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## Article

# Integrated reporting quality in Malaysia: Do chairman attributes matter?

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*Suggested Citation:* Qaderi, Sumaia Ayeshe; Chandren, Sitraselvi; Abdullah, Zaimah (2023) : Integrated reporting quality in Malaysia: Do chairman attributes matter?, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 10, Iss. 1, pp. 1-23, <https://doi.org/10.1080/23311975.2023.2186757>

This Version is available at:

<https://hdl.handle.net/10419/294323>

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**To cite this article:** Sumaia Ayesh Qaderi, Sitraselvi Chandren & Zaimah Abdullah (2023) Integrated reporting quality in Malaysia: Do chairman attributes matter?, Cogent Business & Management, 10:1, 2186757, DOI: [10.1080/23311975.2023.2186757](https://doi.org/10.1080/23311975.2023.2186757)

**To link to this article:** <https://doi.org/10.1080/23311975.2023.2186757>



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Received: 07 February 2023  
Accepted: 28 February 2023;

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Reviewing editor:  
Collins G. Ntim, Accounting,  
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## ACCOUNTING, CORPORATE GOVERNANCE & BUSINESS ETHICS | RESEARCH ARTICLE

# Integrated reporting quality in Malaysia: Do chairman attributes matter?

Sumaia Ayeshe Qaderi<sup>1\*</sup>, Sitraselvi Chandren<sup>2</sup> and Zaimah Abdullah<sup>2</sup>

**Abstract:** In recent research, there has been increased attention on the chairman's role in companies' adoption of non-financial reporting. However, no empirical research has explored the chairman's role in improving the quality of integrated reporting (IR). Using the agency theory, this study responded to an existing research gap in the IR literature by analysing the effect of chairman attributes on IR quality. This study uses the International IR Framework (IIRF) to construct the IR index comprising 100 items and four dimensions (background, form, assurance and reliability, and content). The data consists of 363 company-year observations from Malaysian companies over the period 2017–2020. To test the developed hypotheses, panel-corrected standards error (PCSE) regression is applied. The empirical results indicate that chairmen with longer tenure and larger share ownership are adversely associated with IR quality. Nevertheless, the findings suggest that the chairman age, educational level, and financial expertise are insignificantly related to the IR quality. This is the first research, to the best of the researchers' knowledge, that investigates chairman attributes as a determinant of IR quality in Malaysia. The study's findings are important to regulators, policymakers, corporate executives, and other stakeholders interested in how the chairman's role influences companies' IR quality using evidence from an emerging Asian country—Malaysia.

**Subjects:** Asian Studies; Economics; Finance; Business, Management and Accounting

**Keywords:** Integrated reporting; chairman attributes; agency theory; Malaysia

### 1. Introduction

Integrated reporting (IR) has gained greater interest worldwide in the recent disclosure literature (Vitolla et al., 2020c). IR is a new voluntary reporting (Vitolla et al., 2020c), combining financial and non-financial information into an integrated report (Zouari & Dhifi, 2022). The reasons why companies disclose IR practices are varied. According to Vitolla et al. (2019a), IR addresses the stakeholders' concerns, improving sustainable value creation and increasing corporate legitimacy (Vitolla et al., 2019a). Another reason is IR practice leads to improve companies' financial performance (Pavlopoulos et al., 2019), enhances company value through the trust of stakeholders (Dey, 2020), better corporate reputation Vitolla et al. (2020b), mitigates earnings management (Wu & Zhou, 2022), lower levels of agency costs (Obeng et al., 2020) which endorses earnings quality, minimises the company's capital cost (Vitolla et al., 2020c), and increases the effectiveness of board monitoring capable of reducing information asymmetries and increasing transparency for stakeholders (Cortesi & Vena, 2019).

Due to the financial and non-financial benefits of IR practice, limited research has addressed internal IR determinants, including the board of directors (e.g., Qaderi et al., 2022; Vitolla et al., 2020a), ownership structure (Zouari & Dhifi, 2022), audit committees (Raimo et al., 2020a), company-specific characteristics (Erin & Adegboye, 2022), and financial consequences (Dey, 2020; Vitolla et al., 2020c). However, other studies have focussed on external IR determinants such as country-specific characteristics (Girella et al., 2019), external pressures from stakeholders (Vitolla et al., 2019a), and national culture dimensions (Vitolla et al., 2019b), observing that they all encourage IR quality. In view of the above, prior studies neglected the chairman's role in improving IR quality.

The board chairman, as internal corporate governance (CG) mechanism, is the most powerful person on the boardroom (Machold et al., 2011) and is responsible for shaping strategic corporate decisions through developing board dynamic managerial capabilities and enhancing board value creation (Åberg & Shen, 2020), ensuring board effectiveness (Amran et al., 2014), strengthening the stakeholder confidence in the company (Chandren et al., 2021), resolving conflicts of interest and minimising potential managerial opportunism (Withers & Fitza, 2017), improving the quality of corporate decisions through enhancing the information disclosure's transparency. Theoretically, the agency theory asserts that an independent chairman may play a crucial role in influencing corporate decisions related to disclosure, strengthening the monitoring role (Ahmed Haji & Mohd Ghazali, 2013; Jensen & Meckling, 1976). The research on the role of the chairman is increasing gradually (Banerjee et al., 2020). Researchers like Banerjee et al. (2020) highlighted the need for further research on the board chairman's role because the board chairperson is an internal CG mechanism (Åberg & Shen, 2020) that plays a vital role in improving corporate reporting quality.

Empirical research has investigated the influence of the board chairman on different aspects of accounting, such as financial performance (Amran et al., 2014; Chandren et al., 2021); intellectual capital disclosure (Ahmed Haji & Mohd Ghazali, 2013); and CSR reporting (Haniffa & Cooke, 2005). Although the chairman attributes are a contemporary topic of debate in the literature, a few studies have investigated the chairman attributes such as age (Al-Absy, 2020), tenure, financial expertise (Al-Matari, 2022), and ownership (Chandren et al., 2021). These studies emphasized the need for further research on the chairman attributes. In view of the above, the effect of chairman attributes on IR quality has not yet been analysed by researchers. Therefore, this study bridges this research gap by exploring the influence of some attributes (e.i., age, tenure, educational level, financial expertise, and ownership) on IR quality.

Malaysia provides the necessary impetus to examine chairman attributes and IR quality for several reasons. First, Malaysia is an emerging country that has recently exhibited rapid IR adoption in the corporate sector. Second, Practice 11.2 of the Malaysian Code on CG (MCCG) 2017, established by the Securities Commission Malaysia (SCM), encourages large companies to adopt IR using International IR Framework (IIRF) (Securities Commission Malaysia [SCM], 2017). Third, MCCG 2017 focuses on the chairman's role and responsibilities, including leading the board in its management monitoring to strengthen its effectiveness in safeguarding shareholders' interests (SCM, 2017). However, although the Malaysian regulatory bodies have concentrated on adopting IR in the capital market through initiatives to promote IR, not all listed companies in Malaysia have adopted it as they do not recognise its potential benefits. Thus, there is a need for more research in this area.

This study covers a sample of 363 company-year-observations for Malaysian companies that apply IR practice from 2017 to 2020. This study uses panel-corrected standard error regression (PCSE) to evidence the chairman attributes' effect on IR quality. Using panel data decreases the collinearity problems between independent and control variables and favours the capture of unobservable heterogeneity. The empirical result reveals that the chairman age, educational level, and financial expertise are not correlated with IR quality in Malaysian companies. In contrast, the study's findings indicate that the chairman tenure and ownership are negatively and

significantly related to IR quality. Therefore, this study concludes from these empirical results that the chairman's role does not affect improving IR quality in the Malaysian context. Such a finding is surprising since the boards of Malaysian companies are dominated by controlling family shareholders.

The contributions of this research are three-fold. Firstly, this study provides new evidence on the determinants of IR quality, especially in emerging markets, and complements research concerning the ability of the chairman to improve corporate reporting quality (Åberg & Shen, 2020). Specifically, analysing the impact of some attributes (i.e., age, tenure, educational level, financial expertise, and ownership) on the role played by the chairman with IR quality is novel and is an important contribution of this study. This study is the first to enlighten the chairman's role and their different attributes in improving IR quality, and it will open new research areas in this field. Secondly, this research relies on the agency theory to explain how chairman attributes affect IR quality. Based on this theory, the chairman is considered an essential monitoring mechanism capable of reducing agency problems and information asymmetry and improving disclosure quality. Finally, the findings have direct implications for the policymakers and regulatory bodies who can promote changes to how Malaysian companies select chairmen so they can achieve sustainable performance. This study can help Malaysian companies' managers, investors and stakeholders acquire an in-depth knowledge of the determinants that influence the quality of IR.

The remainder of the paper involves five more sections. Section 2 discusses the theoretical framework, the literature review, and develops the research hypotheses. Section 3 describes the sample and empirical model. Sections 4 and 5 present an analysis of the results and discussion. Finally, Section 6 provides concluding remarks, implications and limitations.

## 2. Theoretical foundation, literature review, and hypotheses development

### 2.1. Theoretical foundation

Building on the seminal research by Jensen and Meckling (1976), recent studies (e.g., Qaderi et al., 2022; Vitolla et al., 2020a) have highlighted agency theory as a critical theoretical lens through which to view the board of directors. This theory explains the interest conflict among managers and shareholders, which raise agency problem and costs (Jensen & Meckling, 1976). To solve these conflicts, there are several remedies suggested by agency theory. One of them is the board of directors (Jensen & Meckling, 1976; Qaderi et al., 2022). The board of directors represents a monitoring mechanism that may assist in reducing information asymmetries and increasing the level and quality of disclosure (Vitolla et al., 2020a). Further, agency theory claims that the chairman, as part of the company's board, may perform a monitoring role that helps to align the interests of management and stakeholder (Åberg & Shen, 2020; Fama & Jensen, 1983). Ahmed Haji and Mohd Ghazali (2013) argue that an independent board chairman may substantially influence corporate decisions concerning disclosure, strengthening the monitoring role. This study applies the agency theory to examine the chairman attributes-IR quality relationship.

### 2.2. Literature review

#### 2.2.1. Determinants of IR quality

Practitioners and academics have paid increasing attention to IR strategy (Raimo et al., 2020a). Therefore, it is necessary to distinguish between internal and external determinants of IR quality. One strand of studies (e.g., Dilling & Caykoylu, 2019; Girella et al., 2019; Vitolla et al., 2019b) has shown different internal determinants that are directly linked with IR quality. In this regard, the first group of researches (e.g., Nguyen et al., 2022; Qaderi et al., 2022; Raimo et al., 2020a, 2020b; Vitolla et al., 2020a) has found that stakeholder-oriented CG (board of directors including independence, size, gender diversity, and activity; audit committees such as independence, financial expertise, size, and meetings) and shareholder-oriented CG (ownership structure namely state ownership, ownership concentration, and managerial ownership) are one of the internal determinants of IR quality. Another

group of studies (e.g., Dilling & Caykoylu, 2019; Frias-Aceituno et al., 2014; Girella et al., 2019; Iredele, 2019; Vitolla et al., 2020b) has investigated the drivers of IR quality (such as company-level determinants including company size, profitability, and financial leverage).

However, the second strand of studies has examined the external determinants of IR quality (e.g., country level, stakeholder pressure, national and culture). Several studies find that Hofstede's cultural dimensions (e.g., individualism, masculinity, power distance, and indulgence) are negatively related to IR quality (Vitolla et al., 2019b). Other studies find that IR quality is positively related to pressure from stakeholders (e.g., shareholders, employees, environmental protection companies, governments, and customers) (Vitolla et al., 2019a). Further, a strand of research investigated the correlation between country-level characteristics (proxied by gross domestic product (GDP) and legal system) and IR adoption (Girella et al., 2019). As highlighted previously, no empirical research has yet examined the role of chairman attributes in improving IR quality. Consequently, this study intends to fill this research gap by examining the impact of chairman attributes on the quality of IR in the Malaysian context.

### 2.2.2. *Chairman attributes*

The chairman is the formal leader of the board and is responsible for ensuring board effectiveness and communicating with the stakeholders (Amran et al., 2014). In addition, the literature confirms that the corporate board is a key mechanism in internal governance monitoring (Åberg & Shen, 2020). Thus, the chairman plays a monitoring role and is responsible for resolving conflicts of interest and minimising potential managerial opportunism (Ghaleb et al., 2021a; Withers & Fitza, 2017), thus increasing the company's transparency and voluntary disclosures. Accordingly, MCCG 2017 defines the board chairman as responsible for the company's leadership and board effectiveness and for instilling good CG practices (SCM, 2017). In addition, MCCG 2017 focuses on the chairman's role and responsibilities, including leading the board in its monitoring of management to strengthen its effectiveness in safeguarding shareholders' interests (SCM, 2017).

Empirically, some scholars have attempted to determine relationships that depend on the leadership effect of the chairman (Withers & Fitza, 2017). They argue that the chairman's knowledge and experience contribute to positive leadership behaviour (Åberg & Shen, 2020). Recently, scholars have started to pay attention to the chairman attributes role in different accounting aspects. Considering the crucial role that the chairman plays in corporate decisions, scholars have analysed the extent to which various chairmen's demographic and personality characteristics (e.g., age, ethnicity, tenure, power, and experience) affect their corporate decisions regarding financial performance and disclosure policies. For instance, Chandren et al. (2021) find that chairman age and ownership have a positive association with operating performance, while chairman tenure may significantly reduce operating performance. Additionally, Amran et al. (2014) show that the chairman age and ethnicity are likely to improve financial performance.

Al-Matari (2022) finds that chairmen tenure and expertise have a positive correlation with the company's financial performance. Al-Absy (2020) reveals that the chairman age and tenure significantly influence financial stability. However, Ahmed Haji and Mohd Ghazali (2013) find that an independent chairman can play a better role in influencing intellectual capital disclosure. Haniffa and Cooke (2005) indicate that a chairman with multiple directorships tends to increase corporate social disclosures. Although the board chairman has a substantial role in establishing corporate policies and is responsible for monitoring, managing and mitigating uncertainty (Ghaleb et al., 2021a), no study has analysed the chairman attributes-IR quality relationship. Accordingly, this study aims to fill this gap by analysing whether and how the chairman plays a role in improving IR quality.

## 2.3. *Hypothesis development*

### 2.3.1. *Chairman age and IR quality*

Age is one of the most critical attributes of board diversity, implying the knowledge, experience, and skills that directors possess and might contribute to making strategic decisions (Khan et al.,



2019a). The chairman age plays a key role in strategic leadership, enhancing the board's value creation and supporting the stakeholders' interests (Åberg & Shen, 2020). MCCG 2017 emphasises that boardroom diversity may increase board effectiveness, particularly the board age and senior management (SCM, 2017). Theoretically, agency theory argues that diversity in directors' age may provide better monitoring of managerial behaviours (Alfiero et al., 2018). Elmagrhi et al. (2019) argue that the older the directors, the higher the corporate environmental performance. This is because older directors bring plenty of professional knowledge, experience, networks, and financial resources, thus improving transparency by reporting non-financial information.

Despite a few studies investigating the influence of board age on non-financial reporting quality (Katmon et al., 2019; Khan et al., 2019b), the effect of the chairman age on IR quality has not been examined. However, limited studies provide evidence of the correlation between directors' age and IR quality. For instance, Alfiero et al. (2018), in a study of 120 Italian companies in 2014, and Alfiero et al. (2017), in European countries, show no correlation between the board members' age and IR adoption, contrary to the belief that older directors are more impelled towards the disclosure of IR practices. Likewise, Songini et al. (2022) reveal that older board members insignificantly impact IR quality among 53 companies from 2013 to 2016. Given the lack of literature on the board chairman age-IR relationship and following agency theory, the current study predicts that an older chairman would be more willing to engage in IR quality. Thus, the following hypothesis is predicated:

**H1.** Chairman age is positively related to IR quality.

### 2.3.2. *Chairman tenure and IR quality*

Chairman tenure refers to the duration of service that the current board chairman has been in this position (Åberg & Shen, 2020). Board or chairman tenure is one of the indicators of director power and experience (Krause et al., 2017; Rao & Tilt, 2016). MCCG 2017 requires listed companies to ensure that they limit independent directors of up to a cumulative term of nine years (SCM, 2017). With the management-friendliness hypothesis under an agency theory, Vafeas (2003) states that long-tenured board members could increase the agency problem and reduce the effective oversight of executives. Byrd et al. (2010) posit that directors with long tenures will increase agency problems and lower the board's oversight function of managers, thus discouraging the disclosure of CSR-related information.

To the best of the researchers' knowledge, there is no empirical evidence of board or chairman tenure-IR quality relationship. However, existing research on the impact of board tenure on non-financial reporting quality indicates unclear findings. Some literature points out that companies with longer board tenure are positively associated with better CSR quality (Katmon et al., 2019; Khan et al., 2019a). A possible explanation is that board tenure may be a factor that provides greater knowledge and experience, resulting in a better understanding of the company's business environment (Handajani et al., 2014). However, other studies show a negative correlation between long-tenured directors and CSR reporting (Handajani et al., 2014; Rao & Tilt, 2016), indicating that a board with longer tenure may impair its monitoring function, increase agency and information asymmetry problems (Byrd et al., 2010), and thus reduce the quality of disclosure. However, Khan et al. (2019b) conclude that board tenure has an insignificant impact on CSR quality. As this stream of literature is still gaining attention from scholars and is consistent with the management-friendliness hypothesis, this study predicts that a long-tenured chairman will lead to reducing IR quality. Therefore, the following hypothesis is predicated:

**H2.** Chairman tenure is negatively related to IR quality.

### 2.3.3. *Chairman educational level and IR quality*

Diverse levels of education among board members are one of the key resources contributing to influencing or enhancing the cognitive ability of the board, which may, in turn, influence strategic decisions relating to a company's policy of financial or non-financial disclosure (Katmon et al., 2019). Directors with a high educational level are a valuable resource for improving non-financial performance (Harjoto et al., 2019). Higher-educated board members exhibit greater confidence in their knowledge and are better able to handle complex ethical practices (Elmagrhi et al., 2019). Accordingly, MCCG 2017 states that boards should recruit directors with a mix of the knowledge, skills, qualifications, and experience required for the position (SCM, 2017). Agency theory posits that directors with diverse educational levels may be more perceptive in decision-making, increasing boards' effectiveness (Bear et al., 2010). Elmagrhi et al. (2019) claim that diversity in educational levels plays a crucial role in improving the board's performance, including boosting managerial monitoring, providing different supervision perspectives, improving board independence, and hence enhancing non-financial disclosure.

Only a few researchers have tested the impact of board members' education level on non-financial reporting quality (e.g., Katmon et al., 2019; Khan et al., 2019a, 2019b). However, only one study attempted to examine the board education-IR quality nexus in the international context (Songini et al., 2022), showing that the higher the directors' educational level, the more improved IR quality. This positive relationship may be because that educational level improves directors' cognitive ability by providing wider knowledge and strengthening their problem-solving ability, producing alternative ideas on strategic issues on non-financial information (Katmon et al., 2019; Khan et al., 2019a). Drawing on the paucity of literature on Malaysia and the agency theory, this study anticipates that a chairman with a higher educational level could enhance IR quality. Thus, the following hypothesis is predicated:

**H3.** Chairman's educational level is positively related to IR quality.

### 2.3.4. *Chairman financial expertise and IR quality*

The financial expertise of directors indicates knowledge and experience, which in turn may enhance the cognitive ability of the directors (e.g., the ability to make good strategic and financial decisions) (Elmagrhi et al., 2019) and finally increase financial and non-financial disclosure (Ahmed Haji & Anifowose, 2016a). Åberg and Shen (2020) assert that a chairman with more expertise will perform better and more confidently when providing external information to stakeholders. Agency theory posits that financial expertise is a useful way to mitigate agency conflicts by increasing the board's effectiveness and improving non-financial performance (Ganesan et al., 2019). Bear et al. (2010) argue that directors' financial expertise is essential in board leadership as they have various resources to monitor management behaviour better and solve problems.

Although empirical evidence concerning the influence of directors' financial expertise on non-financial disclosure offers conflicting results (Ahmad et al., 2018; Dienes & Velte, 2016; Ganesan et al., 2019; Harjoto et al., 2015), empirical studies investigating the effect of chairman on IR quality remain scarce. Wang et al. (2020) indicate that the board members' financial expertise is influential in making decisions regarding IR quality. Likewise, Erin and Adegboye (2022) reveal that directors with financial expertise are more likely to engage in IR-related information. One possible explanation is that the chairman's financial expertise is a valuable monitoring tool for companies to improve IR quality. Consistent with the agency theory perspective, this study presumes that companies with a chairman with financial expertise may increase their IR quality. Consequently, the following hypothesis is posited:



**H4.** Financial expertise of the chairman is positively related to IR quality.

#### 2.3.5. Chairman ownership and IR quality

Another aspect of chairman characteristics considered in the literature is chairman share ownership. This refers to a chairman's share proportion (Chandren et al., 2021). Two opposing views under the agency theory perspective have commonly been used to explain the board ownership-disclosure relationship. The first view (entrenchment hypothesis) expects that board ownership could harm voluntary disclosure (Jensen & Ruback, 1983; Sadou et al., 2017). According to Abu Qa'dan and Suwaidan (2019), companies with higher directors' ownership tend to participate less in non-financial activities. The second view (alignment of interest hypothesis) suggests that director ownership positively impacts voluntary disclosure (Hafsi & Turgut, 2013; Jensen & Meckling, 1976). Adel et al. (2019) claim that directors with larger share ownership are more likely to engage in CSR-related information.

Although many academic studies have investigated the linkage between board ownership and non-financial reporting quality (e.g., Ahmed Haji, 2013; Sadou et al., 2017), less research has focused on the board ownership-IR quality relationship. For instance, Raimo et al. (2020b) indicate that executive directors' ownership is correlated with lower IR quality. However, Masduki and Zaid (2019) find evidence that executive directors' share ownership is unrelated to the IR disclosure level. In line with the entrenchment hypothesis, this study predicts that the higher director ownership, the lower the IR quality. Therefore, the following hypothesis is predicated:

**H5.** Chairman share ownership is negatively related to IR quality.

### 3. Research design

#### 3.1. Sampling and data

The sample included all companies operating in the Malaysian market applying IR over 2017–2020. The following sample selection criteria were applied in this study. First, if a company states in its annual report that it is following the principles of the IIRF as presented by the International IR Council (IIRC). Second, if the term “integrated” is mentioned in the report title. In addition, financial companies were included in the sample due to the lack of particular legislation for IR adoption in financial or non-financial companies (Suttipun & Bomlai, 2019). Thus, the final unbalanced panel data sample comprises 363 company-year observations. The IR and CG data were manually collected from companies' annual reports, while other financial data were retrieved from the Thomson Reuters DataStream. The sample selection process is shown in Table 1.

#### 3.2. Measurement of research variables

##### 3.2.1. Dependent variable

The dependent variable is IR quality (IRQ), which focuses on the content of information disclosed and considers the themes, form, and style (Hammond & Miles, 2004; Vitolla et al., 2019a). Further,

**Table 1. Sample selection**

Details	Observations
Company-year observations that apply IR	378
Less: Company-year observations that are being delisted from Bursa Malaysia	(4)
Less: Company-year observations due to duality between CEO and Chairman	(11)
= Company-year observations in final sample	363

the disclosure quality provides relative usefulness of the data and more reliable disclosure than quantity (Al Lawati et al., 2021). This study used the coding instrument (IR index) based on the IIRF and prior IR studies, comprising 100 items of information in four dimensions (background, form, assurance and reliability, and content). Content analysis is applied to capture the IRQ in this study (Qaderi et al., 2021; Vitolla et al., 2020a).

Following previous research works (Pistoni et al., 2018), this study used the scoreboard for the background category, containing 7 items, is evaluated to enable stakeholders to understand the introduction of the information required to be included in an IR under the IIRF. A score of “1” is assigned when the company disclose an IR item in its annual report and “0” otherwise. Hence, value 7 is the maximum score for this category. The scoreboard for the assurance and reliability category, consisting of 3 items, is evaluated by explaining that IR assurance can assist stakeholders in understanding a company’s non-financial performance and promoting additional investment, especially when IR disclosure deals with strategic issues. A value of “1” is assigned when the IR item has existed in the annual report and “0” otherwise. Thus, this category has a maximum score of 3.

Following Ahmed Haji and Anifowose (2016b), the scoreboard for the content category (87 items) is evaluated based on compliance with the IIRF. A score ranging from 0 to 3 was given to each IR item involving this category. A value of “0” is connected to the absence of an IR item. A score of “1” corresponds to a description of narrative or general qualitative information. A value of “2” is connected to a description of qualitative information with a specific explanation. Finally, a score of “3” corresponds to a description of qualitative and quantitative information. Therefore, the maximum score for this category is 261 (i.e.,  $3 \times 87 = 261$ ). The final category is “form”, which comprises 3 items to assist stakeholders in understanding the readability and accessibility of the information disclosed in IR. The adopted scoreboard is assigned a score between 0 (absence) and 3 (qualitative and quantitative information). Thus, this category has a maximum score of 9 (i.e.,  $3 \times 3 = 9$ ). Finally, the overall IRQ is calculated as the percentage of the number of IR items disclosed to the total items that should be disclosed in the checklist (280 scores). A breakdown of the evaluation categories and scoring mechanisms is presented in Table 2.

This study carried out the validity tests for the IR index by taking the experts’ opinions from IR academics. Further, the study applied the internal consistency test by conducting Cronbach’s Coefficient Alpha test to ensure the reliability of the index. The results for IRQ over the four years were 0.9106, implying this value is reliable and acceptable. Additionally, a single coder read and checked all the annual reports twice by the same researcher in two separate coding periods (Wan-Hussin et al., 2021) to ensure reliability in the study’s data coding. Finally, this study selected 20% from earlier scoring for the study’s sample and re-scored it three months later. The results of the test-retest reliability approach, testing the correlation between the first and subsequent scores, found the correlation to be greater than 90%, indicating that the scores are reliable and valid.

### 3.2.2. Independent variables

This study measures the chairman age (CHAIRAGE) as the age in years (Chandren et al., 2021). This study follows previous studies and measures chairman tenure (CHAIRTEN) by the number of years being chairman in the company (Åberg & Shen, 2020; Ghafran & Yasmin, 2018). CHAIREDULEV is computed in this study using a dummy variable, scoring “1” if the chairman has a postgraduate degree (e.g., master or doctorate) and “0” otherwise, consistent with previous studies (Li et al., 2019). This study calculates CHAIRFEXP using a dummy variable that takes “1” if the chairman has financial qualifications (e.g., accounting, finance, auditing, and economics) or has previous financial experience and “0” otherwise (Ghafran & Yasmin, 2018). Following previous studies, this study measures CHAIROWN by dividing the number of shares owned by a chairman to the company’s total number of shares issued (Chandren et al., 2021).

**Table 2. IRQ scoring model**

<b>(1) Background</b>	<b>(2) Assurance and reliability</b>	<b>(3) Content elements and fundamental concepts</b>	<b>(4) Form</b>
x = 0; ✓ = 1	x = 0; ✓ = 1	x = 0; ✓ = 3	x = 0; ✓ = 3
• Motivation for adopting IR	• Internal audit of the report	• Organizational overview & external environment	• Readability and clarity
• Objectives pursued by the IR	• Third-party verification of the report	• Business model	• Conciseness
• Document beneficiaries/ recipients	• Acknowledgements and awards for the report	• Risks & opportunities	• Accessibility
• Person in charge of the IR process		• Strategy & resource allocation	
• CEO letter demonstrating sustainability commitment		• Governance	
• Title of IR		• Performance	
• Consistency with generally applied disclosure standards		• Outlook	
		• Basis of presentation	
		• Financial capital	
		• Manufactured capital	
		• Intellectual capital	
		• Human capital	
		• Social and relationship capital	
		• Natural capital	
		• Value creation process	
<b>Maximum score: 7</b>	<b>Maximum score: 3</b>	<b>Maximum score: 261</b>	<b>Maximum score: 9</b>

### 3.2.3. Control variables

This study used several control variables selected consistent with earlier research (e.g., Al-Qadasi et al., 2019; Alshorman et al., 2022; Altarawneh et al., 2022; Badru & Qasem, 2021; Chandren et al., 2021; Dey, 2020; Ghaleb et al., 2021b; Ntim et al., 2019; Pavlopoulos et al., 2019; Qasem et al., 2022; Raimo et al., 2022; Vitolla et al., 2020a; Zouari & Dhifi, 2022) to improve the regression model goodness of fit. These included board size (BSIZE), board independence (BINDEP), CEO age (CEOAGE), CEO tenure (CEOTEN), company size (CSIZE), company leverage (DR), return on assets (ROA), ownership concentration (OWNCON), the presence of a CSR committee (CSRCOM), and audit firm size (AFSIZE). All research variables are defined in Table 3.

### 3.3. Regression model

The main regression analysis is estimated using panel data with standard errors corrected (PCSE). The main analysis uses IR quality as the dependent variable and chairman attributes as independent variables. The following regression model was estimated:

$$\begin{aligned}
 IRQ_{it} = & \beta_0 + \beta_1 CHAIRAGE_{i,t} + \beta_2 CHAIRTEN_{i,t} + \beta_3 CHAIREDDULEV_{i,t} + \beta_4 CHAIRFEXP_{i,t} \\
 & + \beta_5 CHAIROWN_{i,t} + \beta_6 BSIZE_{i,t} + \beta_7 BINDEP_{i,t} + \beta_8 CEOAGE_{i,t} + \beta_9 CEOTEN_{i,t} \\
 & + \beta_{10} CSIZE_{i,t} + \beta_{11} DR_{i,t} + \beta_{12} ROA_{i,t} + \beta_{13} OWNCON_{i,t} + \beta_{14} CSRCOM_{i,t} \\
 & + \beta_{15} AFSIZE_{i,t} + \text{industry Fixed Effects}_i + \text{Year Fixed Effects}_t + \varepsilon_{i,t}
 \end{aligned} \quad (1)$$

**Table 3. Research variables description**

Variables	Description
<b>Dependent variable</b>	
IRQ	Percentage of the number of IR items disclosed to the total items that should be disclosed in the IR checklist (280 scores)
<b>Independent variables</b>	
CHAIRAGE	Chairman age in years
CHAIRTEN	Number of the years in which the present board chairman has been serving in this position
CHAIREDULEV	Dummy variable: “1” = a chairman has a postgraduate degree, and “0” = otherwise
CHAIRFEXP	Dummy variable: “1” = a chairman holds financial qualifications or has previous financial expertise, and “0” = otherwise
CHAIROWN	Percentage of shares owned by a chairman
<b>Control variables</b>	
BSIZE	Number of directors on the board
BINDEP	Percentage of an independent board of directors
CEOAGE	Age of the CEO in years
CEOTEN	Number of years the present CEO has held this position in the company
CSIZE	Natural log of the total assets
DR	Total debt/Total assets
ROA	Net income/Total assets
OWNCON	Percentage of shares held by the top five largest shareholders
AFSIZE	Dummy variable: “1” = the company is audited by BIG4 auditors, and “0” = otherwise
CSRCOM	Dummy variable: “1” = if there is a CSR committee in the company, and “0” = otherwise

All research variables are defined in Table 3.  $\beta_0$  is the constant,  $\beta_1$ - $\beta_{15}$  represent the regression coefficient; Industry and Year are the industry and year-fixed effects; the indices  $i$  and  $t$  are the companies and the year, and  $\epsilon$  represents the error term.

## 4. Empirical results

### 4.1. Descriptive analysis

Table 4 summarises descriptive statistics of all variables for the 2017–2020 period. The average IRQ is 54.474. This score shows that IR quality by Malaysian companies was moderate, indicating good involvement with IR practices in the Malaysian company’s samples. This finding is aligned with prior IR studies in developed and developing countries (Cooray et al., 2020; Vitolla et al., 2020a).

In terms of chairman attributes, CHAIRAGE ranges between 44 and 88 years, with an average (median) of 67.774 (69) years, indicating that Malaysian companies often appoint mature board chairmen who fall into the age category of 60+ years. This result is higher than the average found by Chandren et al. (2021), p. 68.213 years during the period 2017 to 2019 for a sample of 89 Malaysian companies. CHAIRTEN lies between 1 and 49.262 years, with a mean of 8.588 years served in the same company, implying that Malaysian companies prefer to retain the chairman for a longer tenure. This mean is slightly lower compared to the finding of Chandren et al. (2021), p. 9.877 years. The mean value of CHAIROWN is 7.279%, ranging from 0 to 78.444%, and lower than that documented by Chandren et al. (2021), p. 9.40%. The average CHAIREDULEV is 47.90%.

**Table 4. Descriptive analysis of research variables**

Variables	Mean	SD	Min	Median	Max
IRQ	54.474	9.297	31.429	55.000	68.929
CHAIRAGE	67.774	8.930	44.000	69.000	88.000
CHAIRTEN	8.588	9.642	0.331	5.462	49.262
CHAIREDULEV	0.479	0.500	0.000	0.000	1.000
CHAIRFEXP	0.336	0.473	0.000	0.000	1.000
CHAIROWN	7.279	17.416	0.000	0.000	78.444
BSIZE	8.532	1.937	5.000	8.000	13.000
BINDEP	0.532	0.130	0.273	0.500	0.857
CEOAGE	55.325	8.211	34.000	55.000	78.000
CEOTEN	7.280	8.382	0.416	4.523	41.719
CSIZE	15.854	1.703	11.744	15.693	20.455
DR	22.932	15.981	0.000	21.210	65.493
ROA	5.364	7.701	-14.150	4.000	34.410
OWNCON	62.621	16.440	24.641	64.910	87.700
AFSIZE	0.843	0.364	0.000	1.000	1.000
CSRCOM	0.738	0.440	0.000	1.000	1.000

Notes: Number of observations = 363. All research variables are defined in Table 3.

For CHAIRFEXP, about 33.60% of the sample observations have financial qualifications or previous financial experience (e.g., accounting, auditing, and finance).

Regarding the control variables, the average BSIZE is about 8.532 (8 directors); 53.20% of board members identified as BINDEP. The average CEOAGE is 55.325 years. In contrast, the mean CEOTEN in the same company is about 7.280 years, indicating that Malaysian companies prefer to retain the CEO for a longer period. On average, CSIZE is 15.854, ROA is 5.364%, and the average DR is 22.932%. Furthermore, OWNCON has a mean value of 62.512%. About 84.30% of Malaysian companies were audited by one of the BIG4 audit firms. Finally, around 73.80% of companies have a CSR committee.

#### 4.2. Diagnostic results

Before selecting regression analysis, several diagnostic tests must be met to ensure the validity of the research model. First, to mitigate the potential effect of outliers, the authors winsorise all continuous variables with outlier values at the top and bottom 1% (Katmon et al., 2019; Obeng et al., 2020). Second, the normality of error terms and linearity are tested, and the normality test result indicates a relatively normal distribution. Third, Table 5 reports the correlation matrix and variance inflation factors (VIF) to check the multicollinearity problem. All correlations coefficients among the independent variables are lower than 0.80, implying no evidence of a multicollinearity problem in the regression model. According to Gujarati and Porter (2009), multicollinearity problems exist if the correlation coefficients are lower than 0.80. As presented in Table 5, the values of VIF are less than 10, confirming that this study has no serious multicollinearity issues (Hair et al., 2014).

Fourth, the Breusch-Pagan and Lagrange Multiplier test was employed to choose between the random-effects and the pooled ordinary least squares (OLS) regression. The results in Table 6 indicate that the null hypothesis is rejected ( $p$ -value = 0.000); thus, the random-effects regression is more appropriate than pooled OLS regression (Gujarati & Porter, 2009). Finally, the authors compare fixed-effects and random-effects regression by using the Hausman test. The result concludes that the  $p$ -value is 0.000 (significant); thus, fixed-effects regression is more suitable

**Table 5. Pearson correlation matrix of all variables**

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) IRQ	1.00															
(2) CHAIRAGE	-0.04	1.00														
(3) CHAIRTEN	-0.22***	0.46***	1.00													
(4) CHAIREDDULEV	0.05	-0.16***	-0.07	1.00												
(5) CHAIREXP	0.10**	-0.12**	-0.14***	-0.18***	1.00											
(6) CHAIROWN	-0.15***	0.13**	0.43***	-0.11**	-0.15***	1.00										
(7) BSIZE	0.28***	-0.07	-0.17***	0.02	0.04	-0.01	1.00									
(8) BINDEP	0.22***	0.05	0.02	0.14***	0.13**	-0.14***	-0.22***	1.00								
(9) CEOAGE	0.03	0.10*	0.09*	-0.10*	0.01	0.08*	0.04	-0.05	1.00							
(10) CEOTEN	-0.18***	0.10*	0.13**	-0.20***	-0.03	0.09*	0.07	-0.21***	0.51***	1.00						
(11) CSIZE	0.44***	0.17***	0.02	0.02	0.10*	0.10*	0.22***	0.21***	0.06	-0.05	1.00					
(12) DR	0.16***	-0.01	-0.16***	-0.03	0.04	0.03	0.16***	-0.08	0.05	-0.04	0.15***	1.00				
(13) ROA	-0.10**	-0.02	-0.01	0.10*	-0.05	-0.04	-0.04	-0.13**	-0.12**	0.03	-0.24***	-0.12**	1.00			
(14) OWNCON	0.16***	-0.04	-0.09*	0.02	0.02	-0.06	0.00	0.13**	-0.11**	-0.26***	0.17***	0.02	0.01	1.00		
(15) AFSIZE	0.10*	-0.04	-0.06	-0.03	0.07	-0.13**	0.22***	0.06	-0.05	-0.11**	0.34***	0.10*	-0.03	0.29***	1.00	
(16) CSRCOM	0.03	0.04	0.03	-0.04	-0.08	0.08	-0.01	-0.03	0.08	0.10**	0.03	-0.21***	0.01	0.08	0.10**	1.00
VIF	-	1.64	1.97	1.41	1.19	1.58	1.36	1.70	1.54	1.64	2.12	1.33	1.40	1.40	1.38	1.78

Notes: \*\*\*, \*\*, and \* indicate significance at 0.01, 0.05, and 0.10 levels, respectively. All research variables are defined in Table 3.



(Gujarati & Porter, 2009). Fifth, the Modified Wald test is applied to identify heteroscedasticity. The study's results reveal that the  $p$ -value is 0.000, hence indicating the presence of heteroscedasticity (Hair et al., 2014). Finally, the findings of the Wooldridge test for autocorrelation indicate that the  $p$ -value is 0.000, therefore the presence of autocorrelation in the panel regression (Wooldridge, 2011). To solve these problems, this study runs PCSE for heteroscedasticity and autocorrelation using Prais-Winsten regression (García Martín & Herrero, 2020; Ghaleb et al., 2022).

#### 4.3. Multivariate regression analysis

Table 6 displays the PCSE regression results on the effect of chairman attributes on IR quality. Models (1)–(5) show the regressing results for the effect of each independent variable on IR quality. The full Model is shown in Model (6). Table 6 indicates that  $R^2$  in Model (6) is 0.7670%, indicating that the research variables can explain 76.70% of the variation in IR quality. The  $p$ -value of Wald  $\chi^2$  (0.000) for all study models is less than 1%.

PCSE regression result in Model (6) of Table 6 demonstrates that CHAIRAGE is not significantly associated with IRQ. Thus, H1 is rejected. This result suggests that the chairman age does not play a substantial role in improving IR quality. However, CHAIRTEN inversely and significantly influences companies in engaging in IRQ at the 0.05 level. This result supports H2 and shows that the long-serving the chairman, the less IR quality.

In contrast, Table 6 in Model (6) shows that CHAIREDULEV has a positive but insignificant correlation with IR quality. Thus, H3 is rejected. That is, the chairman's educational levels do not significantly improve corporate IR quality. Additionally, CHAIRFEXP is positively but insignificantly correlated with IR quality. Thus, H4 is rejected. That is, chairmen with financial expertise are not interested in engaging in IR quality. Finally, the results support H5, showing that CHAIROWN is strongly and negatively associated with IR quality at the 0.01 level. This means that the chairman with larger share ownership tends to engage less in IR practices.

For the control variables, the regression findings reveal that larger board size and greater board independence are significantly and positively related to IR quality. These findings align with prior studies (Qaderi et al., 2022; Vitolla et al., 2020a). Moving to CEO age, the results find that older CEOs have a positive relationship with IR quality. However, long-tenured CEOs are associated with lower IR quality. Concerning the company-specific attributes, the regression result shows that large companies affect positively and significantly IR quality, which is consistent with Vitolla et al. (2020a) and Vitolla et al. (2020b). Further, the results indicate that highly leveraged companies (DR) and profitable companies (ROA) are positively and significantly related to the quality of IR, in line with the previous studies (Girella et al., 2019; Wang et al., 2020). Moreover, companies with highly concentrated ownership tend to improve IR quality, similar to (Ahmed Haji & Anifowose, 2016a). As for audit firm size, the result indicates that AFSIZE does not affect IR quality. The study's result disagrees with studies conducted by Erin and Adegboye (2022), who show that companies audited by BIG4 auditors report higher IR quality. Finally, the result shows that the presence of a CSR committee is related to the company's engagement in IR practice, which is consistent with previous studies (e.g., Raimo et al., 2020b; Vitolla et al., 2020a).

#### 4.4. Robustness analysis

Several tests were used in this study to check the results' robustness. Firstly, this research runs the main regression model separately for each independent variable, following the work (Zaid et al., 2019). The PCSE regression results in Model (1) to Model (5) are consistent with the findings in final Model (6). Overall, the robustness test results suggest that the main results remain fairly robust. Secondly, alternative measures of both IR quality are used, namely, IR disclosure level, measured using the binary scale, following the prior studies (Ahmed Haji & Anifowose, 2016a). A score of "1" is assigned if the company disclose an IR item in its annual report and "0" otherwise. The findings of Table 7 are similar to the main results reported in Table 6, indicating that the findings are robust. Thirdly, this study re-estimates the regressions model by including alternative measures of chairman

**Table 6. PCSE regression results on chairman attributes and IR quality**

Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
CHAIRAGE	-0.063 (-1.557)					-0.025 (-0.702)
CHAIRTEN		-0.097*** (-3.105)				-0.050** (-2.209)
CHAIREDDULEV			0.497 (0.745)			0.647 (0.950)
CHAIRFEXP				0.697 (1.217)		0.463 (1.007)
CHAIROWN					-0.070*** (-4.982)	-0.056*** (-4.840)
BSIZE	0.847*** (9.375)	0.822*** (7.454)	0.856*** (10.211)	0.867*** (10.171)	0.918*** (10.981)	0.853*** (8.152)
BINDEP	7.771*** (4.347)	6.582*** (4.319)	7.691*** (4.207)	7.658*** (5.037)	6.234*** (4.834)	5.279*** (4.361)
CEOAGE	0.152*** (3.306)	0.149*** (3.389)	0.150*** (3.346)	0.147*** (3.219)	0.147*** (3.596)	0.146*** (3.616)
CEOTEN	-0.236*** (-4.586)	-0.228*** (-4.398)	-0.234*** (-4.619)	-0.237*** (-4.987)	-0.240*** (-5.152)	-0.228*** (-4.439)
CSIZE	2.695*** (12.434)	2.586*** (14.980)	2.633*** (13.743)	2.630*** (15.666)	2.687*** (16.083)	2.637*** (12.650)
DR	0.018* (1.782)	0.015* (1.960)	0.019* (1.663)	0.018 (1.541)	0.023** (2.097)	0.022*** (3.045)
ROA	0.060* (1.714)	0.054* (1.661)	0.054* (1.731)	0.056* (1.870)	0.054* (1.943)	0.054* (1.783)
OWNCON	0.030**	0.033**	0.032**	0.034**	0.034***	0.033**

(Continued)

**Table 6. (Continued)**

Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
AFSIZE	(2.323) 0.426 (0.265)	(2.372) 0.512 (0.354)	(2.490) 0.542 (0.313)	(2.487) 0.399 (0.244)	(2.616) -0.324 (-0.199)	(2.386) 0.013 (0.008)
CSRCOM	1.203* (1.706)	1.164* (1.691)	1.166 (1.607)	1.227 (1.595)	1.343* (1.826)	1.349* (1.674)
Constant	-6.576*** (-2.637)	-7.499*** (-2.657)	-9.875*** (-3.207)	-9.876*** (-3.233)	-9.675*** (-3.382)	-6.349*** (-2.816)
Year-fixed-effects	Included	Included	Included	Included	Included	Included
Industry-fixed-effects	Included	Included	Included	Included	Included	Included
Observations	363	363	363	363	363	363
R <sup>2</sup>	0.762	0.770	0.762	0.762	0.755	0.767
Wald Chi <sup>2</sup>	36.04	33.50	28.73	26.26	31.29	37.52
Prob>Chi <sup>2</sup>	0.000	0.000	0.000	0.000	0.000	0.000
Breusch and Pagan test						193.85 ***
Hausman test						50.79***
Heteroscedasticity test						4.30***
Autocorrelation test						426.126***

Notes: z-statistics in parentheses. \*\*\*, \*\*, and \* indicate significance at 0.01, 0.05, and 0.10 levels, respectively. All research variables are defined in Table 3.

**Table 7. Alternative dependent variable measurements by PCSE regression**

Variables	Coef.	Z-value	P-value
CHAIRAGE	−0.029	−0.594	0.552
CHAIRTEN	−0.066**	−2.377	0.017
CHAIREDULEV	0.688	0.806	0.420
CHAIRFEXP	0.624	0.998	0.318
CHAIROWN	−0.069***	−4.782	0.000
BSIZE	1.077***	6.920	0.000
BINDEP	7.693***	3.738	0.000
CEOAGE	0.212***	3.832	0.000
CEOTEN	−0.308***	−3.791	0.000
CSIZE	3.502***	14.258	0.000
DR	0.030***	2.743	0.210
ROA	0.057	1.254	0.006
OWNCON	0.045***	3.002	0.003
AFSIZE	0.203	0.095	0.924
CSRCOM	1.281	1.145	0.252
Constant	−16.023***	−4.794	0.000
Year-fixed-effects	Included		
Industry-fixed-effects	Included		
Observations	363		
R <sup>2</sup>	0.703		
Wald Chi <sup>2</sup>	47.41		
Prob>Chi <sup>2</sup>	0.000		

Notes: \*\*\*, \*\*, and \* indicate significance at 0.01, 0.05, and 0.1 levels, respectively. All research variables are defined in Table 3.

attributes and some control variables. CHAIRAGE is measured as a natural logarithm (Chandren et al., 2021), while CHAIROWN is measured as a dummy variable that takes “1” if the chairman has shared and “0” otherwise (Antonucci & Venditti, 2021). For the control variables, DR is computed as the ratio of liabilities to the total assets (Qaderi et al., 2022; Wang et al., 2020), whereas OWNCON is calculated by the sum of substantial shareholders who hold at least 5% of the shares of the company (Al-Qadasi et al., 2019). The results of Table 8 support the main results in Table 6.

## 5. Discussion

The study’s results confirm that some characteristics of the chairman contribute significantly to Malaysian companies’ engagement in IR practices. Specifically, the PCSE regression results show that the chairman tenure and ownership are negatively and significantly related to IR quality and thus support agency theory. However, the chairman age, educational level and financial expertise do not affect IR quality, thus failing to support the predictions of agency theory. Thus, agency theory is partial to interpreting the results. Furthermore, from these findings, the board chairman does not play an active role in enhancing IR quality in Malaysian companies, perhaps because the chairmen are not familiar with IR quality, given that it is a new concept in reporting (Vitolla et al., 2019b). Another reason for this result could be attributed to a high percentage of companies that appointed a family member as the chairman may limit the sharing of company information to keep their interests and sacrifice the stakeholders’ interests.

The analysis of the individual chairman attributes indicates that the chairman age does not affect IR quality. This finding agrees with previous IR research showing companies with older directors discourage the adoption of IR (Alfiero et al., 2018, 2017). It is also similar to the results of

**Table 8. PCSE regression results for alternative measurements for independent and control variables**

Variables	Coef.	Z-value	P-value
CHAIRAGE	−1.104	−0.47	0.640
CHAIRTEN	−0.064***	−2.94	0.003
CHAIREDDULEV	0.817	1.39	0.164
CHAIRFEXP	0.629	1.28	0.200
CHAIRROWN	−1.308***	−4.29	0.000
BSIZE	0.822***	7.85	0.000
BINDEP	6.353***	5.16	0.000
CEOAGE	0.144***	3.55	0.000
CEOTEN	−0.216***	−4.14	0.000
CSIZE	2.509***	14.31	0.000
DR	0.056*	1.81	0.070
ROA	0.034**	2.02	0.044
OWNCON	0.030***	4.22	0.000
AFSIZE	0.290	0.19	0.847
CSRCOM	1.613*	1.69	0.092
Constant	−3.184	−0.41	0.681
Year-fixed-effects	Included		
Industry-fixed-effects	Included		
Observations	363		
R <sup>2</sup>	0.758		
Wald Chi <sup>2</sup>	14.52		
Prob>Chi <sup>2</sup>	0.000		

Notes: \*\*\*, \*\*, and \* indicate significance at 0.01, 0.05, and 0.1 levels, respectively. All research variables are defined in Table 3.

Songini et al. (2022), which suggest that older directors are ineffective in enhancing IR quality. Although 80% of the sample are older chairmen, this insignificant result indicates that senior chairmen in Malaysian companies do not prefer to disclose IR-related information. One possible explanation is that even though older directors may have more expertise (Elmagrhi et al., 2019), they are more cautious, take fewer risks, and are less attracted to accept change or embrace and implement innovative policies related to business operations, including non-financial activities (Katmon et al., 2019). This means that engagement in IR practices is not the primary concern of older directors in Malaysian companies.

Secondly, the results show that companies with longer board tenure lead to lower IR quality. One plausible explanation of the inverse relationship may be that Malaysian independent directors have a tenure of more than nine years (SCM, 2020), which is predicted to threaten the independence and monitoring role of the board and increase agency problems (Byrd et al., 2010), and ultimately become detrimental to corporate sustainability (Handajani et al., 2014; Rao & Tilt, 2016). This evidence is similar to prior literature on disclosure (Handajani et al., 2014; Rao & Tilt, 2016), which reported that longer-tenured directors are likely to disclose less non-financial information.

Thirdly, the findings show an insignificant relationship between the chairman's education and IR quality. One possible explanation for the insignificant relationship could be attributed to IR being considered a new form of corporate reporting (Vitolla et al., 2019b); thus, the chairman of Malaysian boards is still unfamiliar with IR practice and how to prepare an IR properly. This finding

of an insignificant impact is contrary to prior studies (Songini et al., 2022), which find that the higher the board members' level of education, the more improved the IR quality.

Fourthly, the findings indicate that the financial expertise of the chairman does not affect the IR quality. This study finds that, on average, 33.61% of the sample companies have chairmen with financial qualifications or experience, which is comparatively very low. This conclusion could be because IR practice might require domain knowledge of accounting, auditing, and finance to evaluate information disseminated effectively. However, this result is inconsistent with the finding of Wang et al. (2020), which reports that the directors' financial expertise is influential in making decisions regarding IR quality.

Finally, the results indicate a negative effect of chairman shares ownership on IR quality. This negative relationship could be because of the nature of Malaysian companies' structure of high ownership concentration (Al-Qadasi et al., 2019). Ownership concentration limits the role of CG in an emerging market. Further, the board's share ownership is the main factor that increases agency problems among management and shareholders. This finding is similar to the previous academic findings reported by Raimo et al. (2020b), indicating that directors' ownership is correlated with lower IR quality. However, Masduki and Zaid (2019) show no correlation between directors' share ownership and IR disclosure.

## 6. Conclusions

The board chair is considered one of the critical positions in governance due to the board chairman has become ever more critical to the company's sustainable future. Although a new line of research examines the emerging trend of the board chair's role, there is a lack of empirical research on board chairman attributes and their impact on IR quality. Thus, the present research examines the effect of certain chairman attributes on IR quality in an emerging market. This study covers the period 2017–2020 of all Malaysian-listed companies that adopt IR practice and contains an unbalanced data panel of 363 company-year observations. An IR index is developed based on IIRF, and the content analysis technique is performed to evaluate IR quality. The findings based on the PCSE regression analysis show that age, educational level, and financial expertise do not play a significant role in improving companies' engagement in IR, whether level or quality. This evidence is inconsistent with agency theory, which predicts an effective role for the chairman in improving IR quality. Conversely, chairman tenure is significantly related to lower IR quality, suggesting that companies with longer chairman tenure are less inclined to be involved in IR-related disclosure. This result supports agency theory. Furthermore, a large proportion of ownership by the chairman negatively affects the IR quality, indicating that the chairman's share ownership can reduce disclosing IR-related information. Overall, the role of the board chairman does not affect improving IR quality in the Malaysian context. This may be because the chairman is unfamiliar with IR practice, given that IR is a new corporate reporting concept. Also, this is because most Malaysian chairmen have a family-controlled company.

This research offers several critical practical and theoretical implications. For the theoretical implications, this study provides fruitful insights into how chairman-related theories and IR quality. In this vein, although the previous studies suggest that board chairmen are mainly considered to contribute to the company's creating value through monitoring role and provision of resources (Åberg & Shen, 2020), the results show that the board chairman is ineffective in enhancing the role of monitoring governance. These findings do not support the agency theory prediction that an effective board chairman enhances IR practice. This result could be because the boards of Malaysian companies are dominated by controlling family shareholders, who may utilise their power to use the company's resources to protect their own interests rather than those of the minority shareholders. Thus, there is a need to improve the effectiveness of the board chairman in emerging markets.



The findings also have practical implications for policymakers, investors, and other stakeholders. First, policymakers and Malaysian regulatory bodies might need to formulate additional policies and determine specific requirements, such as qualification and experience, for appointing the right board chairman, to strengthen the chairman's role in enhancing IR quality. Second, Malaysian companies would need to understand the roles and responsibilities of the appointed chairman and their consequences on IR quality. The results indicate a negative relationship between chairman attributes (tenure and ownership) and IR quality; however, there is no relationship between other chairman attributes (age, educational level, and financial expertise) and high-quality IR. Third, the findings also bring fresh insights for corporate executives and investors about how chairman tenure and ownership affect companies' engagement in IR practice. Other stakeholders may also be interested in knowing what board chairman attributes should be considered when appointing a board chairman that may significantly support corporate reporting strategy and enhance IR quality. Finally, from an academic viewpoint, it is important to examine different chairman attributes in enhancing IR quality.

This study has certain limitations, which are the guidelines for future research. First, it only covers a single emerging country, Malaysia, where IR is still not mandatory. Future research may expand this empirical framework to conduct a comparative study of developed and developing countries. Second, this study examines the relationship between chairman attributes and IR quality using an aggregate measure of IR quality. Thus, future research can use individual dimensions of IR like content elements, capitals, etc. Third, it includes only five attributes of a board chairman, although there are others. Future research could investigate the influence of other chairman attributes (e.g., gender, busyness, nationality, remuneration, overseas background, and political experience) on IR quality to provide a more comprehensive understanding of their effect.

#### Acknowledgements

The authors would like to thank the Senior Editor of Cogent Business & Management, Professor Collins G. Ntim, and the three anonymous reviewers for their insightful comments and helpful suggestions. The authors would also like to express their appreciation to the Ministry of Higher Education (MOHE) of Malaysia through Fundamental Grant Scheme for Research Acculturation of Early Career Researchers (RACER/1/2019/SS01/UUM/6).

#### Funding

This research was supported by Ministry of Higher Education (MOHE) of Malaysia (RACER/1/2019/SS01/UUM/6).

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#### Disclosure statement

No potential conflict of interest was reported by the author(s).

#### Citation information

Cite this article as: Integrated reporting quality in Malaysia: Do chairman attributes matter?, Sumaia Ayesha Qaderi, Sitraselvi Chandren & Zaimah Abdullah, *Cogent Business & Management* (2023), 10: 2186757.

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