
| Intercept | 0.170 | 0.057 | 0.836*** | 0.721*** | 0.133 | 0.275*** |
| | (1.014) | (0.357) | (6.731) | (6.438) | (1.532) | (3.242) |
| CG | 0.154 | 0.109 | 0.178 | 0.182*** | -0.150** | 0.058 |
| | (1.271) | (1.522) | (1.556) | (3.114) | (-2.167) | (1.404) |
| CG*FOWN | -0.089 | | 0.042 | | 0.663*** | |
| | (-0.275) | | (0.143) | | (3.755) | |
| CG*GOWN | | 0.383 | | 0.556* | | -0.342 |
| | | (0.920) | | (1.663) | | (-1.541) |
| FSIZE | 0.058*** | 0.058*** | 0.087*** | 0.074*** | 0.057*** | 0.054*** |
| | (6.314) | (5.705) | (12.564) | (9.980) | (12.321) | (10.779) |
| FAGE | -0.010 | -0.021 | 0.012 | 0.018 | 0.010 | 0.014 |
| | (-0.448) | (-0.919) | (0.643) | (1.054) | (0.847) | (1.244) |
| LEVERAGE | 0.074*** | 0.073*** | 0.003 | 0.006 | 0.002 | 0.002 |
| | (8.770) | (8.547) | (0.584) | (1.101) | (0.352) | (0.256) |
| GROWTH | 0.585* | 0.626* | 0.757*** | 0.696*** | 0.388*** | 0.410*** |
| | (1.717) | (1.777) | (2.892) | (2.591) | (2.594) | (2.848) |
| R2 | 0.2589 | 0.2545 | 0.3180 | 0.3390 | 0.2594 | 0.2493 |
| Adj.R2 | 0.2399 | 0.2354 | 0.3005 | 0.3220 | 0.2405 | 0.2301 |
| n | 762 | 762 | 762 | 762 | 762 | 762 |
| F-stat | 15.654 | 15.563 | 27.562 | 30.936 | 21.199 | 18.662 |
| Prob>F | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

**, ** and *** represent significance at p<0.10, <0.05 and <0.01, respectively. The t-statistics are reported in parentheses*

## CONCLUSION

Ownership structures significantly impact sustainability owing to their influence on the company's strategic decision-making and control over the business. It can solve an agency conflict by becoming more conscious of its full potential and acting in the shareholder's interest (Bose & Mahajan 2018). In most emerging markets, ownership structure remains a concern, as the business market is dominated by family and government ownership (Jalila & Devi 2012). Although ownership structures offer a good explanation of corporate sustainability performance, the role of ownership structures displayed mixed results, opening up room for further discussion.

This research has investigated how ownership structures, specifically family and government ownership, influence sustainability performance within the Malaysian setting. Results revealed that FOWN negatively affects sustainability performance, further suggesting that family members' involvement and control in management and shareholding diminish a conducive environment for sustainable business practices. These results also corroborate the findings of earlier studies where a positive relationship was found between government ownership and CSP, albeit with a slightly lower coefficient value. This finding highlights the government's role in promoting social and environmental standards, reflecting a commitment to sustainability that transcends mere financial performance. The government's monitoring function and its influence on firm practices underscore the significant impact of GOWN on enhancing CSP.

Additionally, this study aimed to explore the potential of CG to strengthen the relationship between OS and CSP besides seeking to understand its impact on promoting sustainable business practices by emphasising CG's role in overseeing management effectiveness and mitigating agency conflicts. This study extends the existing literature on corporate governance mechanisms by considering risk management, audit committees and sustainability committees, which have rarely been collectively examined in past studies. However, this study presents a nuanced view of the moderating role of CG. While CG positively influences the relationship between FOWN and CSP, which indicates that effective governance mechanisms can amplify the sustainability efforts of family-owned firms, it does not significantly moderate the relationship between government ownership and CSP. This evidence suggests that the CG mechanism has not effectively exerted GOWN firms to meet CSP goals.

This study underscores the importance of considering ownership structures in crafting and implementing organisational sustainability strategies. Demonstrating family and government ownership's negative and positive influence on CSP encourages policymakers and corporate leaders to foster ownership conditions conducive to sustainability. The distinct impact of CG on family-owned firms suggests that targeted governance reforms could further embed sustainability into corporate practices, particularly in contexts similar to Malaysia. The nature of this study has some limitations, emphasising the need for additional research. Three years of study may be insufficient to explain such phenomena. Additional research over an extended period would be required to confirm the findings. Second, future studies may extend the current study to other institutional settings, countries or contexts. Third, additional research can examine the degree to which ownership is concentrated in a few large shareholders or widely dispersed among many small shareholders. Finally, future research may examine the relationship between CSR performance and other governance factors.

## ACKNOWLEDGEMENT

The authors thank the Universiti Kebangsaan Malaysia and the Ministry of Higher Education of Malaysia for the financial assistance awarded under the Research University Grant code GUP) 2021-001.

## REFERENCES

A.A. Zaid, M., Wang, M., Adib, M., Sahyouni, A. & T.F. Abuhijleh, S. 2020. Boardroom nationality and gender diversity: Implications for corporate sustainability performance. *Journal of Cleaner Production* 251.

Aksoy, M., Yilmaz, M.K., Tatoglu, E. & Basar, M. 2020. Antecedents of corporate sustainability performance in Turkey: The effects of ownership structure and board attributes on non-financial companies. *Journal of Cleaner Production* 276.

Al-Janadi, Y. 2021. Ownership structure and firm performance in the Middle East: A meta-analysis. *Journal of Risk and Financial Management* 14(12): 1-23.

Al-Shaer, H. & Hussainey, K. 2022. Sustainability reporting beyond the business case and its impact on sustainability performance: UK evidence. *Journal of Environmental Management* 311.

Al Amosh, H. & Khatib, S.F.A. 2021. Ownership structure and environmental, social and governance performance disclosure: The moderating role of the board independence. *Journal of Business and Socio-economic Development* 2(1): 49-66.

Al Farooque, O., Buachoom, W. & Sun, L. 2020. Board, audit committee, ownership and financial performance – emerging trends from Thailand. *Pacific Accounting Review* 32(1): 54–81.

Ali, A. & Jadoon, I.A. 2022. The value relevance of corporate sustainability performance (CSP). *Sustainability*

*(Switzerland)* 14(15).
Alkaraan, F., Albitar, K., Hussainey, K. & Venkatesh, V. 2022. Corporate transformation toward Industry 4.0 and financial performance: The influence of environmental, social, and governance (ESG). *Technological Forecasting and Social Change* 175.
Amidjaya, P.G. & Widagdo, A.K. 2019. Sustainability reporting in Indonesian listed banks: Do corporate governance, ownership structure and digital banking matter? *Journal of Applied Accounting Research* 21(2): 231–247.
Amosh, H. Al. 2021. Ownership structure and environmental, social and governance performance disclosure: the moderating role of the board independence. *Journal of Business and Socio-economic Development* 2(1).
Amran, N.A. & Che Ahmad, A. 2014. Effects of Ownership Structure on Malaysian companies performance. *Asian Journal of Accounting and Governance* 4(1): 51–60.
Argento, D., Grossi, G., Persson, K. & Vingren, T. 2019. Sustainability disclosures of hybrid organizations: Swedish state-owned enterprises. *Meditari Accountancy Research* 27(4): 505–533.
Artiach, T., Lee, D., Nelson, D. & Walker, J. 2010. The determinants of corporate sustainability performance. *Accounting and Finance* 50(1): 31–51.
Bapuji, H., de Bakker, F.G.A., Brown, J.A., Higgins, C., Rehbein, K. & Spicer, A. 2020. Business and Society research in times of the corona crisis. *Business and Society* 59(6): 1067–1078.
Barroso-Castro, C., Pérez-Calero, L., Vecino-Gravel, J.D. & Villegas-Periñán, M. del M. 2020. The challenge of board composition: Effects of board resource variety and faultlines on the degree of a firm's international activity. *Long Range Planning* 55(2).
Bhatt, P.R. 2016. Performance of government linked companies and private owned companies in Malaysia. *International Journal of Law and Management* 58(2): 150–161.
Bose, M. & Mahajan, R. 2018. *Business Sustainability: Exploring the Meaning and Significance Business Sustainability: Exploring the Meaning and Significance-Declines-in-Global-Poverty-But-Major-Challenges-Remain*.
Boshnak, H.A. 2021. Determinants of corporate social and environmental voluntary disclosure in Saudi listed firms. *Journal of Financial Reporting and Accounting* 20(3/4): 667-692.
Bursa Malaysia. 2015. Reporting Guide. *Sustainability Reporting Guide*: 1–76.
Cabral, C. & Sasidharan, A. 2021. Do regulatory mechanisms affect corporate social performance? Evidence from emerging economies. *Journal of Cleaner Production* 326.
Cancela, B.L., Neves, M.E.D., Rodrigues, L.L. & Gomes Dias, A.C. 2020. The influence of corporate governance on corporate sustainability: new evidence using panel data in the Iberian macroeconomic environment. *International Journal of Accounting and Information Management* 28(4): 785–806.
Colakoglu, N., Eryilmaz, M. & Martínez-Ferrero, J. 2021. Is board diversity an antecedent of corporate social responsibility performance in firms? A research on the 500 biggest Turkish companies. *Social Responsibility Journal* 17(2): 243–262.
Cooke, T.E. 1989. Disclosure in the corporate annual reports of swedish companies. *Accounting and Business Research* 19(74): 113–124.
Daniele, M., Pelucco, V. & Quarato, F. 2022. Family ownership during the Covid-19 pandemic. *Journal of Banking & Finance* 135.
Disli, M., Yilmaz, M.K. & Mohamed, F.F.M. 2022. Board characteristics and sustainability performance: empirical evidence from emerging markets. *Sustainability Accounting, Management and Policy Journal* 13(4): 929-952.
Dong, W., Dong, X. & Lv, X. 2022. How does ownership structure affect corporate environmental responsibility? Evidence from the manufacturing sector in China. *Energy Economics* 112.
Faccio, M. & Lang, L.H.P. 2002. The ultimate ownership of western European corporations. *Corporate Governance and Corporate Finance: A European Perspective* 65: 163–190.
Fauzi, H. & Musallam, S.R.M. 2015. Corporate ownership and company performance: A study of Malaysian listed companies. *Social Responsibility Journal* 11(3): 439–448.
Gujarati, D.N. 2003. *Basic Econometrics*. Fourth. New York: McGraw-Hill Higher Education.
Habtoor, O.S., Hassan, W.K. & Aljaaidi, K.S. 2019. The impact of corporate ownership structure on corporate risk disclosure: Evidence from the Kingdom of Saudi Arabia. *Business and Economic Horizons* 2.
Haider, Z.A., Liu, M., Wang, Y. & Zhang, Y. 2018. Government ownership, financial constraint, corruption, and corporate performance: International evidence. *Journal of International Financial Markets, Institutions and Money* 53: 76–93.
Hashim, F., Zaini, E. & Poney, W.B. 2021. The role of family ownership in the relationship between board characteristics and corporate social environmental reporting: Evidence from Malaysia. *Asian Journal of Accounting and Governance* 16: 37–51.
Ismail, S.M.B., Md. Aris, N.B., Mohamed, A.S., Yusof, S.M. & Bt. Zaidi, N.S. 2020. Ownership structure and firms' performance: Evidence from finance sector in Malaysia. *International Journal of Academic Research*

*in Business and Social Sciences* 10(7): 319–329.
Issa, A. & Zaid, M.A.A. 2021. Boardroom gender diversity and corporate environmental performance: a multi-theoretical perspective in the MENA region. *International Journal of Accounting and Information Management* 29(4): 603–630.
Iwasaki, I., Ma, X. & Mizobata, S. 2022. Ownership structure and firm performance in emerging markets: A comparative meta-analysis of East European EU member states, Russia and China. *Economic Systems* 46(2).
Jadoon, I.A., Ali, A., Ayub, U., Tahir, M. & Mumtaz, R. 2021. The impact of sustainability reporting quality on the value relevance of corporate sustainability performance. *Sustainable Development* 29(1): 155–175.
Jalila, S. & Devi, J. 2012. Ownership structure effect on the extent of segment disclosure: Evidence from Malaysia. *Procedia Economics and Finance* 2: 247–256.
Jamil, A., Mohd Ghazali, N.A. & Puat Nelson, S. 2020. The influence of corporate governance structure on sustainability reporting in Malaysia. *Social Responsibility Journal* 17(8): 1251-1278.
Javeed, S.A., Latief, R., Jiang, T., San Ong, T. & Tang, Y. 2021. How environmental regulations and corporate social responsibility affect the firm innovation with the moderating role of Chief executive officer (CEO) power and ownership concentration? *Journal of Cleaner Production* 308.
Jia, J. & Bradbury, M.E. 2020. Risk management committees and firm performance. *Australian Journal of Management* 46(3): 369–388.
Kamaludin, K., Ibrahim, I. & Sundarasen, S. 2020. Moderating effects of family business on audit committee diligence and firm performance: A middle eastern perspective. *International Journal of Economics and Management* 14(2): 173–188.
Kamarudin, K.A. 2021. Product market competition, board gender diversity and corporate sustainability performance: International evidence. *Journal of Financial Reporting and Accounting* 20(2): 233-260.
Katmon, N., Mohamad, Z.Z., Norwani, N.M. & Farooque, O. Al. 2019. Comprehensive board diversity and quality of corporate social responsibility disclosure: Evidence from an emerging market. *Journal of Business Ethics* 157(2): 447–481.
Koji, K., Adhikary, B.K. & Tram, L. 2020. Corporate governance and firm performance: A comparative analysis between listed family and non-family firms in Japan. *Journal of Risk and Financial Management* 13(9): 1-20.
Kouaib, A., Mhiri, S. & Jarboui, A. 2020. Board of directors' effectiveness and sustainable performance: The triple bottom line. *Journal of High Technology Management Research* 31(2).
Kumala, R. & Siregar, S.V. 2021. Corporate social responsibility, family ownership and earnings management: the case of Indonesia. *Social Responsibility Journal* 17(1): 69–86.
Kumar, K., Kumari, R., Nandy, M., Sarim, M. & Kumar, R. 2022. Do ownership structures and governance attributes matter for corporate sustainability reporting? An examination in the Indian context. *Management of Environmental Quality: An International Journal* 35(5): 1077-1096.
Laporšek, S., Dolenc, P., Grum, A. & Stubelj, I. 2020. Ownership structure and firm performance–The case of Slovenia. *Economic Research-Ekonomska Istrazivanja* 34(1): 2975-2996.
Liu, K. 2018. Government ownership in listed firms around the world. *Studies in Business and Economics* 13(2): 131–146.
Liu, T., Zhang, Y. & Liang, D. 2019. Can ownership structure improve environmental performance in Chinese manufacturing firms? The moderating effect of financial performance. *Journal of Cleaner Production* 225: 58–71.
Mai, W. & Hamid, N.I.N.B.A. 2021. The moderating effect of family business ownership on the relationship between short-selling mechanism and firm value for listed companies in China. *Journal of Risk and Financial Management* 14(6): 1-20.
Mal, H., Varma, M. & Vishvakarma, N.K. 2022. An empirical study to prioritize the determinants of corporate sustainability performance using analytic hierarchy process. *Measuring Business Excellence* 27(6).
Malik, M.F., Zaman, M. & Buckby, S. 2020. Enterprise risk management and firm performance: Role of the risk committee. *Journal of Contemporary Accounting and Economics* 16(1).
Mohammed, N.F., Ahmed, K. & Ji, X.D. 2017. Accounting conservatism, corporate governance and political connections. *Asian Review of Accounting* 25(2): 288–318.
Mohd Ghazali, N.A. 2020. Governance and ownership in Malaysia: Their impacts on corporate performance. *Asian Journal of Accounting Research* 5(2): 285–298.
Mosbah, A., Serief, S.R. & Wahab, K.A. 2017. Performance of family business in Malaysia. *International Journal of Social Sciences Perspectives* 1(1): 20–26.
Muntahanah, S., Kusuma, H., Agus Harjito, D. & Arifin, Z. 2021. The effect of family ownership and corporate governance on firm performance: A case study in Indonesia. *Journal of Asian Finance* 8(5): 697–0706.
Musallam, S.R.M., Fauzi, H. & Nagu, N. 2019. Family, institutional investors ownerships and corporate performance: the case of Indonesia. *Social Responsibility Journal* 15(1): 1–10.
Nikolaou, I.E., Tsalis, T.A. & Evangelinos, K.I. 2019. A framework to measure corporate sustainability

performance: A strong sustainability-based view of firm. *Sustainable Production and Consumption* 18: 1–18.
Nugroho, H. 2019. The impact of government support Asian development bank institute. *ADBI Working Paper Series* (983).
OECD. 2017. OECD Survey of Corporate Governance Frameworks in Asia
Panicker, V.S. 2017. Ownership and corporate social responsibility in Indian firms. *Social Responsibility Journal* 13(4): 714–727.
Pareek, R. & Sahu, T.N. 2022. How far the ownership structure is relevant for CSR performance? An empirical investigation. *Corporate Governance (Bingley)* 22(1): 128–147.
Radu, C., Smaili, N. & Constantinescu, A. 2022. The impact of the board of directors on corporate social performance: A multivariate approach. *Journal of Applied Accounting Research* 23(5).
Sahasranamam, S., Ayra, B. & Sud, M. 2019. Ownership structure and corporate social responsibility in India: empirical investigation of an emerging market. *Review of International Business and Strategy* 31(4): 540–555.
Saidat, Z., Alrababa'a, A.R. & Seaman, C. 2022. Family-owned banks in Jordan: do they perform better? *Journal of Family Business Management* 12(4).
Searcy, C. 2016. Corporate sustainability performance measurement systems: A review and research agenda. *Journal of Business Ethics* 107(3): 239–253.
Securities Commission Malaysia. 2021a. Malaysian Code on Corporate Governance. Kuala Lumpur.
Securities Commission Malaysia. 2021b. Malaysian Code on Corporate Governance. Kuala Lumpur.
Ting, I.W.K. & Lean, H.H. 2015. Does government ownership matter? Comparative study between GLCS and NGLCS in Malaysia. *Singapore Economic Review* 60(2): 1–22.
Wang, K.T. & Shailer, G. 2017. Family ownership and financial performance relations in emerging markets. *International Review of Economics and Finance* 51: 82–98.
Yakob, N.A. & Hasan, N.A. 2021. Exploring the interaction effects of board meetings on information disclosure and financial performance in public listed companies. *Economies* 9(4): 1-11.

Normarliana Laili*
Faculty of Economics and Management
Universiti Kebangsaan Malaysia
43600 UKM Bangi Selangor, MALAYSIA.

Faculty of Administrative Science and Policy Studies
Universiti Teknologi MARA
70300 Seremban, MALAYSIA.
E-mail: p105952@siswa.ukm.edu.my/normarliana@uitm.edu.my

Mohamat Sabri Hassan
Faculty of Economics and Management
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA.
E-mail: msabri@ukm.edu.my

Romlah Jaffar
Faculty of Economics and Management
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA.
E-mail: romlah@ukm.edu.my

Shuhaimi Jaafar
Faculty of Economics and Management
Universiti Kebangsaan Malaysia
43600 UKM Bangi Selangor, MALAYSIA.

Faculty of Management and Muamalah
Universiti Islam Selangor
41300 Bangi, Kajang, Selangor MALAYSIA.
E-mail: shuhaimi@kuis.edu.my

Ahmad Monir Abdullah
Faculty of Economics and Management
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor, MALAYSIA.
E-mail: ahmadmonirabdullah@ukm.edu.my

*Corresponding author