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## ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

# Board governance mechanisms and sustainability reporting quality: A theoretical framework

Elaigwu Moses<sup>1\*</sup>, Ayoib Che-Ahmad<sup>2</sup> and Salau Olarinoye Abdulmalik<sup>3</sup>

**Abstract:** The presumed poor performance in terms of sustainability commitments and Sustainability Reporting Quality (SRQ) of quoted companies have incentivized stakeholders' agitation relating to the Economic, Environmental, and Social (EES) impacts of companies' operations. Business activities have generated several threats in the form of climate change, pollution, GHG emission as well as natural disasters, and several other problems that have negatively affected the environment and stakeholders. Companies are expected to report their sustainability performance to stakeholders. However, the quality of such sustainability reports has been critically criticized as they are mostly assumed to fall below stakeholders' expectations. This study aims to conceptually examine the association between board governance mechanisms and SRQ in Malaysia. The method adopted by this study is the review of previous literature on sustainability reporting practices and



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### PUBLIC INTEREST STATEMENT

This study is a conceptual examination of the relationship between board governance attributes and sustainability reporting quality of PLCs in Malaysia. Sustainability (sustainable development) issues became more pertinent right from the time it was made part of the agenda of the WCED. The essence of this is to save the world from the economic, environmental, and social risks resulting from companies' operations. As a result, companies are expected to be responsible sustainably through their sustainability commitments and the reporting of such to the wider society and specifically their stakeholders. Meanwhile, the concern of this study is the quality of such reports, hence, many companies engage in not reporting the truth about their sustainability performance. However, the companies' board has a crucial role to play via their monitoring responsibilities in enhancing SRQ of the organizations. Through this, the company obtains legitimacy and enhances its reputation and performance as well as saving the society from man-made and natural disasters which are repugnant to sustainable development. The study found that there is a positive association between board governance mechanisms and sustainability reporting quality.

SRQ to gain insight into drawing a proposition regarding the relationship between board attributes and SRQ of PLCs in Malaysia. Through this method, the study generally verifies the SRQ of firms and how it is influenced by board attributes. Based on the insight from the reviewed past investigations, the study concludes in its proposition that there is a positive association between the examined board governance elements and SRQ based on multiple theories. The study has practical implications for the companies, regulators, government, and other stakeholders in their policy considerations and investment decisions. The study recommends an empirical study to re-investigate SRQ employing the variables used in this study and more board attributes to enhance the generalizability of the findings.

**Subjects:** Economics; Environmental Economics; Finance; Business, Management and Accounting

**Keywords:** board governance mechanisms; sustainability reporting quality; economic impact; environmental impact; social impact; Malaysia

### 1. Introduction

The concept of Sustainability Reporting Practice (SRP) is about meeting stakeholders' sustainability information needs relating to the Economic, Environmental, and Social (EES) impacts of companies' business operations (World Commission on Environment and Development (WCED), 1987). The occurrence of natural disasters like flooding, earthquake, and the increase in carbon emission, as well as issues of pollution (water and air) and social inequality, have become a major challenge globally (Chong, 2019; Manning et al., 2019; Yusoff et al., 2006). These disasters are considered to be the consequences of poor sustainability practices associated with economic growth in terms of industrialization and globalization (Ansong, 2017; Zainal, 2013). Consequently, Malaysians like the rest of the world are worried following the report of the Ministry of Energy, Science, Technology, Environment, and Climate Change (MESTECC) concerning their experience and the anticipated negative effect of climate change (The Star, 2019). Hence, it was documented that sustainability issues cost the Malaysian Government a whole lot of money (over RM10 billion) in the past 20 years (Chong, 2019; The Star Online, 2019; Zurairi, 2018). Therefore, in the recent past years, several academic investigations in the field of accounting center on sustainability issues which have generated serious debate (Yusoff & Lehman, 2009). Meanwhile, the sustainability concerns of the companies' stakeholders can be achieved through companies' sustainability performance and the credible disclosure of sustainability information via Sustainability Reports (SRs) (Betianu, 2010; Deegan, 2013). Hence, stakeholders are perceived to give more preference to firms that are seen to be sustainably responsible (Mahoney et al., 2013). This by implication means that firms ought to be good corporate citizens through behaving responsibly or sustainably while pursuing the economic objectives of their businesses (Ansong, 2017; Gherghina & Simionescu, 2015; Ong, 2016; Ong & Djajadikerta, 2017). This is because, it is through a credible sustainability performance and disclosure that sustainable development could be achieved otherwise, the purpose of SRP will be defeated.

However, putting Sustainability Reporting Quality (SRQ) into consideration, it is observed that mistrust, lack of confidence, and skepticism towards firms always prevail among stakeholders and academic scholars (Lock & Seele, 2016) which negates the assumptions of the agency and stakeholder theories (Freeman, 1984; Jensen & Meckling, 1976). This is because, in a situation where there is a lack of genuine compliance with regulations and guidelines for Sustainability Reporting (SR), firms may decide voluntarily the probability and extent of publishing their Sustainability Performance (SP) through SRs (Manning et al., 2019). Such a situation has been documented to have created a credibility gap between SP and SRQ (Manning et al., 2019). For instance, employing the assumptions of the signaling theory, managers could disclose SP

information just to signal its SP to stakeholders thereby gaining competitive advantages like the cost of equity reduction and better or easy financing (Cheng et al., 2014; Dhaliwal et al., 2011) which is synonymous with self-presentation theory (Goffman, 1959; Cho et al., 2018). Also, firms with poor SP are known for using the lens of legitimacy theory to subdue legitimacy threats<sup>1</sup> from public pressures. In this situation, the management employs sustainability reporting as a tool for managing stakeholders' perceptions, to decrease the negative effect of poor SP on the company's reputation and legitimacy (Brammer & Pavelin, 2006; Freedman & Patten, 2004). The issue is, not reporting or masking poor SP reduces SRQ hence the firm's sustainability commitments or activities may not be presented fairly in every material respects (Boiral, 2013; Cho et al., 2012; Reimsbach & Hahn, 2015). As such, stakeholders most times view sustainability information as been strategic thereby lacking expected quality and credibility (Lock & Seele, 2016). Even though SR has received scholarly and empirical attention considerably, such attention focuses more on the probability or extent (quantity) of SR and the effect of firm and board attributes (Hahn & Kühnen, 2013; Lock & Seele, 2016) while very little attention has been granted SRQ just as very little is also known concerning the contextual factors affecting the quality of SR (Hahn & Kühnen, 2013). Consequently, SRs have received critical criticism for lack of transparency and credibility occasioned by being poor in quality notwithstanding voluntary standardization (Lock & Seele, 2016; Milne & Gray, 2013).

Sustainability reports are as a result guilty of expanding the credibility gap in which the legitimacy of firms is threatened in the society, leading to corporate greenwashing (Lock & Seele, 2016; Seele & Gatti, 2017). The poor sustainability practice is a function of poor sustainability performance and disclosures that make SRQ a challenge that calls for scholarly investigations. Hence, studies concerning SRQ is devoid of consensus and under-researched as emphasized by previous studies (e.g., Amran et al., 2014; Anas et al., 2015; Huang & Watson, 2015; Jain & Jamali, 2016; Sadou et al., 2017; Yusoff et al., 2015). This is because, the SRP of most firms is for the mere disguise of compliance with relevant regulations without much concern for reporting quality as portrayed by extant literature (e.g., Loza Adai, 2020; Milne & Gray, 2013; Yusoff et al., 2015; Zahid et al., 2016). The less concern for SRQ is as well portrayed by the percentage of external assurance of SRs which is 45% globally and 12% in Malaysia (Lawrence & Thomas, 2018; Peng, 2018), notwithstanding that independent third-party assurance, is one of the key determinants of SRQ (Bursa Malaysia, 2018; Fernandez-Feijoo et al., 2018; GRI, 2016). As such, the credibility of SRPs has been extensively debated just like its usefulness and transparency which have been equally criticized empirically (Boiral, 2013; Boiral & Gendron, 2011; Cho et al., 2015, 2018). Moreover, the marketing aim and the lack of material and balanced disclosures have received harsh criticism in prior investigations (Boiral & Henri, 2017; Cho et al., 2015, 2018; Puroila, 2018). As a result, SRQ is seen to be falling short of stakeholders' expectations as their confidence is negatively affected (Boiral & Heras-Saizarbitoria, 2020) and the purpose of SRP extensively defeated. This indicates that SRs can not be taken as being of expected quality without being thoroughly verified to be so (Cho et al., 2018; Junior et al., 2014).

Meanwhile, most sustainability reporting studies were conducted in the developed economies compared to emerging or developing countries. Sustainability studies in the developing economy dwell more on the probability and extent of disclosures, determinants of disclosure, signaling firm reputation, and for international comparisons of disclosures (Hahn & Kühnen, 2013; Larrán-Jorge & Martínez, 2013; Odriozola & Baraibar-Diez, 2017). Justifying that there is a dearth of SRQ studies (Loza Adai, 2020; Yusoff et al., 2015). In this case, Malaysia is not an exception considering the less empirical attention on SRQ and the calls for further investigations (e.g., Aziz & Rosmiza, 2017; Hussain et al., 2018; Zahid et al., 2016, 2020). Therefore, to address the issues surrounding SRQ, the role of the board in terms of corporate governance mechanisms is pertinent, hence the transparency and credibility of corporate reporting bother on effective board in terms of monitoring (MCCG, 2017; Osazuwa et al., 2017). Although, corporate scandals like Enron, WorldCom and others like Sime Darby, Kenmark Ltd, and Linear Corporation in Malaysia, were attributed to corporate governance failure which has caused stakeholders much concern in terms of the

credibility of corporate reporting (Abdulmalik & Che-Ahmad, 2019; Ofoegbu et al., 2018). This situation has informed several reforms in corporate governance worldwide and specifically in Malaysia (Abdulmalik & Che-Ahmad, 2019). For example, the Revised Malaysian Code of Corporate Governance (MCCG) 2017 and the revised Malaysian Sustainability Reporting Guide (SRG) in 2018 (Bursa Malaysia, 2017, 2018). Nonetheless, the corporate governance issue entails the application of governance mechanisms that could synchronize stakeholders and management interests (Osazuwa et al., 2015). Most studies relating to board governance were conducted based on the lens of the agency theory by examining various board attributes and the performance of firms (Aguilera et al., 2008; Osazuwa et al., 2015, 2017). But, the present study aligns agency theory with legitimacy, stakeholder, critical mass, resource dependence, and Socio-Emotional Wealth (SEW) theories to avail the board the opportunity of making sure issues concerning sustainability are attended to by companies. Thereby responding to stakeholders' information needs credibly and legitimizing the activities of companies as well as saving the environment and the people from disasters.

Further, the effectiveness of the board of directors is most times questioned by asymmetric information occasioned by the self-serving spirit of managers (Fama & Jensen, 1983; Jensen & Meckling, 1976). So, ameliorating information asymmetry is crucial in enhancing SRQ through an effective board. Hence, prior studies have established that an effective board is crucial in ensuring a credible SRP (Garcia-torea et al., 2016; Lau et al., 2016). Besides, studies document that the association between board governance and sustainability reporting demands further scholarly attention (Hussain et al., 2018; Yusoff et al., 2015). Consequently, this study is to look into the questions: (1) Is there a relationship between board attributes like board gender diversity, board communication, board integrity, political connection, external assurance, and SRQ? (2) Do family-controlled firms moderate the relationship between these variables and SRQ? Therefore, the main aim of this research is to x-ray conceptually the association between the mentioned board governance attributes and SRQ as well as looking into the interacting role of family-controlled firms. To the best knowledge of the researcher, this constitutes the first study employing these variables in this combination as depicted by the research framework in Figure 1. The combination of these variables makes the present study differs from the very few previous studies on SRQ especially in Malaysia (e.g., Abd-Mutalib et al., 2014; Ahmed Haji, 2013; Sadou et al., 2017; Zahid et al., 2016, 2020; Zainal, 2013, 2017). Meanwhile, this study is motivated by the scanty research concerning the association between corporate governance and SRQ (Hussain et al., 2018; Loza Adai, 2020; Yusoff et al., 2015) and the necessity of SRQ in ameliorating the negative impact of companies' operations on stakeholders and the wider society to achieve sustainable development which is the essence of SRPs. Moreover, this study is informed by the fact that extant literature (e.g., Ahmad, 2017) posits that transparency in sustainability disclosures remains a weak tradition in Malaysia and that most companies engage in SRP for merely disguising compliance with regulations for the sake of obtaining legitimacy and portraying their reputation (Zahid et al., 2016). This according to Cho et al. (2012) "consequently could lead to a decline in real sustainability performance and causes un-sustainability that ironically contradicts the fundamental notion of sustainability" (Ong, 2016, p. 6).

The present study is therefore of immense significance as it contributes to sustainability reporting research in accounting being among the few studies that examine SRQ which has been acknowledged by previous investigations to be under-researched especially in emerging economies (Amran, Lee et al., 2014; Anas et al., 2015; Loza Adai, 2020; Yusoff et al., 2015). Moreover, most studies on SR and especially SRQ are conducted in the developed economies (Gnanaweera et al., 2018), but the current study examines SRQ in an emerging economy like Malaysia. The study further extends the body of knowledge by the introduction of salient internal (e.g., gender diversity, board communication, board integrity, political connection, and family-controlled firms) and external (independent third-party assurance) governance mechanisms that have not been employed by past investigations in examining SRQ. Board gender diversity is viewed from the perspective of critical mass which bothers on the number of female directors (at least 30%) as against mere or token representation of one female director on the board, which has been less examined in terms of SRQ. The study also highlights the association of board communication in terms of overlapping directorship with SRQ, as directors overlap has been studied

more relating to firm value, boards' monitoring effectiveness, and the quality of corporate financial reporting (Kalelkar, 2017; Samuel et al., 2019; Sassen et al., 2018; Velte, 2017) compared to SRQ. Equally, examining SRQ from the perspective of board integrity is rare, especially in the Malaysian context. In the same vein, the study is among the few research to associate firms' political connection with SRQ as well as bringing to bear the role of external assurance in SRQ which has received the least attention in the Malaysian sustainability studies. The study equally examines the interacting effect of family-controlled firms in SRQ in consideration of the inconclusiveness of previous SR research. Based on these variables, this study theoretically adds to existing knowledge through the application of the assumptions of the agency, legitimacy, stakeholder, critical mass, resource dependence, and SEW theories to explain their linkage with SRQ. Practically, the current study is of immense significance to stakeholders (e.g., the government, management of companies, host communities, suppliers, creditors, potential investors, and NGOs), as it hopes to engage PLCs in Malaysia to put into consideration SRQ in their investment and policy considerations.

The remaining part of this work is structured as follows: Section 2 presents a literature review relating to sustainability reporting quality and corporate governance mechanisms while section 3 is about the methodology and research framework. Finally, section 4 presents the conclusion and outlines the limitations of the study as well as suggestions for further research.

## **2. Literature review and research proposition**

### **2.1. Conceptual definition**

Sustainability Reporting (SR) idea was made popular after the United Nations General Assembly (UNGA) in the year 1987 (Deegan, 2013; Ong, 2016). This is because, issues relating to sustainable development are occupying the center of affairs globally such that the responsibilities of corporate organizations are not limited to the maximization of shareholders' wealth but include the creation of value for the entire society (Gherghina & Simionescu, 2015). Sustainable development was defined officially by the WCED<sup>2</sup> as "the development that meets the present needs without denying the future generations the opportunity to meet their own needs" (World Commission on Environment and Development (WCED), 1987). From the UNGA and the WCED's perspectives, the issue of sustainability reporting became more popular and a global ideology (Guenther et al., 2006; Guthrie & Abeysekera, 2006; Ong, 2016). Consequently, the Global Reporting Initiative (GRI) came up with an elaborate sustainability reporting framework. The GRI, therefore, defined SR as "reporting on how an organization contributes or aims to contribute in the future, to the improvement or deterioration of economic, environmental and social conditions, developments, and trends at the local, regional or global level" (Global Reporting Initiative (GRI), 2015, p. 17). These definitions were adopted by the accounting profession and Bursa Malaysia (Bursa Malaysia, 2006; KPMG, 2015; PricewaterhouseCoopers (USA), 2014). So, SR constitutes the medium by which companies' stakeholders are communicated sustainability information relating to the sustainability performance of companies (Gnanaweera et al., 2018; Hernández-Perlines & Ibarra Cisneros, 2017; Schaltegger & Wagner, 2006).

### **2.2. Corporate governance mechanisms and sustainability reporting quality**

The quality of SRs is significant and relevant for making several kinds of decisions in the desire for sustainable development worldwide by company stakeholders. Contrarily, companies in the bid to protecting their legitimacy mostly disclose unrealistic and misleading sustainability information (Cho et al., 2012, 2015, 2018). Besides, more positive sustainability information is disclosed compared to negative ones, thereby exposing the stakeholders to only positive information which consequently affects their confidence in the SRs (Gray & Milner, 2002; Unerman et al., 2014). This harms the image of firms and such practice equally poses risk to sustainable development in terms of the impact of firms' operation on society hence the main purpose of SRP is defeated (Luo & Tang, 2014; Unerman et al., 2014). Firms in such a situation only employ SRP as linguistic devices to portray firm image by disclosing unrealistic sustainability information in the form of powerful fiction to legitimize their operations (Gray, 2010; Cho et al., 2012; Milne & Gray,

2013). This increases stakeholders' pressure on the demand for transparent and credible corporate sustainability reports globally to show companies' sustainability commitments realistically (Al-Shaer & Zaman, 2016). However, research concerning the determinants of sustainability disclosure has attracted empirical attention from both developed and developing countries. As such, studies have examined the role of some specific firm characteristics and board attributes (e.g., Amran et al., 2014; Garcia-torea et al., 2016; Hashmi et al., 2018; Herda et al., 2012; Hussain et al., 2018; Manning et al., 2019; Sadou et al., 2017; Shahab & Ye, 2018). For instance, Garcia-torea et al. (2016) conducted a study in Spain employing board effectiveness proxied with "board size and independence, CEO duality, women on board, directors' experience, board meetings, and board committees" covering 17 countries with a sample of 2366 companies. From the perspective of stakeholder theory and stakeholder orientation of the firms' system of corporate governance which is proxied by the transparency of SRs and the PLS method of analysis; the study discovered that transparent SRs are associated with firms that operate in the stakeholder-oriented countries. The study generally indicated that an effective board of directors is most likely to address stakeholders' interests. Meanwhile, transparency is measured as a reflection of four characteristics<sup>3</sup> in assessing the content and quality of SRs putting into consideration the GRI guidelines. Similarly, Hu and Loh (2018) carried out cross-sectional research involving 462 firms in Singapore, by adopting the SRQ index from sustainability reporting scores of a prior investigation by Loh et al. (2016) based on four dimensions<sup>4</sup> of SR. The study employed agency theory and through a linear and logistic regression document an increase in the quality of SRs which is associated with board attributes like "board capacity (larger board sizes and a higher number of board meetings), board independence, and board incentive".

However, other studies, on the contrary, have documented that the mere fact that companies engage in SRPs does not expressly mean that the information disclosed is of the quality expected by stakeholders (Junior et al., 2014). Some extant literature investigated the association between certain board attributes and SRQ but document negative associations for several reasons. For instance, most organizations in the bid to legitimizing their operations disclose unrealistic sustainability information that is misleading (Cho et al., 2012, 2015, 2018; Luo & Tang, 2014). To buttress this, Manning et al. (2019) studied sustainability disclosure quality in Netherland using SEM-PLS in examining the association between "board effectiveness (board independence, sustainability expertise, and board diversity)" and SRQ from 2012 to 2016. The study through the application of signaling, legitimacy, and stakeholder theories discovered that corporate sustainability performance is negatively associated with SRQ of companies that are poor sustainability performers. This is consistent with Hummel and Schlick (2016) in their study of SRQ that covers several countries (e.g., Spain, Germany, Switzerland, Italy, France, Sweden, and/or the United Kingdom) using the GRI sustainability disclosure index (G3.1 version). The multivariate regression analysis discovered that firms that are poor in sustainability performance opt for low-quality disclosure by disguising their actual sustainability performance to protect their legitimacy which portrays the application of the theory of self-presentation (Goffman, 1959) as emphasized by past observations (Cho et al., 2015, 2018). Thereby, justifying the view of Cho et al. (2015) who posited that "the possible role that corporate sustainability disclosure can play in any transition towards a less unsustainable society remains unclear" (p. 91). The lack of clarity according to the author is blamed on organized hypocrisy. It is therefore quite obvious that the empirical evidence in terms of comparing SRQ of companies is devoid of consensus and demands more investigations (Loza Adau, 2020).

Nonetheless, drawing the issue closer to the Asian emerging market, the issue of SRQ becomes more compounded as very few studies have been conducted on SRQ especially in Malaysia (Yusoff et al., 2015). For instance, Ahmad (2017) who investigated the relationship between board independence and sustainability reporting using agency theory from 2008 to 2013 via content analysis, concluded that transparency remains weak in Malaysian sustainability disclosures, thereby upholding the opinion of Aaijaz and Ibrahim (2012). Also, Amran, Lee et al. (2014) conducted "a cross-sectional study of 113 companies in twelve countries of the Asia-Pacific Region based on legitimacy theory and resource-based view. The study employed multiple regression to investigate the

association between board composition (size, independence, and gender diversity), CSR strategies (organizational vision and mission, CSR Committee, and NGO collaboration) and SRQ". It concludes that SRQ in these countries left much to be desired and requires improvement. Thereby calling for more research relating to the responsibilities of the board concerning the reporting process regarding accountability. This is supported by Abd-Mutalib et al. (2014), who used a quality index on a scale of 4 points (0 to 3) to posit that SRQ of PLCs in Malaysia needs improvement as the content of the reports are more of general and qualitative information rather than quantitative. Further, Zahid et al. (2016), using the GRI guideline in a longitudinal study to examine SRQ of 113 PLCs (Real Estate Investment Trust-REIT and Property Sectors) in Malaysia from 2010 to 2013 based on a content analysis found that the social dimension was more focused than the environmental dimension. The author equally emphasized that SR is at its embryonic stage and dwells more on qualitative disclosures as most companies disclose sustainability information for mere compliance with relevant regulations. However, employing ownership structure, independence, the board size, and sustainability award to examine SRQ in 2011 and 2014, Sadou et al. (2017) through content analysis and a quality index based on a scale of 0 to 3 in a multiple regression model discovered a fair improvement in sustainability disclosure quality in Malaysia. This study upheld the view of Ahmed Haji (2013) and Zainal (2013). Similarly, in a more recent study by Katmon et al. (2019) using content analysis based on a sustainability quality indicators of 20 items to develop a sustainability disclosure quality index weighed on the scale of 0 to 3. The study from the perspective of agency and resource dependence theories via multivariate regression documents a positive relationship between board diversity (educational level, tenure, and gender) and sustainability disclosure quality.

From the mixed results of the above studies and the fact that SRQ research remains a grey area that deserves further empirical attention, especially in Malaysia, the current study is motivated. This is consistent with Hussain et al. (2018) and Yusoff et al. (2015) who believe that the association between board governance attributes and SRQ is under-researched. Therefore, the present study aims to conceptually look at SRQ in Malaysia through the review of crucial board governance attributes like board diversity (gender diversity based on critical mass), board communication, board integrity, political connection, external assurance, and the interacting effect of family-controlled firms. These variables to the best of the researchers' knowledge make the current study differs from previous research on SRQ, especially in Malaysia. The following sections review relevant literature on these variables.

### 2.2.1. Board diversity

Board diversity has been considered an important concept that enhances board effectiveness in terms of good governance and has attracted both scholarly and corporate attention. Board diversity entails the heterogeneity of board members based on different dimensions which are to the advantage of the firms (Rao & Tilt, 2016). It enhances the effectiveness of the board relating to corporate leadership, thereby enhancing the performance of companies (Carter et al., 2011; Rao & Tilt, 2016). As a result, several attributes concerning the diversity of the board for example, independence, age, ethnicity, gender, nationality, and others have been investigated in connection with SR in previous studies (Al-Shaer & Zaman, 2016; Harjoto et al., 2015; Ibrahim & Hanefah, 2016; Rao & Tilt, 2016; Zhuang et al., 2018). These studies show the significant effect of gender diversity on sustainability disclosures which indicates the corporate relevance of female directors<sup>5</sup> (Rao & Tilt, 2016). Hence, gender diversity enhances balanced decision as the way of thinking of women differs from men (Bakar et al., 2019). Also, the female directors are more sensitive to issues concerning sustainability, more generous in terms of community issues, and are more stakeholder-oriented as they pay attention to employees, the environment, and communities, and have different leadership style (Adams, 2015; Al-Shaer & Zaman, 2016; Adams & Ferreira, 2009). Besides, women are known for supporting effective decisions that could enhance the firms' sustainability strategies thereby improving SR (Al-Shaer & Zaman, 2016; Bakar et al., 2019). Further, women on the board could enhance the credibility of corporate disclosures through the reinforcement of the mechanisms of stakeholder engagement (Manetti & Toccafondi, 2012). In



terms of style of communication and personality, they are different (Liao, Luo, & Tang, 2015) and are risk-averse regarding the loss of reputation and litigation (Srinidhi et al., 2011)

Meanwhile, based on the argument of Friedman (2007), engaging in SR is symptomatic of agency problems which could be ameliorated by an effective board that enhances firms' responsibility in terms of SRP through gender diversity (Bakar et al., 2019; Jo & Harjoto, 2011). This is consistent with previous studies like Harjoto et al. (2015) in the USA; Ibrahim and Hanefah (2016) in Jordan; and Al-Shaer and Zaman (2016) in the UK that document a significant positive association between board gender diversity and SR. In the same vein, there are studies in Malaysia relating to board gender diversity and SR that depicts a significant positive relationship (e.g., Amran et al., 2014; Abdullah & Ismail, 2013; Bakar et al., 2019; Katmon et al., 2019; Zahid et al., 2020). On the contrary, other investigations recorded a significantly negative relationship between gender diversity and SR (Abdullah & Ismail, 2013; Handajani et al., 2014; Zhuang et al., 2018). This means the relationship between the two variables is still devoid of consensus and inconclusive, even though most of the studies point to positive associations. Equally, most of the existing studies concerning gender diverse board relate to financial outcomes of firms such as earnings management, earnings quality, stock price informativeness, and earnings forecast accuracy of analysts (Gul et al., 2013; F.A. Gul et al., 2011; Krishnan & Parsons, 2008; Srinidhi et al., 2011). This points to the fact that board gender diversity enhances the transparency of corporate reports and ameliorates asymmetric information (Al-Shaer & Zaman, 2016). Most of the sustainability studies view gender diversity through the lens of tokenism (i.e. from the angle of a token representation of a female on the board) as against critical mass (i.e., the least of 30% female representation) which is the focus of the present research. Most importantly, there is less attention given to SRQ from the critical mass perspective of gender diversity.

However, extant literature from the perspective of Critical Mass Theory (CMT) (Kanter, 1977) has shown a linkage between gender diversity and SR. The CMT concerns the average number of female directors on the board relating to policy effect and making change as an influential body against tokenism and its limitation (Kanter, 1977; Torchia et al., 2011). Hence, having 3 females and above on corporate boards eliminates the focus of female director representation from just gender to showing female talent with every sense of confidence without much pressure (Konrad et al., 2008). Consequently, the CMT posits that unless a particular level of females on the board of directors is reached, the positive effect of gender diversity may not be easily achieved (Kanter, 1977). In line with the theory, Joecks et al. (2013) found in Germany that a critical mass (30% or 3) of female representation on the board is associated with high firm performance. Al-Shaer and Zaman (2016) in the UK equally document an increased SRQ based on the number of female directors on the board. The positive effect of female directors on SRQ is also evident in the few Malaysian sustainability disclosure quality research (e.g., Bakar et al., 2019; Katmon et al., 2019; Zahid et al., 2020). But these studies mostly looks at the proportion or ratio of female representation and not the critical mass of at least 3 or 30% female representation that constitutes the measure of gender diversity in this study. Based on the relevance of female directors from the perspective of CMT as shown by extant literature, this study proposes that board gender diversity is positively associated with SRQ.

### 2.2.2. Board communication

Board communication is one of the crucial tools for the effectiveness of a diverse board. Hence, the success of a diverse board rests heavily on effective communication to reduce the negative effect of diversity (Samuel et al., 2019). Board members are effectively and adequately informed in the board discussion process if the avenue for effective communication is made feasible (Malenko, 2013). Such effective communication has been established to be made possible through overlapping directorship (Samuel et al., 2019). Overlapping directorship is a situation in which a board member serves simultaneously or concurrently on two or more board committees (Chandar et al., 2012; Velte, 2017). For instance, an audit committee member serving on the compensation committee simultaneously (Kalelkar, 2017). Such overlap creates homophily as against

heterophily, thereby necessitating effective collaborative communication in the face of a diverse board (Samuel et al., 2019) and enhancing the quality of corporate reporting (Chandar et al., 2012; Kalelkar, 2017). Moreover, studies have documented that over 60 % of sampled companies at least have a member serving concurrently on both audit and compensation committees (Liao & Hsu, 2013). However, most of the studies relating to directors' overlap concern the quality of financial reporting, audit effectiveness, and firm value with mixed findings (e.g., Chandar et al., 2012; Kalelkar, 2017; Karim et al., 2016; Liao & Hsu, 2013; Samuel et al., 2019; Sassen et al., 2018; Srinidhi, 2019; Velte, 2017). For example, Habib and Bhuiyan (2014, 2016) observed that overlapping membership is known for spillover of knowledge that increases expertise and the committees' quality of monitoring. This is supported by previous investigations which concludes that directors' overlap improves corporate reporting quality (Chandar et al., 2012; Fernández Méndez et al., 2017; Habib & Bhuiyan, 2016; Madi et al., 2015; Velte, 2017). On the contrary and consistent with the busyness hypothesis (Tanyi & Smith, 2015), committee members overlap leads to over-commitment that could diminish the effectiveness of individual committees as they become very busy and thereby negatively affecting the quality of corporate disclosures (Kalelkar, 2017; Laux & Laux, 2009; Liao & Hsu, 2013). Therefore, exploring the lens of the agency, legitimacy, and stakeholder theories (Freeman, 1984; Jensen & Meckling, 1976; Suchman, 1995), the present study posits a positive relationship between overlapping directorship and SRQ. This is because, based on insight from extant literature, which documents overlapping directorship to be positively associated with the financial reporting quality of firms, it means that the same association could be established with the quality of non-financial reporting (sustainability reporting).

### 2.2.3. Board integrity

Studies on corporate integrity are scarce to come by in most emerging economies especially relating to sustainability reporting compared to the developed countries. Integrity is a concept that is very crucial in terms of the success of both public and private businesses. Integrity birthed transparency and accountability in most human endeavors through the act of honesty, sincerity, and uprightness (Ismail, 2010). It is also viewed as the corporate organization's ethical or behavioral predispositions relating to the norms of society (Huberts, 2014). Corporate integrity bothers on the organizations' commitment to transparency (Cecchetti et al., 2018; OECD, 2017). As such, Cecchetti et al. (2018) look at transparency in this regard to concern the credibility of corporate reporting (whether financial or non-financial and mandatory or voluntary) which is necessitated by the firms' commitment to integrity. This as an act of corporate good governance enhances accountability and legitimizes companies' operations (Cecchetti et al., 2018). Therefore, corporate integrity has caught scholarly attention mostly in the developed economies relating to the effectiveness and the success of firms via the monitoring role of corporate boards to ensure the credibility of information disclosures (e.g., Agyei-Mensah, 2017; Cecchetti et al., 2018; Coulson-Thomas, 2013; Gajewski & Li, 2015; Huberts, 2014). Hence, several firms engage in the misrepresentation of information as a way of deceiving stakeholders (Coulson-Thomas, 2013; Goffman, 1959; Cho et al., 2015, 2018). Coulson-Thomas (2013) stressed that "sometimes there is a wide gap between appearance and substance, concealment rather than transparency, and obfuscation rather than enlightenment in corporate disclosures" (p. 32). Consequently, good corporate governance is duty-bound to alleviate or prevent integrity violations and protect the interest of stakeholders (Bank., 2014; Coulson-Thomas, 2013; Leipziger, 2015). As a result, firms' board of directors serves as a fundamental tool in addressing integrity issues relating to the quality of corporate reports through their monitoring influence on the companies' activity and disclosures (Cecchetti et al., 2018; Gajewski & Li, 2015). In other words, the board has to as a matter of obligation ensure, sustain, and enforce the culture of integrity for firms' credible disclosure of information by setting the ethical tone (Brenner & Molander, 1977; Cecchetti et al., 2018; Soutar et al., 1994). Cecchetti et al. (2018) concludes that companies whose boards uphold integrity principles effectively, disclose mostly a credible corporate information and this is consistent with the stakeholder and legitimacy theories of SRP. Integrity, in this case, is measured by the author using 5 activities that were noted as "markers of integrity"<sup>6</sup> (e.g., the adoption of ethics or behavior code; programmatic documents for corruption prevention; internal job rotation; whistleblowing policies; and training

and learning program on corruption and integrity) (Cecchetti et al., 2018). Based on the above reviews, the current study proposes a positive relationship between board integrity and SRQ.

#### 2.2.4. Political connection

Firms conduct businesses in an environment prepared by the government and this makes the study of firms' political patronage crucial regarding the quality of information disclosure. Hence, the political connection of firms is a crucial element in board governance (Wang et al., 2018). Issues surrounding political connection has attracted scholarly attention in different dimensions since the birth of the idea in 1974 by Krueger (Krueger, 1974; Wang et al., 2018). Malaysian PLCs are not missing out in the act of political patronage as studies have documented that Malaysia is among the countries whose public listed firms have the highest rate of political connection (Faccio et al., 2006; Fung et al., 2015). Companies are deemed to be politically connected (directly or indirectly)<sup>7</sup> as portrayed by prior studies (e.g., Ang et al., 2013; Faccio et al., 2006; Faccio, 2010; Faccio, 2007) if any of the senior management personnel (e.g., the chairman, executive director, a major equity holder, vice-president, and others) occupies a higher government position (e.g., the prime minister, president—current or former, government minister and others). The political connection of firms is for various reasons (be it positive or negative) and so, viewed from different perspectives by authors (Ang et al., 2013; Fan & Wong, 2004; Fung et al., 2015). As such, studies abound concerning the relationship of Politically Connected Firms (PCFs) with CSR disclosure, economic value, audit fees, firm performance, earnings quality, firm value, tax aggressiveness and more (Abdul Wahab et al., 2017; Ang et al., 2013; Chaney et al., 2011; Hashmi et al., 2018; Muttakin et al., 2018; Osazuwa et al., 2017; Wang et al., 2018). While some authors (Ahmad, 2014; Muttakin et al., 2018; Osazuwa et al., 2017; Wang et al., 2018) found a positive effect of PCFs, others found a negative effect on the contrary (Abdul Wahab et al., 2017; Faccio, 2007; Hashmi et al., 2018; Muttakin et al., 2018; Rahman et al., 2018). The mixed findings indicate the inconclusiveness of the studies concerning PCFs. Meanwhile, studies concerning PCFs' association with SRQ are scarce especially in the Malaysian context.

However, from the perspective of resource dependence and legitimacy theories (Pfeffer & Salancik, 1978; Suchman, 1995; Thompson, 1967), Wang et al. (2018) argued that via political connection, resources (e.g., subsidy, bailout, and others) and legitimacy could be obtained by firms (Hillman et al., 1999). While the firms in return for these benefits (resources and legitimacy), tend to comply with the sustainable development policies of the government (Wang et al., 2018). Moreover, the institutional logic perspective of the resource dependence theory posits that people have different logic of decision-making and liken the process of decision-making of PCFs to that of government. This logic emphasized that PCFs have the propensity of investing in sustainability to enable them to achieve the SDGs of government (Hillman et al., 1999). Based on these arguments and Malaysia being a stakeholder-oriented nation that made SR mandatory as updated in Sustainability Practice Note 9 (Bursa Malaysia Securities Berhad, 2017), this study, therefore, posits a positive association of PCFs with SRQ.

#### 2.2.5. External assurance

In line with the International Audit Assurance Standards Board (IAASB), external assurance engagement is defined as “an engagement in which a practitioner aims to obtain sufficient appropriate evidence to express a conclusion designed to enhance the degree of confidence of the intended users other than the responsible party about the outcome of the measurement or evaluation of an underlying subject matter against criteria” (IAASB, 2011, p. 19). Previous literature has analyzed the process of external assurance based on multiple theories like the agency, signaling, legitimacy, stakeholder, and neo-institutional theories (Boiral & Heras-Saizarbitoria, 2020; Hahn & Kühnen, 2013). According to Boiral and Heras-Saizarbitoria (2020) considering the mainstream literature on sustainability assurance, the process of independent third-party assurance promotes accountability to stakeholders through the improvement of the credibility of SRs (e.g., Moroney et al., 2012; Reimsbach et al., 2018; Simnett et al., 2009). Hence, the main purpose of external auditing is generally to promote accountability to the company's stakeholders. Thereby,

increasing the stakeholders' trust concerning the reliability of the disclosed information via an independent, undiluted, and impartial assessment of such information (Adams & Evans, 2004; O'Dwyer & Owen, 2007). Therefore, various studies have empirically shown the relevance of the process of external assurance in terms of enhancing and increasing the credibility of SRs from the standpoint of stakeholders (Fuhrmann et al., 2017; Manetti & Toccafondi, 2012; Simnett et al., 2009). This is consistent with previous studies that document a positive association between independent third-party assurance and SRQ (e.g., Boiral & Heras-Saizarbitoria, 2020; Braam & Peeters, 2018; Braam et al., 2016; Fernandez-Feijoo et al., 2018; Hsueh, 2018). This upheld the view of Junior et al. (2014) who argued that the tradition of reporting sustainability performance and assuring such reports is a global phenomenon that is known for enhancing the quality of the disclosed sustainability information. This is because, external assurance enhances public confidence, consolidates stakeholders' trust, and legitimizes the operation of companies (Braam et al., 2016). This is supported by Hsueh (2018) who posits that third-party assurance mitigates the credibility gap in SRPs. Similarly, Sawani et al. (2010) emphasized that the need for credible SRs in terms of the veracity of the information, the bridging of a credibility gap, and the assurance practice trend birthed the development of standards<sup>8</sup> and guidelines that enhance the auditing process in the practice of sustainability assurance (Manetti & Becatti, 2009). Moreover, the GRI guideline (G4-33) and the Malaysian SRG (section 3.5) recommends the external assurance of SRs to enhance the credibility (Bursa Malaysia, 2018; Global Reporting Initiative (GRI), 2015). However, the assurance of SRs and scholarly research concerning SRQ remain scanty and scarce (Sawani et al., 2010). Consequent to the above arguments, this study proposes a positive association between external assurance and SRQ.

#### 2.2.6. *Family controlled firms*

Family firm in this study is taken as an interaction term in the relationship between the independent variables (board gender diversity, board communication, board integrity, politically connected firms, and external assurance) and the dependent variable (SRQ). Family Controlled Firms (FCFs) simply refers to businesses or firms that are owned and controlled by family members. According to Lamb and Butler (2018), the most popular definition of family firms was given by Miller in 2007. Miller et al. (2007) defined FCFs as companies that over 5% of its equity shares are own by the family and the family has more than one member of the family as executive directors on the board. Whereby, the executive directors combine the duties of both agents and principals (Lamb & Butler, 2018), such that, the agent serving as a principal has the propensity to act more as a steward (Hernandez, 2012; Adams, 1963). In other words, family companies are businesses characterized by heavy participation of founding families in the firms' operation (Chua et al., 2011, 1999) and associated with fewer agency issues compared to non-family firms (Jensen & Meckling, 1976). Hence, the concentrated ownership stake of the controlling family enhances the effective monitoring or supervision of firms' management (Anderson & Reeb, 2003). Meanwhile, the FCFs has its peculiar agency problem between the controlling family and the minority shareholders from the perspective of expropriation in which the minority shareholders are subdued (El Ghouli et al., 2016). However, from the perspective of the Socio-Emotional Wealth (SEW) theory, FCFs differs from non-family firms based on the family firms' inclination to socio-emotional wealth preservation (Cennamo et al., 2012). Thereby, having more attachment for non-economic values (family image and reputation, firm continuity, future generation considerations, building social legitimacy, and others) and with more motivation to be responsible sustainability wise (Cui et al., 2018; Zellweger et al., 2012). Consequently, several studies in both developed and emerging economies have documented that FCFs demonstrates better performance in both financial and sustainability commitments compared to the non-family counterparts (Abdul-Manaf et al., 2013; Amran & Che Ahmad, 2014; Bansal et al., 2018; Che-Ahmad et al., 2020; Cui et al., 2018; Gavana et al., 2017; Lourenço et al., 2019). Such performance is credited to family firms due to their uniqueness<sup>9</sup> in terms of the style of governance (Abdul-Manaf et al., 2013). Although, most of these studies relating to sustainability practice dwell on the probability and the extent or quantity of sustainability disclosure rather than SRQ which is the focus of the present study.

Further, in the Malaysian context, studies as well documented that about 70% of listed companies are own and controlled by families and 85% have owner-managers (Aman & Ismail, 2017; Amran & Che Ahmad, 2014). Besides, Malaysia is said to rank number seven concerning numbers of family own firms worldwide (Wong, 2017). This is an indication that family firms occupy a large business space in Malaysia which shows its relevance to the Malaysian economy. Family members of FCFs are thereby seen as special stakeholders of the company which prompts the family firms to advocate for sustainability practices to meet the needs of stakeholders (Bansal et al., 2018; Lourenço et al., 2019; Marques et al., 2014). This justifies the choice of FCFs as a moderator in addition to the position of Baron and Kenny (1986) in terms of addressing the issue of inconsistencies of findings. That is, where there is a mixed or an inconsistent relationship between the IV and the DV, an interaction term through an indirect effect possibly could explain the scenario (Baron & Kenny, 1986). Moreover, choosing FCFs as an interaction term is to replicate the works of Bansal et al. (2018) which used a sample from 29 countries; Hashmi et al. (2018) in Pakistan; and Che-Ahmad et al. (2020) in Malaysia who employed family firms as moderating variable in their investigations. These authors discovered that family firms could moderate board attributes like board independence, political connection, and CEO career horizons in their associations with CSR disclosure and earnings quality. Therefore, based on these arguments from the perspective of SEW, stakeholder, and legitimacy theories, this study proposes that FCFs moderates the relationship between board governance mechanisms and SRQ.

### 3. Research method

The method employed by this study is a review of the literature concerning sustainability reporting practices and sustainability reporting quality in association with corporate governance attributes. Through this method, the study got an insight into the level of research regarding sustainability reporting quality and how it has been influenced by board attributes focusing on public listed companies from the Malaysian context.

#### 3.1. Research framework

The significance of companies' ensuring a credible SRPs has attracted much advocacy. As a result, the identification of the factors or determinants of credible SRP is indispensably important. As such, the present research framework is built on the agency, stakeholder, legitimacy theories which are integrated with the critical mass, resource dependence, and SEW theories. These theories are seen to constitute the appropriate linkage conceptually in firms' sustainable decisions to act responsibly as good corporate citizens. The agency theory coupled with empirical studies posits that board attributes are vital considerations or elements necessary to solve or ameliorate the agency problems between management and stakeholders due to the separation that subsists between ownership and control (Ajibolade & Uwuigbe, 2013; Fama & Jensen, 1983; Jensen & Meckling, 1976). That is, an effective board monitoring of the management could enhance SRQ. Also, the legitimacy theory which is a popular theory linked to SR is of the view that SRP is a function of the pressure be it economic, environmental, and social through which firms obtain their legitimacy (Suchman, 1995). The firms obtain such legitimacy by acting proportionately with the norms of society via sustainability practices in the form of a social contract (Craig Craig. Deegan, 2000; Lourenço et al., 2019). While society continues to consider the activities of such companies as legitimate. This theory (legitimacy) could be negatively or positively applied based on the sustainability performance level of firms.

Similarly, the stakeholder theory is another popular theory associated with SR which documents the history of determining SRP. This theory emphasizes the responsiveness of firms to the information needs of the stakeholders through SRs (Freeman, 1984; Freeman et al., 2004), which could positively affect the survival as well as the relationship of such companies with their stakeholders (Freeman et al., 2004; Mensah et al., 2017; O'Dwyer, 2002; Şener et al., 2016). Also, this study considers the critical mass theory which is linked to board gender diversity. It postulates that except certain critical mass or threshold of women in terms of their numbers on the board is attained, the positive impact of gender diversity could be hardly achieved (Kanter, 1977). The

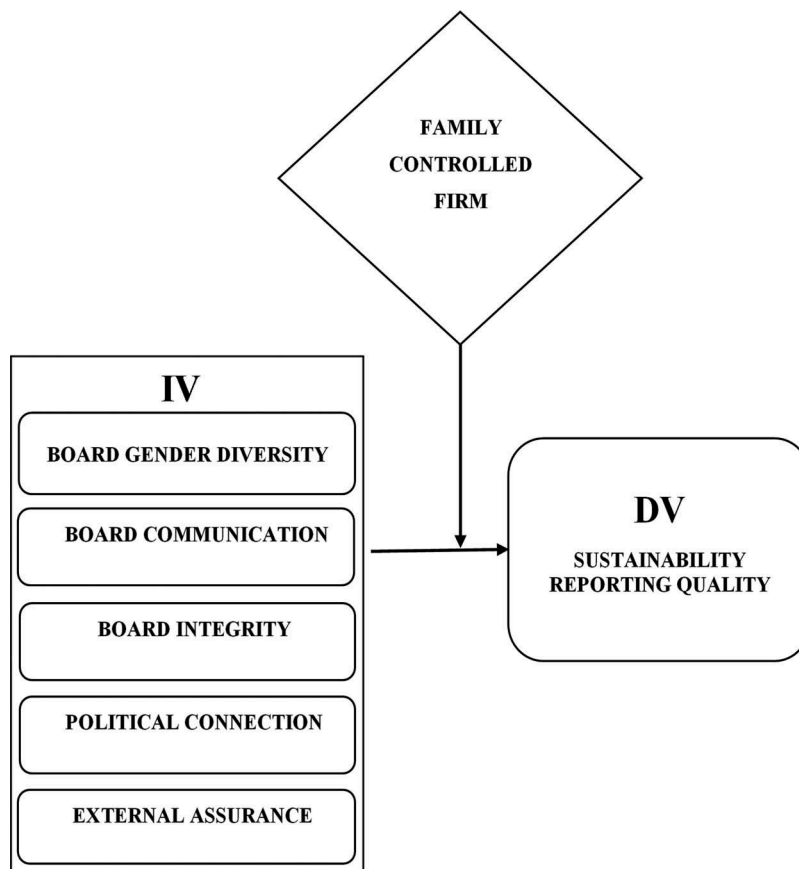
theory, therefore, suggests at least 30% (3 women) female representation on the board of directors which removes the focus of female representation from mere gender (tokenism) to the showcasing of female talent with utmost confidence and less pressure (Konrad et al., 2008) thereby having a positive effect on board outcomes and quality of corporate disclosure. Empirically, Al-Shaer and Zaman (2016) posit that gender diversity enhances SRQ. Therefore, the critical mass theory is of the view that gender diversity enhances sustainability reporting practices. Moreover, the resource dependence theory is connected to the political connection of firms. The theory asserts that through political connections, companies obtain resources in the form of subsidy from government, bailout, financing as well as legitimacy. In return, such companies do their best to please the government via their commitment to government policies concerning SDGs through sustainability practices. As such the resource dependence theory establishes a link between politically connected firms and SRP which by extension affects the SRQ positively. Finally, this study links the SEW theory to family-controlled firms which constitute an interaction term as shown by the theoretical framework. This theory explains the behavioral disposition of FCFs in terms of their sustainability practices which is based on non-economic values (Marques et al., 2014). For instance, FCFs derive fulfillment and satisfaction from non-economic values (social wealth) like the image, name, continuity, and effective management of stakeholders (Bansal et al., 2018; Gomez-Mejia et al., 2011). This is supported by past research that documents a positive relationship between FCFs and SR (Cui et al., 2018; Gavana et al., 2017; Lourenço et al., 2019). The current study used multiple theories in gaining insight into the relationship between the IVs and the DV as a result of the diversity in the variables employed and this is peculiarly consistent with research relating to SRPs (Boiral & Heras-Saizarbitoria, 2020; Hahn & Kühnen, 2013). The proposed theoretical framework is therefore presented in Figure 1 below:

The model replicates or follows the work of Ahmed Haji (2013) and Manning et al. (2019) with the major difference being that the present work introduced a moderator, employs new and different independent variables while concentrating on sustainability reporting quality as the dependent variable in the Malaysian context. Meanwhile, Ahmed Haji (2013) in his study employed two (2) DVs (sustainability disclosure quantity and quality) with different board attributes between 2006 and 2009 in Malaysia. While Manning et al. (2019) in the Netherlands also employed two (2) DVs (corporate sustainability performance and sustainability reporting quality) using different IVs except for external assurance which serves as a control variable. The study employed multiple theories like agency, legitimacy, stakeholder, and signaling theories in establishing links between the variables (Manning et al., 2019).

#### 4. Conclusion and recommendations

The indisputable importance of the future of the planet earth, the people, resources, and the welfare of stakeholders warrants the concept of sustainability reporting practice to be studied. As a result of globalization, industrialization, and technology, organizations are changing in their nature and stakeholder relationships which requires more attention of boards beyond their traditional responsibilities (control and monitoring of management) to a proactive role. That is, the responsibilities of the board of directors have shifted traditionally from what seems to be shareholder-centric to include various stakeholders as this is highlighted clearly to constitute the wider perspective and roles of contemporary corporate governance (Hung, 2011; Rao & Tilt, 2016). Within such a broader view, board governance mechanisms appear to be a principal factor that could be assumed as a determinant of both SRPs and SRQ (Rao & Tilt, 2016). Therefore, the purpose of this research is to conceptually examine SRQ by considering the role of board governance attributes like board gender diversity, board communication, board integrity, political connection, and external assurance as well as the interacting role of family-controlled firms. Based on previous research, mostly in developed countries, effective board governance and external assurance service documented to have enhanced sustainability performance and the quality of SRs through mixed findings. As a followup to the inconclusive empirical evidence regarding the association between board governance attributes and SRPs, the present study delved into studying the relationship conceptually and conclude based on the insight from reviewed literature as follows: (1) Research concerning SRQ is still very scanty in most emerging economies and specifically in Malaysia

**Figure 1. Theoretical Framework**



compared to the developed countries. (2) Proposes a positive association between the reviewed board attributes (i.e. board gender diversity, board communication, board integrity, politically connected firms, external assurance) and SRQ. (3) That FCFs moderates the relationship between the board attributes and SRQ (Bansal et al., 2018; Che-Ahmad et al., 2020; Hashmi et al., 2018). Consequently, this study contributes to the body of knowledge through the examination of these board attributes that have received the least scholarly attention in terms of SRQ in the context of this study. Hence, previous research investigated board governance mostly in association with firm performance, earnings quality, financial reporting quality, firm value, CSR disclosures, and others. The study further adds to existing knowledge via the verification of multiple theories (e.g., agency, legitimacy, stakeholder, critical mass, resource dependence, and SEW theories) as determinants of sustainability practices and SRQ (Hahn & Kühnen, 2013). Aside from the theoretical significance, the study has a practical implication for the government, companies' management, regulators, and other stakeholders in terms of policy considerations and investment decisions regarding sustainability performance and SRQ. Such could contribute to saving the planet earth and specifically Malaysians from the impact and worries over the existing and impending disasters climatically created by man and nature.

The study, however, suffers certain limitations. For instance, the board governance attributes reviewed are just a few out of so many that could be examined concerning SRQ. Moreover, this study is conceptual, as an empirical investigation is important and required to advance the causal or correlational association between board attributes and SRQ. The study, therefore, recommends that future investigations be empirical and should include other board attributes like sustainability committee, compliance with regulations (e.g., Sustainability Reporting Guide), issues about harmonizing sustainability standards, the different levels of external assurance, and its standards and

other variables in examining SRQ. Further, future research could as well investigate SRQ in more countries for comparative purpose especially within Asia as an emerging market.

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### Notes

1. "According to legitimacy theory, corporate legitimacy is required for organizational survival. A company will achieve legitimacy when it is perceived to operate within a socially constructed system of norms, values, and bounds of which the entity is a part. When companies do not satisfy public expectations and requirements, they must cope with increased public pressure, scrutiny, and monitoring, as well as with greater risks to legitimacy" (Manning et al., 2019., p. 2).
2. The World Commission on Environment and Development.
3. "frequency of reporting, level of application of the GRI guidelines, declaration of the level and assurance".
4. "governance, economics, environmental, and social".
5. "Several countries have started adopting either legislative or voluntary initiatives to promote female representation on corporate boards. This includes, for example, Norway (40 % gender quota for female directors or face dissolution), Sweden (25 % voluntary reserve for female directors or threat to make it a legal requirement), Spain (comply-or- explain type law requiring companies to reach up to 40 % female directors by 2015), France (law which requires 50 % gender parity on the board of every public firm by 2015) and more recently Italy (law requiring listed and state-owned companies to ensure one-third of their board members is female by 2015). In addition to European countries, many developing countries such as India, China, Malaysia, and Middle Eastern countries are also recognising the importance of female board members' talent. Finally, in Australia, the Stock Exchange (ASX) in its recent changes to corporate governance principles now requires listed companies to specifically report on gender diversity at board and senior management levels. Most of these initiatives, whether voluntary or legislative, clearly indicate that the presence of women on boards could affect the governance of companies in significant ways (Adams & Ferreira, 2009)" (Rao & Tilt, 2016).
6. "5 kinds of activities are noted as 'markers of integrity'. These are: 1. Ethics or Behavior Code—represents the adoption of an ethics or behavior code as a proxy for a commitment to ethical behavior of the firm and member of staff. 2. Adoption of Programmatic Documents for Corruption Prevention—the adoption of such documents or policies designed to prevent corrupt practices in organizational activities to promote integrity in employees' behavior. 3. Internal Job Rotation—the adoption of internal job rotation policies for employees and managers working in areas that are exposed to the risk of corruption. 4. Whistleblowing Policies—the adoption of whistleblowing policies and reporting such thereof. 5. Training and Learning Program—the adoption of training and learning programs on corruption and integrity" (Cecchetti et al., 2018).
7. "Direct political connections occurs in a situation where one of the senior management personnel of the company for instance, the chairman, chief executive officer, vice-president, executive director or secretary of the board or a major shareholder with at least 10% shareholding in the company is the country's current or former president, prime minister, government minister, senior government employee or a member of the parliament. Also, an indirect political connection could be identified in three ways". Firstly, a firm is deemed as having an indirect political connection "if a relative with the same last name as a head of state or minister is a top officer or a large shareholder". Secondly, a company is: " ... indirectly connected when a top executive or a large shareholder has been described by The Economist, Forbes, or Fortune as having a friendship with a head of state, government minister, or member of parliament". Thirdly, "a firm is politically connected if prior studies or even the press had documented such connection" (Ang et al., 2013; Faccio et al., 2006; Faccio, 2010; Faccio, 2007).
8. "In the past years, two international standards, the IAASB's International Standards on Assurance engagements (ISAE 3000) and the AA1000 Assurance Standards (AA1000AS) have been used dominantly in conducting external verification services on sustainability reports. According to KPMG (2005) there were eight assurance standards identified, two standards being applied globally, two standards applied in Australia and one each in Germany, Japan, Sweden and The Netherlands. Three commonly used standards are AA1000 Assurance Standard (AA1000AS), Global Reporting Initiative Guidelines (GRI) and ISAE 3000" (Sawani et al., 2010).
9. "Family firms have special characteristics that distinguish themselves from non-family firms. In family firms, ownership is concentrated, and managerial ownership is high. The management mainly consists of family members and the board of directors is less open to the outsider. The family spirit is strong in family firms whereby, it serves as a monitoring and controlling mechanism (Fama & Jensen, 1983). Family traits influence the governance of family firms. The involvement of family members in the management allows them to have extensive knowledge in the operations of the firms. Family members can make flexible, timely, and efficient decisions. The presence of family members in the management benefits family firms in terms of a lower cost of debt, and therefore, family firms are more likely to maximize shareholders' values. Finally, the agency cost is expected to be less severe for family firms compared to non-family firms" (Abdul-Manaf et al., 2013, p. 2).



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