

Corporate Governance Towards Sustainability Performance Quality: A Case of Listed Firms in Malaysia

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ABSTRACT

Sustainable development according to the United Nations, listed firms globally now routinely provide sustainability data. However, there is not enough information on Sustainability Performance Quality (SPQ) in the majority of emerging economies, including Malaysia. The quality of sustainability performance is very important and considered by this study as it is key to investment or business decisions and relevant in the context of the study in terms of achieving sustainable development. This study looks at how the SPQ of the top 100 Malaysian-listed businesses is affected by factors connected with corporate governance (e.g., board meetings, board size, and board ethnic diversity). The Top 100 firms were considered as a result of their public visibility and impact on society. Utilizing 500 firm-year data, a longitudinal sample of 500 nonfinancial firms on the Bursa Malaysia for 2015-2019 is employed in this study. The findings from the analysis using the Fixed Effect estimation technique in panel regression demonstrated that ethnic diversity and board size have positive impacts on the SPQ of the chosen enterprises at 1% and 5% significant levels. However, board meetings have a significant but negative influence at a 5% level of significance. The descriptive study found that the average SPQ is 26%, which has to be improved despite the significant relationship pointing to a development in the calibre of sustainability disclosures. Bursa Malaysia's necessary regulatory improvements and an effective board might result in this outcome. In addition, the study poses to develop a policy for the firms, stakeholders, government, and regulators to rise the disclosure standard of corporate sustainability. Also, gaps are filled in the study by providing empirical evidence and new insights on the significance of board meetings, board ethnic diversity, and board size in Malaysian firms' sustainability disclosure – with the least attention to empirical research. Conclusively, if sustainable development must be achieved, sustainability practices become relevant as suggested by the United Nations and the Global Reporting Initiative.

Keywords: Corporate Governance, Sustainability Performance Quality, Sustainable Development, Listed Firms, Malaysia.

INTRODUCTION

Despite being in its infancy in comparison with developed nations such as Australia, the UK, and the USA, sustainability disclosure is becoming more widespread in Malaysia (Abd Mutalib et al., 2014; Abdulkareem et al., 2021; Elaigwu et al., 2022; Hasan et al., 2023). A variety of issues related to sustainability affecting the people, society, and environment are connected to Malaysia's advancement in

sustainability practices (Al-Tae & Flayyih, 2023; Zahid et al., 2020). This is because industrialization and globalization have had severe consequences on Malaysia's economy, the environment, and society and developing countries as well (Abass et al., 2022; Al-Khoury et al., 2022; Abd Mutalib et al., 2014; Zainal, 2017; Zurairi, 2018). Firm activities have produced several risks to the environment and human life

through different sorts of catastrophes (Akbas, 2016; Al-Dhamari et al., 2022; Alzabari et al., 2019). These disasters are brought on by industrialisation and globalization, which have been shown to stifle long-term growth (Hussein, 2021). According to the Ministry of Environment, the Malaysian government is concerned about both the long and short-term impacts of climate change (Al-Taie et al., 2017; Talab & Flayyih, 2023). According to the research, catastrophe is imminent as Malaysians experience extreme heat and flooding as a result of rising sea levels. Carbon emissions have greatly grown as a result, which is concerning to Malaysians (Hussein, 2022; Abdullah & Ku Ismail, 2017; Al-Shammari et al., 2017; Flayyih, 2016). More evidence of the detrimental impact of corporate performance on its environment and its people is provided by the instance of air and water pollution, which is also discussed (Abdullah & Ku Ismail, 2017; Aziz & Bidin, 2017; Flayyih, 2016; Nikkeh et al., 2022a). In Pasir Gudang, a tyre recycling firm polluted the water, leading to serious health risks and economic harm (Al-Tae & Flayyih, 2023; Al-Taie et al., 2017; Alyaseri et al., 2023; Flayyih, 2015; Mhaibes & Mahmood, 2020). This is an instance of pollution. According to Zurairi (2018), 20 years ago, catastrophes associated with sustainability concerns cost the Malaysian government over RM8 billion, which resulted in a 13% decline in GDP. Because of this, the Malaysian government is making every effort to lessen its carbon footprint, including using renewable energy, updating the Note 9 practice of sustainability of Bursa Malaysia and the Malaysian sustainable report guide (MSRG), 2018 as well as starting new ideas (Alwan et al., 2023; Alyaseri et al., 2023; Salman et al., 2023; Khoo, 2019; Sadou et al., 2017). In the meanwhile, because implementing such rules is a challenge that requires more work, the numerous regulatory measures and regulations intended to mitigate the adverse effects of firms' operations were ineffective. Reducing these sustainability-related hazards calls for more credible sustainability performance and disclosure quality as against mere disclosures that do not put into cognizance the reliability of the sustainability performance and the information disclosed (Moses et al., 2020). To elevate the quality and reliability of sustainability performance, Zahid et al. (2016) reported that compliance with the MSRG in particular warrants more regulatory attention. As a result, businesses try to legitimize themselves by using sustainable practices (Manning et al., 2019). Because of this, companies that just engage in sustainability activities should not be regarded as trustworthy as those that demonstrate sustainable performance while the quality of the disclosure should be examined (Al-Tae & Flayyih, 2023; Flayyih, 2015; Flayyih et al., 2022; Flayyih & khiari, 2022; Junior et al., 2014; Maseer et al., 2022). A majority of emerging nations, including Malaysia, have expressed doubts about the openness and dependability of enterprises' sustainability performance (Osazuwa et al., 2017), and this is one of the key causes of poor sustainability performance, according to Peng (2018). To increase the reliability of listed companies' sustainability performance, an effective board is required (Revised, 2007). Experts evaluate the sustainability performance of firms in both established and emerging economies, aside from practical issues. However, the

majority of developing nations such as Malaysia have given less weight to SPQ (Alkhafaji et al., 2018; Flayyih & khiari, 2022; Loza Adau, 2020). It is evident that little study has been done on the quality of sustainability performance since empirical data on SPQ is scarce (Abass et al., 2022, 2023; Ahmed Haji, 2013; S. I. Ali et al., 2023; Nikkeh et al., 2022b; Sadou et al., 2017). There are existing studies on the association existing between sustainability reporting and corporate governance (CG) as claimed by Flayyih and Khiari (2023b), and Yusoff et al. (2015). The issue of the paucity of research on the quality of sustainability reporting has been brought to light. Hussain et al. (2018) cite the need for more research in this area as evidence for their argument. According to academics, further research is required to understand fully the correlation between sustainability performance and Zahid et al. (2016). As a result, the current study aims to fill the existing gap by assessing how SPQ is affected by CG factors like ethnic diversity, board meetings, and board size of the Top 100 firms listed on Bursa Malaysia which have received less empirical attention. In light of these factors, bad board governance may be related to subpar sustainability performance. Notably, this paper evaluates SPQ using a combination of these variables. For regulators, corporate management, government, and other stakeholders interested in enhancing board ethnic diversity, board size, and board meetings in Malaysia, this study offers managerial and theoretical consequences. Thus, this study is categorized as a review of the literature, theoretical background, and hypothesis formulation as covered in section 2, the methodology in section 3, section 4 comprises the findings while the conclusion is reached in the last section and section 6 has the limitations and prospective avenues for further studies.

LITERATURE REVIEW

Sustainability Performance Quality and Board Ethnic Diversity

Malaysia is a mixed nation with divided cultural values because of ethnic conflict. Part of the blame for this can be attributed to the government's New Economic Plan (NEP), which intends to remove the connection between race and economic function. Haniffa and Cooke (2005) assert that the NEP is a sort of institutionalized positive discrimination in the Bumiputras' favor because it grants them several benefits, such as commercial contracts. According to Haniffa and Cooke (2005), the New Economic Plan of the government discriminates against people based on their ethnicity, which has an effect on how businesses behave generally and how they disclose sustainability data.

There were indications of strong collusion between some Malay businesspeople and the government during the 1990s economic boom (Jayasankaran, 1997). According to Roberts (1992), since the government is one of the stakeholders in enterprises, developing a company reputation for environmental responsibility through transparency and sustainability performance might be regarded as a strategy by the stakeholder management. Therefore, it is anticipated that businesses controlled by the ethnic group chosen by the

government. Albalaki et al. (2019) and Mohammed et al. (2018) spend more time on sustainability disclosure in order to gain legitimacy, which will change how the general public perceives the business savvy of the directors who are Bumiputra (Haniffa & Cooke, 2005).

Furthermore, the agency theory states that board members from various ethnic origins also perform their oversight responsibilities more successfully, which reduces agency costs (Effiezal Aswadi Abdul et al., 2018; Nikkeh et al., 2022b). Similar to the theory of stakeholders (AL-Timemi & Flayyih, 2013), stakeholder awareness and demand has compelled organizations to integrate sustainability into their purpose, vision, strategies, planning, and choices. The idea holds that for the preservation of the stakeholders' interests to be guaranteed, the directors within the board as the members of the senior managers, must defend the corporate sustainability performance disclosure agenda (Al-Shaer & Zaman, 2016; Donaldson & Preston, 1995; Freeman, 1984; Hadi, Abdulhameed, et al., 2023). The stakeholder theory's descriptive method also underlines how important it is for the boards of directors to coordinate several stakeholders' interests (Donaldson & Preston, 1995; Freeman, 1984; Hadi, Ali, et al., 2023; Zahid et al., 2020). Empirical data from past research (such as (Bakar et al., 2019; Zhang, 2012)) are also taken into consideration in addition to the underlying assumptions of the aforementioned theories, showing a connection between board ethnic diversity and sustainability practices. Zhang (2012) found a favorable correlation between ethnicity and sustainability disclosures among Fortune 500 enterprises. Utilizing 139 samples and 36 samples from two studies (i.e., (Haji-Abdullah & Wan-Hussin, 2009; Haniffa & Cooke, 2005)) of Malaysian corporations, it is discovered that organizations with boards mostly comprised of Malay directors report greater sustainability performance. Upadhyay and Zeng (2014) found that there is a significantly negative association between sustainability disclosure and board ethnic diversity, contrary to the study of Al-Dhamari et al. (2022) who found no significant influence between quality sustainability disclosure and board ethnic diversity. Hence, this research proposed the following hypothesis:

H1: The listed firms in BM have a favourable and substantial relationship between the board's ethnic diversity and sustainability performance excellence.

Sustainability Performance Quality and Board Size

The size of a board is referred to as the number of members within the board (Neamah, & Mhaibes, 2021; Jizi et al., 2014; Rashid, 2013). There is variation in the size of the board when taking into consideration several corporate organizations (Ahmed Haji, 2013; M. A. Ali et al., 2023; Zahid et al., 2016). Empirical research showed that with a significant occurrence of experienced directors and experts on a board, the firm performance can be boosted (Nguyen et al., 2021). However, no set "best size" of a particular directors' board. Past research (Ahmed Haji, 2013; Nguyen et al., 2021) suggest that a larger or smaller board of directors may improve performance and corporate transparency. In accordance with the perspectives of the stakeholder theory,

Prado-Lorenzo and Garcia-Sanchez (2010) found that bigger boards are effective more at controlling and monitoring managerial opportunistic activities as they often have greater diversity in the knowledge, representation, and expertise of the shareholders. Contrarily, added that the theory of agency argues that, bigger boards often make decisions that are weak as a result of paucity of communication and coordination among the members of the board which can reduce the board efficiency in making policy on opportunistic and managerial action. Therefore, larger boards tend to have worse governance, which could affect negatively both the sustainability performance and the disclosure quality of an organization, according to the agency theory. According to Zahid et al. (2020), a significant number of empirical research were conducted on emerging and developed economies, and it was found that there is a significant association between board size and corporate sustainability performance. Contextually, Nguyen et al. (2021) noted that in an emerging economy, little is known about the board size's impact on the corporate sustainable performance standards. Osazuwa et al. (2017) between 2008 and 2013 discovered a significantly favorable correlation between sustainable performance disclosure and board size using 3150 firm-year data from 450 Malaysian firms. The second premise follows and says that:

H2: The top 100 Malaysian listed companies show a substantial correlation between sustainable performance quality and board size.

Sustainability Performance Quality and Board Meetings

According to Amran and Ahmad (2013), one factor influencing the efficiency of a board of directors is the overall frequency of the meeting. The board's commitment to managing and addressing firm-related issues is demonstrated by its regular board meetings (Khanchel, 2007). Because of how fundamental this issue is, in 2017, the MCCG Revised made a point stressing the essence of holding meetings by boards to improve the success of a board's performance. The Code recommended that "the board should meet regularly, with due notice of issues to be deliberated" and that "the board should disclose the number of board meetings held in a year, as well as the specifics of attendance of each director with respect to meetings held" (Revised, 2007). The number of meetings that publicly traded Malaysian firms must have annually was not specified in the Code. Agency hypothesis (Flayyih & Khiari, 2023a; Vafeas, 1999) claims that a board member's attendance at meetings is a good indication of how dedicated and hard-working they are. Regular board meetings are said to improve board performance by encouraging member engagement and critical debate on topics that have an influence on operations (Laksmanna, 2008; Lipton & Lorsch, 1992). According to the stakeholder theory, regular board meetings are also essential in dealing with the issues of many stakeholders and accurately accessing risk-facing firms like those that are connected to sustainability issues. This is because of today's business environment's increased uncertainty, competition, and operational complexity. The paucity of studies on

empirical analysis of board meetings and the quality of the sustainable performance of an enterprise in developing economies shows to be the motivating force for the present study. The impact of the board meeting on corporate transparency and CSR has been studied in the past, with varying degrees of success. Odoemelam and Okafor (2018) found a significant and positive relationship between environmental disclosures and board meetings in Nigerian nonfinancial companies. Similar to this, Nguyen et al. (2021) found that there is a positive and significant association between Chinese firm performance and board meetings. Analysing 450 samples from 3150 firms and data from 2008 to 2013, another study by Ahmad et al. (2017) found that there is no significant relationship between the number of occurrences of the board meeting done by the directors and CSR reporting. In other words, Prado-Lorenzo and Garcia-Sanchez (2010) found that there is no significant relationship between board meeting frequency and greenhouse gas declarations. However, the study forecasts a favorable link between a board meeting and SPQ according to the predictions of the relevant theories. Consequently, the third assumption is that:

H3: The top 100 Malaysian listed companies' sustainability performance quality and board meetings have a favourable and substantial correlation.

METHODOLOGY

Population Sampling

In 2019, a total number of 936 firms that are found on the main board of the BM made up the population of this study. By capitalization, the top 100 major corporations make up the sample size. After data cleaning the Top 100 firms constitute the sample size with 500 firm-year observations. Larger businesses are included in the study since it is usual practice in the research of sustainability reporting (Kühn et al., 2018; Maki et al., 2020; Zainal, 2017). There is more visibility for the larger ones to the public and with greater social influence as well as their impact on the society and are extremely aware of the need to legitimate their corporate activity via sustainability practice (Kühn et al., 2018; Zainal, 2017). Due to the fact that their regulatory framework is different from that of nonfinancial enterprises, financial firms were excluded. According to earlier studies (such as ; (Ahmed Haji, 2013; Said et al., 2009)), the exclusion is justified.

Data Collection

Secondary data is employed covering the year 2015 to 2019 in order to take into consideration the requirements of Practice Note 9 of the MCCG update as presented in Bursa Malaysia on necessary sustainability reporting practices as effective as of December 31, 2016. This period is selected in order to prevent the COVID-19 influence on the Malaysian economy in 2020 and 2021 from being obstructed. The main data source is the website of Bursa Malaysia where the yearly report of the Public Listed Companies can be found. Consequently, the yearly report will be used as the data-gathering tool for content analysis. We manually gathered information on sustainability performance from the yearly reports. The approach of content analysis of sustainability reports from firms was used to accomplish this. Additionally, data from the companies' annual reports was hand-selected on board governance elements such as board size, board makeup, and board meetings. For instance, documents like director reports, board bios, and CG statements. Data from the data stream was collected for a number of financial factors including ROE, leverage, industry type, and firm size.

Research Model

This paper examined the model of the subsequent panel regression to investigate the theory of the relationship between the pertinent constructs. The modeling of the association between the board's ethnic diversity, board meetings, the SPQ, and the board size supports the framework of the underpinning theory. The model is in accruing with part literature (such as (Haniffa & Cooke, 2005; Nguyen et al., 2021)). Thus, the study evaluated the multivariate panel regression model in order to evaluate the proposed model about the association between the SPQ and the CG as follows:

$$SPQ_{it} = \beta_0 + \beta_1 BETHNICDIV_{it} + \beta_2 BSIZE_{it} + \beta_3 BMEETINGS_{it} + \beta_4 LEV_{it} + \beta_5 ROE_{it} + \varepsilon_{it} + \mu_{it}$$

Panel data is represented by the notation subscript it , where the letters "i" depicts cross-sectional unit and the letter "t" stands for the years 2015-2019. While Model 2 displays the interaction between IVs and CVs, model 1 depicts the link between the independent variables and the dependent variables. **Table 1** below displays the description and measurement of the variables.

Table 1. Variables and their Respective Explanation

| Codes of Variables | Symbols | Descriptions |
|---------------------------------|-------------------|---|
| Dependent Variables | | |
| Sustainable Performance Quality | <i>SPQ</i> | Represents the level of SPQ, which is assessed using a scale of 0 to 3 and an index created from content analysis of a set of 42 elements adapted from Ahmad et al. (2017) and consistent with past Malaysian sustainability studies (Ahmed Haji, 2013; Thompson & Zakaria, 2004) |
| Independent Variables | | |
| Board Ethnicity Diversity | <i>BETHNICDIV</i> | According to the study by Effiezal Aswadi Abdul et al. (2018), this is quantified by the percentage of Bumiputras (Malay directors) to all board members. |

| Codes of Variables | Symbols | Descriptions |
|--------------------|-------------------|---|
| Board Size | <i>BSIZE</i> | The board size stands for the directors' size in the company's board yearly (Zahid et al., 2020). |
| Board Meeting | <i>BMEETINGS</i> | Odoemelum and Okafor (2018) posit that board meeting represents how frequently the board meeting of the directors. The number of meetings overall had by the board throughout the period. |
| Control Variables | | |
| Leverages | <i>LEV</i> | Leverages are assessed by dividing the total liability by the total assets (Abdullah & Ku Ismail, 2017). |
| Return on Equity | <i>ROE</i> | ROE is calculated using the shareholder's equity net income (Haniffa & Cooke, 2005). |
| Industry Effect | <i>INDEFFECT</i> | Haniffa andCooke (2005) mentioned that Bursa Malaysia's categorization is the foundation for Bursa Malaysia's impact control (environmental sensitivity) |
| Year Effect | <i>YEAREFFECT</i> | In 2017 and 2018, MCCG respectively, underwent updates and improvements (Manning et al., 2019). In order to account for year impacts, these years are chosen. |

In the study, a panel regression analysis is employed. Several statistical approaches may be used to generate conclusions from data that are correct. To evaluate the data, the study used panel regression analysis, correlation, and descriptive statistics. There are three main regression models for the econometric analysis of panel data. Among these are the random effects (RE), fixed effects (FE), and pooled effects (PE). When choosing the model to use for an estimate, the panel regression model primarily weighs the random effect/fixed effect models and the pool effect regression. According to earlier research, the panel regression rule and the FE model were employed in this study, and STATA 14 was used to do the regression. A diagnostic test is run in the study for autocorrelation, multicollinearity, and heteroscedasticity to prevent incorrect results.

RESULTS

Descriptive Information

The findings from the descriptive information of the independent, control, and dependent variables are presented by Panel A in **Table 2**. Sustainable performance quality (SPQ) being the dependent variable has a range of 0% (minimum) to 58% (maximum) with a mean of 26% according to the findings. This shows marginal improvements in the SPQ of listed Malaysian businesses in comparison with past studies (Zahid et al., 2020), which reported 20, 14, and 21 percent sustainability disclosure quality respectively. The 26% of SPQ is modest, nevertheless when in comparison with the 31% found by Bakar et al. (2019). With mean values of 11%, 6%, and 8% respectively, the SSPQ, ESPQ, and the ENSPQ of

disclosure quality all demonstrate improvement. Board ethnic diversity (BETHNICDIV), one of the independent variables, had a mean value of 39%. The range of 0 (minimum) and 1 (maximum) indicates that some boards have all Malay directors, while other boards do not. The results support previous research (e.g., (Haniffa & Cooke, 2005)). The BSIZE of the board of directors was nine. The range for the board size is 4 (minimum) to 17 (maximum). Averagely, the number of the board of directors is consistent with other findings which show that the large board sizes of the Malaysian boards are exceptional (Şener et al., 2016).

There are typically six board meetings every year, ranging from three to twenty-one. As a result, the tested companies hold an average of more than 6 board meetings annually. This is comparable to what Katmon et al. (2019), and Şener et al. (2016) also reported an average of 5 meetings discovered in Malaysia. The board meeting average number was 6 which is more than the 4.57 reported in a study from Singapore (Hu & Loh, 2018) and comparable to the 7.01 and 5.52 reported from China in earlier studies (such as (Rashid, 2013)). Leverages show a Min. of 31% and Max. of 70% for control variables of mean score that is equivalent to the study by Katmon et al. (2019), 30.69%. Also comparable to Nor et al. (2016), the mean ROE value is 14.71%, the Min. value of ROE is -47.97%, and the Man. The value of ROE is 68.8%. The choice of leverage as a control variable is because highly levered firms may have their sustainability practice affected as a result of debt. Casey and Grenier (2015) discovered that highly levered firms tend to prevent extensive sustainability disclosure. In the same vein, ROE is taken as a control variable as profitability of firms matters in terms of their extensive sustainability practices (Clarkson et al., 2008).

Table 2. Descriptive Information for the Variables

| Variables | Observation | Mean Value | Std Deviation | Minimum | Maximum |
|------------|-------------|------------|---------------|---------|---------|
| SPQ | 450 | 0.25 | 0.14 | 0 | 0.58 |
| ESPQ | 450 | 0.05 | 0.045 | 0 | 0.17 |
| ENSPQ | 450 | 0.05 | 0.05 | 0 | 0.23 |
| SSPQ | 450 | 0.15 | 0.05 | 0 | 0.24 |
| BETHNICDIV | 450 | 0.34 | 0.37 | 0 | 1 |

| Variables | Observation | Mean Value | Std Deviation | Minimum | Maximum |
|-----------|-------------|------------|---------------|---------|---------|
| BSIZE | 450 | 900 | 2.22 | 4 | 17 |
| BMEETING | 450 | 7.43 | 2.97 | 3 | 23 |
| LEV | 450 | 27.98 | 19.14 | 0.31 | 70 |
| ROE | 450 | 15.8 | 16.73 | -45.89 | 69.6 |

The SPQ acronym includes the following terms: board ethnic diversity (BETHNICDIV), return on equity (ROE), social SPQ (SSPQ), leverage (LEV), board meeting (BMEETINGS), economy sustainable performance quality (ESPQ), total sustainable performance quality (SPQ), environmentally sustainable performance quality (ENSPQ) and board size (BSIZE).

Correlation Matrix

Table 3 presents the findings from the Pearson correlation matrix. In this study, the coefficient of correlation

of -0.309 to 0.452 is the acceptable value (Gujarati, 1995). The VIF values in **Table 3** demonstrate a sign of no multicollinearity.

Table 3. Paerson Correlation

| Variable | 1 | 2 | 3 | 4 | 5 | 6 |
|------------|-----------|-----------|-----------|-----------|-----------|-------|
| SPQ | 1.000 | | | | | |
| BETHNICDIV | ***0.1206 | 1.000 | | | | |
| BSIZE | **0.092 | ***0.261 | 1.000 | | | |
| BMEETING | 0.000 | ***0.452 | ***0.319 | 1.0 | | |
| LEV | ***0.162 | ***0.213 | 0.258 | ***0.252 | 1.000 | |
| ROE | -0.031 | ***-0.278 | ***-0.241 | ***-0.309 | ***-0.159 | 1.000 |

The significance levels for the relationship are * = p 0.01, ** = p0.05, *** = p0.01. The total sustainability reporting quality (SRQ), return on equity (ROE), leverage (LEV), board ethnic diversity (BETHNICDIV), board meetings (BMEETINGS), board size (BSIZE), and variation inflation factor (VIF).

Results and Discussion

To address the problem of reversed causation or endogeneity, the lagged values of independent variables were employed in the investigation (Setiawan et al., 2021). First-order autocorrelation and heteroscedasticity are a problem, according to the tests of Cook-Weisberg/Breusch-Pagan and Wooldridge that are significant at the level of 0.000. As evidenced by the significance of the Hausman specification and Lagranrian Multiplier tests, the fixed effect model is appropriate more. Also, the generalized least square (GLS) is employed for the appropriate estimator as it is robust for these problems (Zhuang et al., 2018).

Table 4 shows how SPQ is impacted by CG. Models 1 through 3 detail how each independent variable affects SPQ, while Model 4 shows how the combined effect of the three independent factors affects the capacity to provide information on sustainability performance. The outcome of the whole model is shown in Model 5. According to the SPQ model's modified R2 value, the independent variables may account for 47% of the rise in the SPQ. Overall, the study's findings point to an increase in the standard of Malaysian companies' sustainability performance (disclosure). The next part goes through each of the theories in detail.

Board Ethnic Diversity and Sustainability Performance Quality: Model 1 (M1), Model 4, P = 0.06, and Model 5, P = 0.05, all reveal a positive and significant connection between BETHNICDIV and SPQ according to the test of Hypothesis One (H1). This shows that H1 has empirical support. The favorable impact of BETHNICDIV on SPQ is consistent with the theoretical predictions and the empirical findings of other research that reported the same outcomes (Nguyen et al., 2021).

This means that an ethnically diverse board upholds stakeholders' interests and legitimizes businesses by reducing knowledge asymmetry through effective business sustainability disclosures (Freeman, 1984; Freeman et al., 2004). This is in accordance with the assumption of the stakeholder theory which underlines how important it is for the boards of directors to coordinate several stakeholders' interests to enhance sustainability practice (Donaldson & Preston, 1995; Freeman, 1984; Zahid et al., 2020), and the agency theory states that board members from various ethnic origins also perform their oversight responsibilities more successfully, which reduces agency costs (Effiezal Aswadi Abdul et al., 2018) and enhance sustainability practices.

The results show that sustainability performance is enhanced by a board of directors with a majority of members who are Malay. Abdullah and Ku Ismail (2017) mentioned that to protect both people and the environment, Malay people are drawn to sustainability-related issues, and the National Economic Plan's (NEP) description of the Bumiputras (i.e., (Hameedi et al., 2022; Talab et al., 2018)) position may have a significant effect on the sustainability disclosure quality. This is clear from publications (Latif et al., 2013) that highlight concerns about climate change, pollution, and a rise in carbon emissions.

Sustainability Performance Quality and Bard Size: The values of M2 (= 0.00 p0.05), M4 (= 0.00 p 0.10), and M5 (= 0.05 p0.05), demonstrate proof of a significant and favourable association between SPQ and BSIZE when testing Hypothesis Two (H2). This suggests that H2 has empirical backing. The findings demonstrate that the board size and the number of directors increase the sustainability disclosure quality. The significant relationship between SPQ and BSIZE

is in consonance with past studies (such as (Ahmed Haji, 2013; Nguyen et al., 2021)) adding that it is also in accordance with the theory that boards that are bigger in regard to the number of the director show credibility and reliability of sustainable information to minimize asymmetric information more and fulfill information required by the shareholders, thereby making their activities legitimate. Sadou et al. (2017) posit that the outcome has expatiated through the diversity of the wide board of experience, background, and skills which facilitates meaningful disclosure of sustainability performance.

Sustainable Performance Quality and Board Meeting: Hypothesis Three (H3) is experimentally rejected since M3 (= 0.00 p > 0.10), M4 (= -0.00 p 0.10) and M5 (= -0.00 p 0.05) show

that BMEETINGS is significantly and adversely correlated with SPQ. This shows that the degree of sustainability disclosures was unaffected by the analyzed businesses' decreased or stable number of meetings. However, it is consistent with earlier research that discovered the same outcomes (Osazuwa et al., 2017). The negative association conflicts with other studies that found positive results (Hu & Loh, 2018; Osazuwa et al., 2017). The adverse outcome, however, runs counter to the basic presumptions of the relevant theories. The sour connection might be the simple outcome of frequent board meetings brought on by mediocre performance. In this situation, a board meeting is considered as a last-resort measure to improve board governance rather than as a proactive measure.

Table 4. Estimation Technique and Feasible Least Square for the Model of SPQ

| Dependent variable | SPQ | SPQ | SPQ | SPQ | SPQ |
|-----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| (Model) | (1) | (2) | (3) | (4) | (5) |
| Independent Variables | | | | | |
| BETHNICDIV | 0.05 (2.72)*** | | | 0.06 (2.77)*** | 0.05 (3.18)*** |
| BSIZE | | 0.00 (2.08)** | | 0.00 (1.81)* | 0.00 (1.90)** |
| BMEETINGS | | | 0.00 (0.02) | -0.00 (-1.75)* | -0.00 (-2.33)** |
| Control Variable | | | | | |
| Leverage | | | | | 0.00 (3.12)*** |
| Return on Equity | | | | | 0.00 (0.77) |
| Industrial fixed Effect (I) | Y | Y | Y | Y | Y |
| Annually Fixed Effect (Y) | Y | Y | Y | Y | Y |
| R-squared (Percent) | 0.04 | 0.03 | 0.03 | 0.04 | 0.47 |
| F-Test | 5.88 | 4.96 | 4.83 | 4.59 | 27.35 |
| _Cons | 0.24 (24.41)*** | 0.22 (10.30)*** | 0.26 (21.41)*** | 0.22 (10.29)*** | 0.23 (9.34)*** |
| Number of Firm | 100 | 100 | 100 | 100 | 100 |
| No. of Observation | 500 | 500 | 500 | 500 | 500 |
| Pvalues | 0.000 | 0.037 | 0.985 | 0.005 | 0.000 |
| Wald Chi2 | 7.38 | 4.35 | 0.00 | 12.58 | 482.31 |
| Mean VIF | 1.09 | 1.09 | 1.12 | 1.25 | 1.24 |
| Max VIF | 0.94 | 0.93 | 0.93 | 0.88 | 0.89 |

As of * = p 0.10, ** = p0.05, and *** = p0.01 percent at the significant level of *10, **5 and ***1 percent. Total sustainability performance quality (TSPQ), return on equity (ROE), leverage (LEV), board ethnic diversity (BETHNICDIV), board meetings (BMEETINGS), and board size (BSIZE).

CONCLUSION

This paper examines the effects of board meetings, size, and diversity on the SPQ of firms listed in BM. The findings show that the ethnic diversity and the board size (the board that is dominated by Malays) are crucial drivers of SPQ, but that board meeting frequency is not. Except for board meetings (H3), the findings are consistent with the theories of stakeholder and agency underlying premises. According to the agency and stakeholder theories' underlying tenets, a larger, more ethnically diverse board safeguards stakeholders' interests and legitimizes businesses through

superior corporate sustainability performance that reduces the asymmetry of information to advance sustainable development (Freeman, 1984; Freeman et al., 2004; Jensen & Meckling, 1976). However, as the descriptive study demonstrates, Malaysia's current sustainability performance requires greater improvement when compared to other developed countries. Similar to earlier studies (Al-Dhamari et al., 2022), the study found that narrative and qualitative disclosures are preferred to quantitative disclosure. It is worthy of note that for sustainable development to thrive, sustainability practices must be intensified by all corporate bodies beyond their corporate social responsibility as

emphasized by the United Nations, the Global Reporting Initiatives, and other NGOs that have registered their worries for climate change, pollution, diversity and inclusiveness, depletion of the ozone layer, loss of biodiversity, poverty, health and safety of worker, resource preservation, and host of other sustainability related issues. In this way, there will be development that meets the present needs without compromising the future generations the opportunity to meet their own needs as emphasized by the World Commission on Environment and Development.

CONTRIBUTION

This paper contributes both in practices and theories. In a growing country like Malaysia, where firms place a greater emphasis on shareholders than stakeholders, the study evaluated the tenets of agency and stakeholder theory. The theoretical gap is filled by the study since the facts are in accordance with the pertinent theory. According to the agency theory, this study reported that an effective and strong board is necessary as regards the sustainability performance disclosure, ethnic diversity, and board size to balance the stakeholders' interests. The stakeholder theory leads us to the conclusion that organizations that are subject to public threats and pressure on their legitimacy might have legitimized and survived their business operations by providing these stakeholders with the information they require through superior corporate sustainability disclosure made feasible by a strong board of directors. These theories are in accordance with the premise that CG including diverse and sizeable boards of directors raises the sustainability report standard. The study responds to the request for more research in this context and field, adding important empirical values to the literature corpus.

From a policy and practical perspective, this study adjusted the sustainability index according to the sustainability framework of BM and the sustainability framework of the GRI. To assist listed companies in disclosing their sustainability performance, the indices encompass 3 aspects of the sustainability report as found in the BM. The study also offers useful information to practitioners, regulators, and Public Listed Companies about how to enhance the sustainability performance disclosure quality by increasing board size and ethnic diversity. Regarding the corporate sustainability performance disclosure quality having a diverse board is important, especially one that is comprised of Malays and has a sizeable board size. This affects how businesses portray their brand, win over stakeholders, and justify their actions from a policy perspective. The government and its agencies will also profit since attaining sustainable development will protect Malaysia and its environment from calamities connected to sustainability.

LIMITATIONS AND FUTURE DIRECTIONS

The study includes several restrictions that could pave the way for other research. For instance, the research

examined SPQ for 5 years (2015-2019); however, future research might extend the time frame to 2021 to determine the effect of the COVID-19 disruption on listed enterprises' SPQ. In future studies, the sample size, timeframe, and company count might all be enhanced. Additionally, other SPQ metrics as well as enhancing CG system measures might be used in future research.

Despite these drawbacks, the study's authors are certain that it is contemporary and pertinent in the Malaysian context, where sustainability practice is essential to the country's overall well-being. The report goes on to say that listed businesses should actively consider board size and ethnic diversity as they are important factors in the quality of sustainability performance disclosure. Additionally, businesses should take care to keep board meeting frequency at a reasonable level because too many meetings per year could not result in improved disclosure of sustainability performance.

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