

Structural Modelling on the influence of Board of Director Factors to the Whistle Blowing Policies Disclosure Level in Top 100 Malaysian Public Listed Companies

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Abstract: Whistleblowing taken a central role in becoming an important factor in corporate governance frameworks, whose major objective is to fight malpractices and unethical practices in organizations. This study aims to examine the relationship between board of director factors and the whistleblowing policies disclosure level of top 100 public companies in Malaysia. This study uses the characteristics of the board of directors and whistleblowing policy disclosures collected through a content analysis approach. Data analysis was conducted using Structural Equation Modelling (SEM) with the SmartPLS 4 software. The study found that the board factors of board independent, frequency of board meeting and the board gender diversity have significant positive relationships with whistleblowing policy disclosure. However, firm size and auditors do not have significant relationships with whistleblowing policy disclosure. This paper provides the first empirical evidence where agency theory is introduced and generalized to incorporate the impact of whistleblowing policy disclosure and thus contributes new knowledge to the area of whistleblowing policy disclosure.

Keywords: Board factors, corporate governance, Malaysia, whistleblowing, disclosure.

INTRODUCTION

Whistleblowing policies constitute an important component of modern organizational governance that aims to encourage transparency, accountability and ethical conduct by various institutions across different sectors. These policies that create a structured mechanism that allows individuals to report suspected wrongdoing, illegal activities and ethical violations without fear of reprisals, in order to protect the integrity of the organization and its stakeholders (Ahmad *et al.*, 2023). However, the policies varied depending on the country, they may be implemented diversely. For example, the country that seem to really make mandatory disclosure for whistleblowing policies such as the United Kingdom, United States of America, and Australia. This mandatory requirement has increased ethical practices in the companies and impacted positively to the public (Sharma *et al.*, 2018). Meanwhile, countries such as Japan and India do not have legislated whistleblowing procedures; they integrate the regulations into the codes of ethics or contain special rules regarding the issue (Sharma *et al.*, 2018). Likewise, whistleblowing is encouraged in Malaysia but not as mandatory requirement (Ahmad *et al.*, 2018). This show indicates diverse whistleblowing approaches coupled with regulatory systems across different countries while presenting public perceptions about the impact of whistleblowing policies for

ethical business development. The appreciation of international differences strengthens current whistleblowing frameworks along with providing positive protections for whistleblowers worldwide (Ahmad *et al.*, 2018).

The whistleblowing disclosure policy functions as an optional mechanism in Malaysia since the country does not establish this policy as a core element in corporate governance framework. The lack of powerful formal mandatory policies exists partly because of cultural approaches toward whistleblowing while employees remain unaware about those policies. The implementation of currently applied policies encounters obstacles because there exists no effective enforcement procedure. The effectiveness of whistleblowing policies depends heavily on debate in Malaysian contexts. The implementation of the Whistleblower Protection Act (WPA) 2010 does not establish internal organizational protection for employees who report issues and the government has failed to apply the entire law (Bakar & Mangsor, 2022). This state of affairs erodes confidence in legal safeguard provisions for whistleblowers, a key driver of organizational responsibility and transparency. Furthermore, Malaysian companies understand disparities in their financial reports yet they lack standardized policies for whistleblower disclosure (Ahmad *et al.*, 2018). This is to fill these gaps because it is necessary to know why these gaps exist, because, in fact, it seems there is no proper protection for whistleblowers and more importantly, companies must make public their full policy on whistleblowing that this policy will encourage whistleblowers to come (Saha & Kabra, 2020). Potential

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factors influencing whistleblowing policy disclosure were revealed at different levels of the study. Unlike that, factors like regulatory environment and industry practices dominate at country and industry levels (Mohamed *et al.*, 2015; Salleh *et al.*, 2019). The firm level investigations show that, in the case of voluntary disclosure, board factors such as frequency of board meetings, board size, board independence and board gender diversity matter (Alyousef & Alsughayer, 2021; Bravo & Alvarado, 2018).

The reason for undertaking this study is to try to progress the literature on corporate governance and whistleblowing policy communication in the face of these changing narrative patterns and shifts in the literature. The study also noted that board attributes have a significant association with Malaysian firms' disclosures on whistleblowing policies. Whistleblowing is one of the numerous corporate governance practices that binds the power of oversight from the board of directors. These are the board policies with aspects such as independence, diversity, expertise and leadership quality for their implementation. Moreover, portioning responsibilities, which lead to a proper whistleblower culture, can be enhanced because of having a balance of board experience. Board management best practices, such as training and effective communication, in most cases could help to improve the functionality of whistleblowing system and turn it into vital organs for practical support of business ethical practices. For example, Alyousef & Alsughayer (2021) and Bravo & Alvarado (2018) stated that organisations with diverse group members, with independent relations among them and who meet often are more transparent and ethical in organisational decision making.

The association between board changes and whistleblowing policy disclosure can be explained by agency theory. According to this theory, the agents, the management, is likely to defraud the principals, the shareholders as the two parties' conflict of interest. Therefore, these problems can be managed by the board of management and directors' governance in order to harmonize the interests of the management and shareholders. Board characteristics that help in organizational monitoring also reduces the incidence of unreported unethical actions. To sum up, setting the right ethical tone provides a right climate for whistleblowers as this is what will enable organizations to achieve the purpose of curtailing fraud and other malpractices. Such discussion is important to the current discourse on corporate governance and whistleblowing since it not only extends the policy disclosure, but also expands the understanding of its dimensions, following suggestions for further empirical studies by Makri *et al.*, (2024).

The establishment of efficient whistleblowing procedures inside Malaysian organizations serves as a basis for promoting ethical conduct and openness through accountability. A series of essential steps should be implemented to guarantee the policy functions effectively. A valid reporting policy needs to provide accessibility through multiple channels including both telephone-based hotlines and emailed communications and scheduled in-person meetings to attain employee satisfaction (Zakaria *et al.*, 2020). Renewing the protection of whistleblowers requires organizations to establish anti-retaliation measures while providing them with confi-

dential protection and fair investigative systems. The organization must conduct repetitive training sessions that arms employees with knowledge about the whistleblowing policy while also teaching them their rights and procedure to report issues. The inclusion of these elements will enable Malaysian companies to develop an ethical workplace culture and enhance organization performance and public reputation. Organizations that establish whistleblowing policies create positive ethical conduct among employee groups (Ahmad *et al.*, 2023). When a firm lacks a whistleblowing policy they seem to show more acceptance toward unethical conduct.

In Malaysia, problem occurs from selective regulations to whistleblowing where protection shall not be provided if disclosure is made internally through the Whistleblowing Protection Act (WPA) 2010 (Bakar & Mangsor, 2022). However, the legislation most recent in Malaysia to address whistleblowing is the Whistleblower Protection Act of 2010(WPA 2010). Unfortunately, the end result is that employees may want to report unethical practices in the organization. Furthermore, organizational leaders, whether directors or managers, also have a preference for internal whistleblowing. By acting, they help fortify the likelihood that information about misconduct will stay wrapped up in the organization, continuing to correct the vice instead of going public (Kalyanasundram, 2018). Hence, the right environment with an efficient whistleblowing procedure must be created within organizations so that employees are willing to report corruption, fraud, or wrongdoing (Rachagan & Kuppusamy, 2013). Currently, probably the most obvious conclusion that scholars have made is that whistleblowing is an effective means of identifying different sorts of malpractices and fraud in a company. The strength of the Malaysian culture does look to be going a long way towards actively discouraging whistleblowing, along with the strength of the regulators and having both publicly listed companies and their make-up. Chia *et al.*, (2020) noted that public-listed companies are very common in Malaysia; the shareholding in these companies is also mainly centralized. Malaysians are, therefore, unlikely to report any illicit process in these firms (Rachagan & Kuppusamy, 2013). The Malaysian organizational hierarchy defined by a significant power distance creates an environment that hinders whistleblowing. Such organizational structures create spaces where employees avoid questioning their superior's decisions because they anticipate it could damage their career advancement. Strong protection mechanisms must exist to counter the significant risks whistleblowers face since they could lose their job and experience professional isolation from colleagues (Bakar & Mangsor, 2022). Apart from that, it was also found that an effective whistleblowing policy may be decided by the board of directors, by their duty of developing company policies.

LITERATURE REVIEW

Agency Theory

Malaysian shareholders who represent the minority group undertake most of the financial burden for poor corporate governance practices within their emerging market framework dominated by listed family-owned companies. The capital structures in Malaysia are characterized by concentrated ownership which leads to agency conflicts between

majority and minority shareholders who represent the principal-principal relationships. The benefits of concentrated ownership against agency problems lead to creating another agency conflict that separates minority shareholders from the majority. Arslan & Alqatan (2020) demonstrated that in Malaysia many minorities shareholders experience rights expropriation through majority shareholder control especially during party transactions because these shareholders exploit their voting powers and authority to gain personal benefits at minority expense. Researchers have focused on developing multiple solutions to reduce the agency conflict. The monitoring of internal company controls under strong corporate governance systems reduces agency conflict according to current beliefs. Board diversity plays an essential role for managing principal-principal conflicts through its inclusion of independent directors together with gender diverse members. The boards constructed from diverse members deliver expanded inputs and outputs of boards that aim to serve multiple stakeholders. The implementation of diverse board members brings improved oversight capabilities because diverse leadership reduced the power of controlling shareholders and executive management. Several company boards demonstrate higher sensitivity when it comes to public reporting and ethical requirements especially regarding their whistleblower disclosure measures. Good whistleblowing policies serve as an effective measure to prevent agency conflict from emerging. A firm can minimize the agency conflict through effective corporate governance combined with well-established whistleblowing practices.

Whistleblowing Policies Disclosure

The field of whistleblowing research has experienced increased prominence over recent years because studies focus on whistleblower intentions (Hadli *et al.*, 2023; Rahman *et al.*, 2023; Rashid *et al.*, 2023; Yusoff *et al.*, 2023). Study whistleblowing through different perspectives to broaden the scope of this field. Whistleblowing policy analysis has become increasingly relevant as a topic of study in recent times. Research on whistleblowing policy exists but lacks the extensive empirical data which whistleblowing intentions possess. The disclosure of additional whistleblowing policies indicates better implementation of internal control systems (Zakaria *et al.*, 2020). Organizations must establish whistleblowing policies to function as their initial internal controls which stop corporate misconduct. People who wish to report wrongdoing can find security as well as the necessary protocols and contact information through established procedures or forms. The protected employee understands that he will face no consequences from retaliation. The employee acts properly to prevent a second negative event from damaging the business those outcomes include corruption and negative reputation which could endanger the company (Mahmud *et al.*, 2024). Mohamed *et al.* (2015) analyzed whistleblower employee protection under Nigerian and Malaysian common law using a doctrinal legal research method that included a comparison between the two jurisdictions. The effectiveness along with efficiency and strong structure of labour laws and practices are essential factors that enable governments to position themselves as top global economic players. The research examined legal doctrine, but it did not study either Malaysian or Nigerian company protection policies. The

Malaysian legislative system exists without strong enforcement, so operations remain voluntary across the country. The Whistleblower Protection Act 2010 of 2010 has not eliminated the infrequent nature of whistleblowing activities in Malaysia.

Standards to guide whistleblowing policies remain non-existent currently. Salleh *et al.* (2019) emphasized that Malaysia joins four other ASEAN countries that failed to provide sufficient whistleblowing disclosure standards without consistent operational procedures except for Singapore. Singapore does not fall in the same category as other countries when it comes to the whistleblowing policy. Research by, together with Kalyanasundram (2018) discovered that Malaysian companies lack exact standards for whistleblowing policy disclosure. The Malaysian Code of Governance (MCCG) uses an effective practice to promote corporate transparency by establishing whistleblowing policies among 93.14% of public entities (Ali *et al.*, 2023). The disclosure of whistleblowing policies occurs most effectively within companies with larger organizational structures. Some Malaysian research studies lack sufficient details about whistleblowing policy disclosure among local companies. Past investigations assessed predictions about whistleblowing behavior in individuals without discussing the depth of whistleblowing policy disclosure details. The prediction of whistleblowing intentions was the main subject of research in multiple previous investigations (Hadli *et al.*, 2023; Rahayu & Astuti, 2023; Rahman *et al.*, 2023; Rashid *et al.*, 2023; Yusoff *et al.*, 2023). Malaysia lacks sufficient research which evaluates its whistleblowing policy practices. The research of Abidin *et al.* (2019) and Al-absy *et al.* (2019) explained the box-ticking approach without investigating the existence of whistleblowing policy within the organization. Kalyanasundram (2018) researched how effective whistleblowing policy functions while examining board character traits that influence its performance. The results exhibit social desirability bias because the findings emerged from internal auditor opinions about the whistleblowing policy in their organization. The level of whistleblowing policy disclosure was researched extensively by Ahmad *et al.* (2018) through their utilization of Standard Australia 2003. The research investigates fifty leading Malaysian public-listed businesses. The study developed flawed outcomes through its basic sampling method because it neglected essential corporate governance traits. Research has failed to establish a relationship between board characteristics and whistleblowing policy disclosure.

Board Independence

The company's structure makes a board of directors its most critical element for establishing a board that includes no executive directors. Malaysia utilizes its agenda to boost organizational independence as part of its efforts to develop more effective public information disclosure. These directors do not work full-time for the company since they maintain no executive responsibilities within the organization. The board members demonstrate the capability to fulfill their responsibility for shareholder benefit. Pursuant to latest MCCG 2021 Bursa Malaysia established an exclusive twelve-year term limitation for independent directors even though it remains non-renewable. The company operates with an independent perspective regarding its operations and

gains benefits through independent directors who represent shareholders. KPMG Malaysia conducted research which found that 77% of Malaysian firms that met the requirement of having more than 50% independent board members operated under formal whistleblowing policies within their organizations (Abidin *et al.*, 2019). A positive connection exists between organizations controlled by independent board members and their whistleblowing mechanisms that enhance corporate governance.

Various scholarly findings exist about how independent directors affect voluntary disclosure practices. According to Khanchel & Bentaleb (2022) the adoption of independent directors would strongly affect a company's voluntary disclosure practice while simultaneously protecting their reputation. Independent oversight of companies delivers better transparency compared to monitoring conducted by management within the organization according to their view. According to Boateng *et al.* (2022) companies that use multiple independent directors give high importance to voluntary disclosure because this step helps protect their transparency and investor confidence. According to Amalia *et al.* (2022) as well as Vadasi *et al.* (2021) and Cahaya & Yoga (2020) firms with independent directors do not always have higher disclosure practices for whistleblowing policies. The executive director of the company seems to exert influence which leads to such outcomes. Board independence interacts with voluntary disclosure in Malaysia through various regulatory requirements and organizational standards as well as cultural norms which make the results complex. Agency theory helps to understand the functional relationship linking managerial ownership to independent directors. The agency theory establishes the existence of constant agency costs which develop from the managerial-shareholder interest disparity. The conflict of profit maximization interests between managers and shareholders exists because of their opposing goals yet independent directors help resolve this issue (Jensen & Meckling, 1976). The independence of board directors enables them to assess matters obnoxiously and demand suitable voluntary disclosure information. The research demonstrates how companies with increased independent board members tend to disclose voluntarily because they want to enhance investor trust in their operations (Khanchel & Bentaleb, 2022). The evidence demonstrates that board independence takes a distinctly positive role regarding voluntary disclosure activity in Malaysia by applying agency theory principles.

Board Meeting

Business decisions are led by the board of directors which makes this group a vital component for corporate governance strategies. The frequency of meetings signifies that boards actively review, and address whistleblowing system reports when they take place more frequently. The board executes dual responsibilities of identifying shareholder optimal outcomes while monitoring all management decisions according to some scholars (Sofi & Yahya, 2020). The frequency of meetings serves as a proxy to measure how quickly directors submit their monitoring activity reports (Pernamasari, 2018).

The previous mechanisms have demonstrated diverse viewpoints about how board meetings impact financial re-

sults and disclosures. Board power increases when the board shows high conscientiousness in its duty performance. The connection between voluntary disclosure behavior and board meeting leadership has produced supportive results according to research. Khairredine *et al.* (2020) conducted research on 82 companies which were listed on the French Stock Exchange. The analyzed data revealed that environmental disclosure along with ethical disclosure and governance benefits directly from board meeting occurrences. Talpur *et al.* (2018) investigated Malaysian public-listed companies to discover board meetings create meaningful positive effects on voluntary disclosure practices. Pernamasari (2018) discovered that audit committee meetings did not lead to changes in the disclosed information. The absence of definitive evidence demonstrates that research has not established a link between frequent board meetings and corporate disclosure and performance. Based on the above reviews, it can be concluded that the effect of board meetings on board effectiveness remains inconclusive.

Board Gender Diversity

Board membership with women creates a broad representation of perspectives together with business potential growth for companies. Multiple studies show that when firms employ at least one female board member their business significance expands. The Securities Commission Malaysia's Corporate Governance Monitor showed that public limited company boards increased female representation from 23% in 2021 to 34% in 2022. The majority of 80% women directors selected independent positions to overcome concerns about related appointments which could involve family members instead of professionals. From 2016 to 2022 the number of women directors appointed to boards of the top 100 publicly listed firms increased 12.4% while it grew 8.5% for all publicly listed companies. The current levels of female board members surpass expectations toward achieving minimum female director representation set at 30 percent.

The research by Cecchetti *et al.* (2018) established a substantial statistical connection between gender diversity and their commitment to corporate social responsibility disclosure. A Waweru (2020) research from Sub-Saharan Africa demonstrated that business ethics disclosure shows positive and significant connections with board gender diversity and two other corporate governance characteristics: board independence and the proportion of government ownership. The best corporate governance practices adopted by companies serve to increase shareholder and stakeholder accountability which reduces agency costs by reducing managerial opportunism. The results of Khairredine *et al.* (2020) revealed that board meetings combined with gender-diverse boards create a significant positive relationship toward environmental and ethical disclosure and governance. Kalyanasundram (2018) confirms that businesses with more diverse board members notice improved whistleblowing policy disclosure practices. Cecchetti *et al.* (2018) conducted research which established that board effectiveness remained unchanged by both skill and gender board composition using 60 Italian listed state-owned enterprises and non-listed state-owned enterprises as analysis samples. These inconsistent findings illustrate that

the relationship between board gender diversity and disclosure is inconclusive.

Firm Size

A company's ability to produce superior performance reports depends on its size because firm size represents the adequacy of its resources for handling investments. According to Said *et al.* (2018) the inclusion of supplementary information above financial statements in annual reports stimulates company performance by drawing improved investment choices from investors and empowering their evaluation of the company. The availability of better resources within large organizations drives them to adopt superior governance and disclosure methods (Saha, 2022). Firms with larger size perform superior to smaller entities as they possess stronger abilities to distribute risks (Khanchel & Bentaleb, 2022) and maintain clear internal control systems. Large firms must establish an ethical operation alongside organizational justice principles which protects whistleblowers from harm when they report unethical actions. Organizations can achieve this objective through training initiatives combined with ethical standard compliance monitoring led by strong executive support (Novaro *et al.*, 2023). Small organizations usually achieve better whistleblowing policy results through using personal and informal reporting approaches. Cultural transparency combined with employee trust develops through regular face-time between workers and leadership while keeping all internal doors open. This arrangement lets staff share issues without facing negative consequences. Establishing a security-driven workplace atmosphere remains essential for employees to express their concerns and maintain conviction about proper assessment of their reports. Additionally, organizations should document their protection measures which cover close family members of whistleblowers along with spouses to encourage staff members to come forward safely (Zakaria *et al.*, 2020). Large companies tend to provide better whistleblowing policy disclosure and develop proper whistleblowing systems through their superior resources.

Auditor

Auditor size serves as a measurement indicator to evaluate the audit quality of a company. The Big Four auditors need to complete more tasks during their engagement to reach an opinion about the company's financial statement disclosures before issuing a true and fair view conclusion. The study by Peng *et al.* (2022) established that business entities which select Big Four auditors demonstrate superior social corporate disclosure practices. Evidence suggests that businesses which partner with Big Four auditing firms present increased voluntary disclosure activities in their financial statements according to Khanchel & Bentaleb (2022). When companies use Big Four audit firms they demonstrate their decision to produce reliable financial reports. Companies which disclose information about their whistleblowing policies demonstrate their ethical stance to investors and other stakeholders while building their reputation and attracting investors so Big Four audited firms experience increased stakeholder evaluation which forces them to improve transparency to maintain trust. The majority of companies unmet their obligation to provide full and clear whistleblowing pol-

icy information in their annual statements according to Ali *et al.* (2023) mention the world keeps witnessing increased popularity of whistleblowing because employees disclose illegal acts to outside parties for error correction (Kusumaningsih, 2021). A variety of companies refrain from disclosing sensitive information regarding their controls and compliance methods since they perceive legal risks and potential degradation of their competitive position. The large auditor size employed by the big four firms ensures that their audit clients generate superior quality reporting and more effective whistleblowing policy disclosures than companies supported by smaller auditing firms.

Therefore, the hypotheses proposed in this study are as follows:

H1. There is a significant positive relationship between board of director factors (board independence, frequency of board meeting and board gender diversity) and whistleblowing policy disclosure level.

H2. There is a significant positive relationship between firm characteristics and the whistleblowing policy disclosure level.

RESEARCH FRAMEWORK

Fig. (1) illustrates a research framework depicting the independent variables as indicated by the diversity characteristic. The factors for the board of directors are as follows: board independence, board size, board skills. Each of these may impact the decision-making process in whistleblowing, thus constituting the dependent variable, which is the disclosure of policies on whistleblowing. Based on the review of previous literature, the figure below shows the proposed research framework.

RESEARCH METHOD

Malaysian Whistleblowing Policy Disclosure Index

Due to the obvious omission of a Malaysian whistleblowing policy disclosure, the study proposes the development of a self-constructed Malaysian whistleblowing policy disclosure index (WPDI). The crafted index is based on three sources: the guidelines issued by the MCCG (2021), the OECD (2012), and Standards Australia (2003). The process of crafting the WPDI will be carried out in four stages.

In the First Stage:

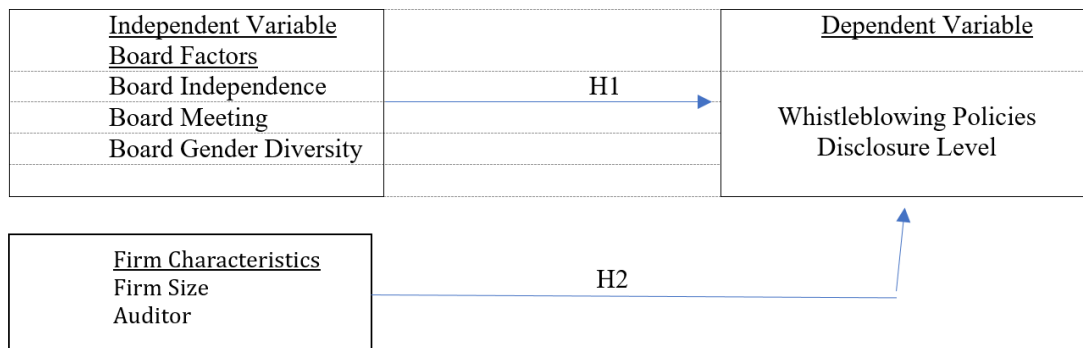
In order to identify the appropriate disclosure items for whistleblowing policies within Malaysian firms, a content analysis approach will be implemented for each of the three sources of guidelines.

During the Second Stage:

The categories and items for the index will be identified and selected. This entailed the selection of the initial items for the index, the categorization of these items, and the subsequent modification of the index as needed.

During the Third Stage:

After the initial WPDI checklist is developed, it will be validated by an expert from a regulatory agency, such as the Institute of Internal Auditors of Malaysia or the Malaysian

**Fig. (1).** Theoretical Framework.

Institute of Accountants, to refine the checklist and ensure its validity.

Finally, in Stage Four:

On the basis of the criteria, a scoring sheet will be provided for each whistleblowing policy disclosure. Disclosures will be obtained from the corporate websites of the corporations and their corporate governance statements in annual reports. The existence of the disclosure will be coded as '1' if it is present and '0' otherwise for each disclosure item.

The scoring procedure was again dichotomous, where an item disclosed received 1, and an item has not received 0. This is in concordance with the quantitative studies done by Ahmad *et al.* (2018) and with (Vadasi *et al.* (2021) to calculate the index. When rating each index item, they were not weighted to eliminate the element of bias involved in this computation.

Sample selection

This study uses a quantitative approach to examine the relationship between board of director factors and whistleblowing policy disclosure. This study uses the characteristics of the board of directors and whistleblowing policy disclosures collected through a content analysis approach. This research used a sample of the companies listed among the top 100 Malaysian publicly listed companies in the main market of Bursa Malaysia as of December 31, 2022. The selection was based on their market capitalization. Besides, the sample under consideration can be more suitable for the purpose of this study as large firms are likely to maintain good governance and better disclosure practices with good resource availability (Saha, 2022). All finance-related firms, insurance companies, closed-fund banks, and unit trust companies are included in the sample, as the high leverage ratios of financial firms to non-financial firms could skew the results (Salleh *et al.*, 2019). Financial firms also have variant compliance, financial reporting standards and regulatory requirements and frameworks than non-financial firms (Chia *et al.*, 2020). Furthermore, we omit firms not reported on their annual whistleblowing policy, and some firms have missing data points on financial measurement. Year 2022 was chosen as a sample year since the 2022 report was the latest available when conducting this study. Acquiring accurate and timely information is a central concern that affects

the validity of the obtained results. Accessing reliable and up-to-date data is critical for ensuring the validity of research findings. Whistleblowing policy disclosures were assessed using the whistleblowing policy disclosure scoring index. As per the requirement, each company's website was visited, and all annual reports were digitally obtained from the website bursamalaysia.com. Table 1 provides the sample selection.

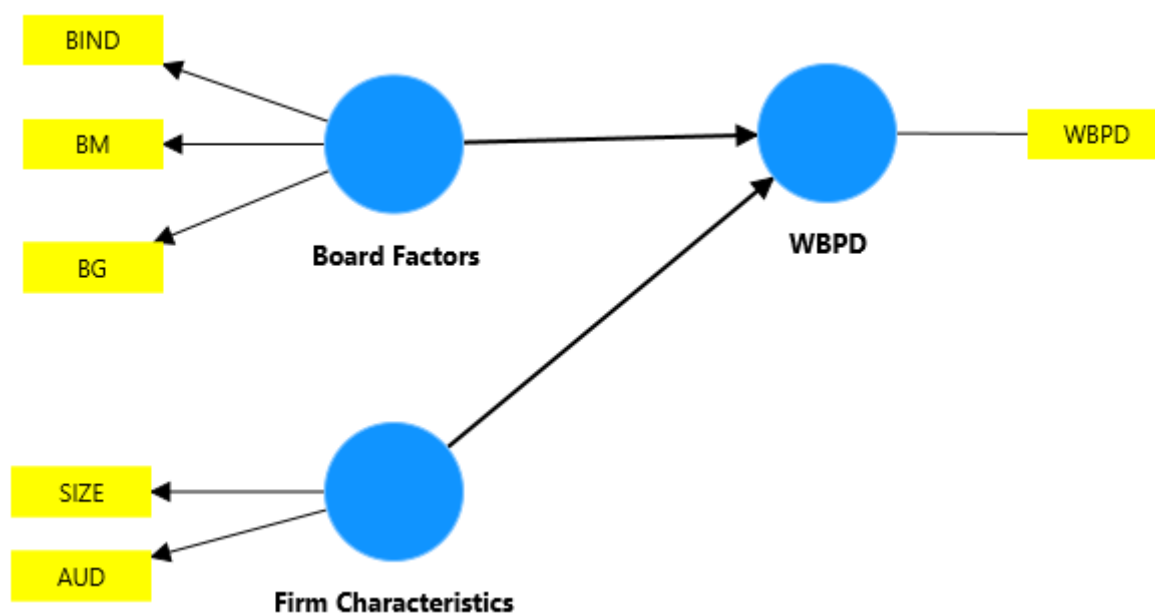
Table 1. Total companies to do content analysis of whistleblowing policies disclosure.

Sample Selection and Elimination Procedure	Companies
Total Top 100 Malaysian Public Listed Companies	100
Elimination	
1. Financial institution	12
2. Unavailable whistleblowing policies disclosure	4
Final sample	84

This research focuses on three main variables: board of director factors, firm characteristics and whistleblowing policy disclosure. Consequently, this study sought to use the predictor variables within the overall arguments, as explained in Section 3. These include the control variables anchored on literature and related to factors likely to influence whistleblowing policy disclosure. The measures and operational definitions of the variables in the study are captured in Table 2. The proposed model is formative, as shown in Figure 1, i.e., the variables observed shape up the latent variable, and graphically, in this case, the causal arrows are directed from the observed variables to the latent variables, as supported by (Hair Jr *et al.*, 2021). In the formative models, each observed variable represents a strand of the latent variable. Together they represent the totality of the reality that we are trying to explain. Data analysis was conducted using Structural Equation Modeling (SEM) operated through SmartPLS 4 software. SEM was chosen for its ability to test the relationships between latent variables simultaneously and provide more comprehensive results regarding the influence of each variable on the whistleblowing policies disclosure.

Table 2. Operationalization of the Variables Measured and Used in the Study.

Variables Name	Acronym	Measurement	Article	Sources	Sign
Whistleblowing Policies Disclosure Level	WBPD	Percentage of the total of the scores awarded for each item in the WBPD index.	Ahmad <i>et al.</i> (2023)	Whistleblowing Policies	+
Board Independent	BIND	Percent of non-executive directors within the board's total number of directors.	Bitrus <i>et al.</i> (2024)	Annual Report	+
Frequency Board Meeting	BM	Numbers of the board meeting held per year.	Makri <i>et al.</i> , (2024)	Annual Report	+
Board Gender	BG	Percentage of female directors in relation to the total number of directors on the board.	Bitrus <i>et al.</i> (2024)	Annual Report	+
Firm Size	SIZE	Natural logarithm of total assets.	Dao & Ngo (2020)	Annual Report	+
Auditor	AUD	Dummy = 1 if audited by a big 4 audit firm, 0 otherwise.	Dao & Ngo (2020)	Annual Report	+

**Fig. (2).** SEM-PLS Model.

A measurement model assessment consists of analyzing indicator contribution to latent variables as well as content validity testing and quality of adjustment together with multicollinearity assessment. Researchers evaluate the multicollinearity situation using the Variance Inflation Factor (VIF) indicator. The assessment of indicator importance uses both *t* statistics on outer weights and outer loadings.

The acceptable threshold for Variance Inflation Factor (VIF) in structural equation modeling stands at below five according to Götz *et al.* (2010) but stands at five and below per the criteria set by authors such as Benitez *et al.* (2020) and Hair Jr *et al.* (2021) for our current study.

Bootstrapping analysis uses 5000 subsamples in accordance with Hair Jr *et al.* (2021) and (Streukens & Leroi-Werelds, 2016) to achieve a significance level of 0.05 with a two-tailed test. The explanatory power of the structural model receives assessment through coefficient of determination (*R*²) and effect size (*f*²) according to the research of Benitez *et al.* (2020) and Hair Jr *et al.* (2021).

Stone-Geisser Index (*Q*²) provides an evaluation criterion via blindfolding procedure for measuring PLS path model predictive relevance in a cross-validated system. The signal quality and magnitude of coefficient estimations undergo evaluation as part of the analysis. A bootstrapping method provides the coefficients by referring specifically to each coefficient estimate. The quality evaluation of the model adjustment utilizes SRMR (standardized root mean square residual) as an indicator following the recommendation by Henseler *et al.* (2016) indicating appropriate values below 0.08.

RESULT

The results of data analysis in this study can contribute to strengthening the understanding of the factors of board of directors and firm factors that influence the whistleblowing policies disclosure level. Furthermore, the findings of this research can serve as a basis for public companies to improve the quality of whistleblowing policies disclosure level.

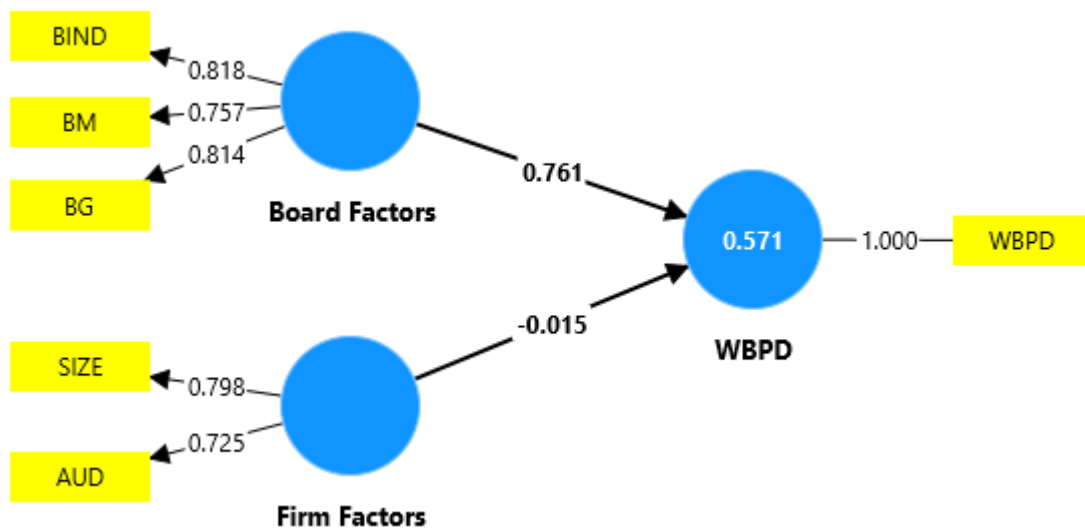


Fig. (3). Outer Loading Analysis.

and ensure the user understands and trusts the policies. The analysis was conducted in several stages, including outer loading tests, reliability tests, and validity tests, as well as hypothesis testing to determine the extent of the influence of the relationships between variables.

Table 2. Outer Loading.

Variable	Indicator	Outer Loading
Board Independence	BIND	0.818
Board Meeting	BM	0.757
Board Gender Diversity	BG	0.814
Firm Size	SIZE	0.798
Auditor	AUD	0.725
Whistleblowing Policies Disclosure Level	WBPD	1.000

The results of the outer loading test in Table 1 show that all the indicators used in this study have outer loading values greater than 0.6, indicating that each indicator can explain its latent variable well. For the variable of Board Independence, the indicator BIND has an outer loading value of 0.818. These values indicate that the indicators significantly and strongly represent the Board Independence variable. For the variable of Board Meeting, the indicator BM has an outer loading value of 0.757. These values indicate that the indicators significantly and strongly represent the Board Meeting variable. For the variable of Board Gender Diversity, the indicator BG has an outer loading value of 0.814. These values indicate that the indicators significantly and strongly represent the Board Gender variable. For the variable of Firm Size, the indicator SIZE has an outer loading value of 0.798. These values indicate that the indicators significantly and strongly represent the Firm Size variable. For the variable of Auditor, the indicator AUD has an outer loading value of 0.725. These values indicate that the indicators significantly and strongly represent the Auditor variable. Mean-

while, for the Whistleblowing Policies Disclosure Level variable, the indicator WBPD has an outer loading value of 1.000. From these values, all indicators have very high outer loading values, meaning this indicator is very strong in explaining the Whistleblowing Policies Disclosure Level variable.

Convergent validity comes first in outer model examination since it determines whether indicators are associated with each other. The examination for multicollinearity problems in the outer model uses the VIF indicator as basis. The existence of multicollinearity problems is established when VIF values surpass five as per the recommendations of Benitez *et al.* (2020) and (Hair Jr *et al.*, 2021). The evaluations conducted through Table 2 reveal that all indicators have VIF values below five which indicates no multilinearity problems based on the established parameter. The research findings confirm that no modifications need to be made to the analysis.

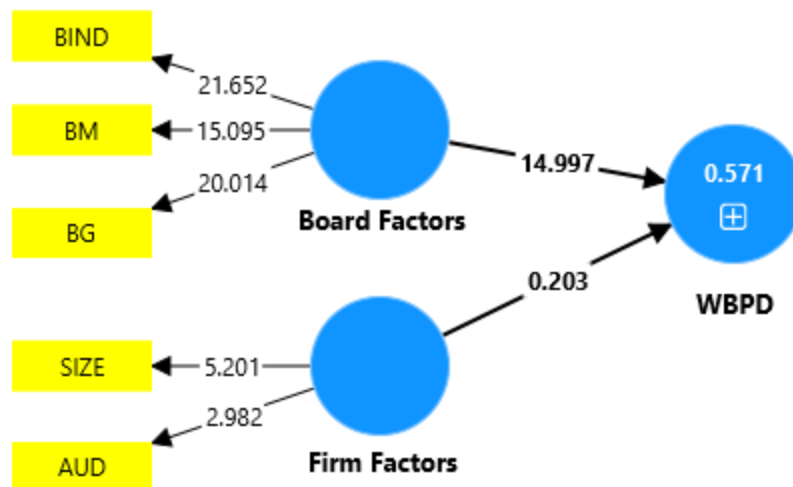
Table 3. VIF Indicators.

Variable	VIF
Board Independence	1.395
Board Meeting	1.373
Board Gender Diversity	1.425
Firm Size	1.027
Auditor	1.027
Whistleblowing Policies Disclosure Level	1.000

The results of the reliability test show that variables of Board Factors in this study have Cronbach's Alpha and Composite Reliability values well above the threshold of 0.7, indicating that all three variables have excellent reliability. For the Firm Factors variable, the Cronbach's Alpha value obtained is 0.281 and the Composite Reliability is 0.735. These values indicate that the indicators used to measure

Table 4. Reliability and validity.

Latent Variables	Indicators	Indicator	Cronbach's Alpha	Composite Reliability	AVE
Board Factors	Board Independence	BIND	0.714	0.839	0.635
	Board Meeting	BS	-	-	-
	Board Gender Diversity	BEXP	-	-	-
Firm Factors	Firm Size	SIZE	0.281	0.735	0.581
	Auditor	AUD	-	-	-
WBPD	Whistleblowing Policies Disclosure Level	WBPD	-	-	-

**Fig. (4).** Hypothesis analysis framework.**Table 5. Hypothesis Testing.**

Hypothesis	T Statistics	P Values	Information
Board Factors -> Whistleblowing Policies Disclosure Level	14.997	0.000	Significant
Firm Factors -> Whistleblowing Policies Disclosure Level	0.203	0.839	Not Significant

Firm Factors have high internal consistency and can provide reliable measurement results.

The results of the validity test show that variables for Board Factors in this study have Average Variance Extracted (AVE) values greater than 0.6, indicating that all three variables are valid. For the Board Factors variable, the AVE value obtained is 0.635. This value indicates that the indicators used to measure Board Factors can explain more than 63.5% of the variance of the construct, indicating that this variable has very good validity. For the Firm Factors variable, the AVE value obtained is 0.581. This figure indicates that the indicators for Firm Factors can explain about 58.1% of the variance of the construct. This shows that the Firm Factors variable has high validity, with its indicators' ability to comprehensively represent the construct.

The results of the hypothesis testing in Table 3 show that hypotheses 1 proposed in this study are accepted while hypotheses 2 are rejected. This is evidenced by the T Statistics values being greater than 1.96 and the P Values being less than 0.05 for all relationships tested for hypotheses 1. The

relationship between board factors and whistleblowing policies disclosure level has a T Statistics value of 14.997 and a P Value of 0.000. This value indicates that board factors affects whistleblowing policies disclosure level. Thus, this hypothesis is accepted. The relationship between firm factors and the whistleblowing policies disclosure level has a T Statistics value of 0.203 and a P Value of 0.839. This shows that firm factors has no significant influence on the whistleblowing policies disclosure level. Thus, this hypothesis is rejected.

CONCLUSION

The study provides valuable details about what determines the levels of whistleblower policy disclosure in businesses. An analysis of board characteristics alongside whistleblowing policy disclosure frequency occurs through assessment of data from Malaysia's 100 largest publicly listed companies. It is important to identify the grounds for these whistleblowing policy disclosure disparities because such knowledge will help the company detail its available whis-

tleblower protection measures as well as provide reassurance to those who wish to report unethical conduct (Saha & Kabra, 2020). High levels of whistleblowing disclosure increase the possibility that improper activities will remain confined to the organization to be addressed rather than being exposed publicly (Kalyanasundram, 2018). Board independence together with meeting frequency and gender diversity successfully improves accountability because they enhance policy disclosure practices. The disclosure of whistleblower policies benefits from increased presence of independent directors who are both female and have more frequent meetings. Peng *et al.* (2022) established that organizations improve their voluntary disclosure when they enhance board gender diversity since female directors focus more on stakeholder needs which solves agency conflicts. The level of board independence produces positive effects on disclosure (Khanchel & Bentaleb, 2022). The independent directors bring pressure to enhance disclosure because they work to eliminate information asymmetry problems in companies.

Organizations can enhance whistleblower policy disclosure by making their boards more independent and more frequent in meetings while increasing gender diversity. The analysis includes restrictions that need attention in order to draw appropriate conclusions from the data. The research examines only three essential corporate governance measures consisting of board independence and board meetings together with board gender diversity. Multiple corporate governance elements that include board properties such as size composition ownership proportion expertise level and executive-CEO duality could affect the evaluation results. The research scope extends only to one annual time period. Results of the relationship between variables can be affected by data collected from a different year. Future investigations should include additional board characteristics together with potential modifiers to develop a better understanding of the elements affecting whistleblowing policy disclosure.

REFERENCES

- Abidin, A. F. Z., Hashim, H. A., Salleh, Z., & Devi, S. (2019). Ethical practice disclosure of Malaysian public listed companies. *KnE Social Sciences*, 1168–1201.
- Ahmad, S. A., Sungip, N., Paino, H., Yunos, R. M., & Hashim, F. (2023). Development of a crafted Malaysian whistleblowing policy disclosure index. *Advances in Social Sciences Research Journal*, 10(4), 25–33.
- Ahmad, S. A., Yunos, R. M., & Amin, J. M. (2018). Whistleblowing policy: An analysis of disclosure level among Malaysian listed companies. *Global Business and Management Research: An International Journal*, 10(3), 36–44.
- Al-absy, M. S. M., Nor, K., Ku, I., & Chandren, S. (2019). Corporate governance mechanisms, whistle-blowing policy and earnings management practices of firms in Malaysia. *International Journal of Humanities and Social Sciences*, 13(6), 917–922.
- Ali, N. A. M. A., Abdullah, Z., Basri, S. A., & Johari, N. (2023). Empowering whistleblowing policy within public listed companies: Current practice in Malaysia. *Information Management and Business Review*, 15(3), 486–496.
- Alyousef, L., & Alsughayer, S. (2021). The relationship between corporate governance and voluntary disclosure: The role of boards of directors and audit committees. *Universal Journal of Accounting and Finance*, 9(4), 678–692.
- Amalia, S., Lesmana, D., Yudaruddin, Y. A., & Yudaruddin, R. (2022). The impact of board structure on voluntary environmental and energy disclosure in an emerging market. *International Journal of Energy Economics and Policy*, 12(4), 430–438.
- Arslan, M., & Alqatan, A. (2020). Role of institutions in shaping corporate governance system: Evidence from emerging economy. *Heliyon*, 6(3).
- Bakar, M. A. O. C. A., & Mangsor, M. M. (2022). It's not enough to speak, but to speak true: Revisiting the whistleblower protection law in Malaysia. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(11), e001949.
- Benitez, J., Henseler, J., Castillo, A., & Schubert, F. (2020). How to perform and report an impactful analysis using partial least squares: Guidelines for confirmatory and explanatory IS research. *Information and Management*, 57(2).
- Bitrus, S., Umale, O., & Adamu, S. (2024). Impact of corporate governance on voluntary disclosure of Nigerian listed industrial goods companies. *African Journal of Management and Business Research*, 15(1), 224–239.
- Boateng, R. N., Tawiah, V., & Tackie, G. (2022). Corporate governance and voluntary disclosures in annual reports: A post-International Financial Reporting Standard adoption evidence from an emerging capital market. *International Journal of Accounting and Information Management*, 30(2), 252–276.
- Bravo, F., & Alvarado, N. R. (2018). Sustainable development disclosure: ESG reporting and gender diversity in the audit committee. *Business Strategy and The Environment*, 28(2), 418–429.
- Cahaya, F. R., & Yoga, G. (2020). Corporate governance and voluntary disclosures: a story about corporate transparency from Indonesia. *International Journal Monetary Economics and Finance*, 13(3), 269–278.
- Cecchetti, I., Allegrini, V., & Monteduro, F. (2018). The role of boards of directors in transparency and integrity in state-owned enterprises. *Studies in Public and Non-Profit Governance*, 7, 53–87.
- Chia, Y. E., Lim, K. P., & Goh, K. L. (2020). More shareholders, higher liquidity? Evidence from an emerging stock market. *Emerging Markets Review*, 44.
- Dao, B. T. T., & Ngo, H. A. (2020). Impact of corporate governance on firm performance and earnings management a study on Vietnamese non-financial companies. *Asian Economic and Financial Review*, 10(5), 480–501.
- Götz, O., Liehr-Gobbers, K., & Krafft, M. (2010). *Evaluation of structural equation models using the partial least squares (PLS) approach*. In *Handbook of partial least squares: Concepts, methods and applications*. Berlin, Heidelberg: Springer Berlin Heidelberg.
- Hadli, Y., Saraswati, E., & Atmini, S. (2023). Factors affecting intention on whistleblowing: An analysis on moderated model of legal protection. *International Journal of Business, Economics & Management*, 6(2), 184–198.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer Nature.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management and Data Systems*, 116(1), 2–20.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Kalyanasundram, S. N. (2018). Board characteristics and the effectiveness of whistleblowing policy: A conceptual paper. *Global Business and Management Research: An International Journal*, 10(3), 1080–1091.
- Khairiddine, H., Salhi, B., Aljabr, J., & Jarboui, A. (2020). Impact of board characteristics on governance, environmental and ethical disclosure. *Society and Business Review*, 15(3), 273–295.
- Khanchel, I., & Bentaleb, D. (2022). Is corporate voluntary disclosure a burden to shareholders? *International Journal of Revenue Management*, 13(1–2), 50–78.
- Kusumaningsih, A. (2021). Factors affecting whistleblowing intention: A study of accounting undergraduate students. *Jurnal Akuntansi*, 13(1), 2085–9643.
- Mahmud, N. M., Mohamed, I. S., Arshad, R., & Adam, A. (2024). Anti-corruption efforts in the healthcare sector during the Covid-19 pandemic in Malaysia. *SAGE Open*, 14(2), 1–11.
- Makri, M., Makan, L. T., & Kabra, K. C. (2024). Board characteristics and integrated reporting in an emerging market: evidence from India. *Asian Journal of Accounting Research*, 9(1), 2–12.

- Mohamed, A. A. A., Ahmad, A. A., & Baig, F. B. S. (2015). Disclosure of wrongdoings and protection of employee whistleblower under the Malaysian and Nigerian law. *Journal of Social Sciences & Humanities*, 23(S), 1–18.
- Peng, X., Qi, T., & Wang, G. (2022). Board gender diversity, corporate social disclosures, and national culture. *SAGE Open*, 12(4), 1–19.
- Pernamasari, R. (2018). Implementation of good corporate governance and voluntary disclosure compliance: 100 compass index companies listed Indonesian stock exchange (IDX) 2015-2016. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 8(2), 235–249.
- Rachagan, S., & Kuppasamy, K. (2013). Encouraging whistle blowing to improve corporate governance? A Malaysian Initiative. *Journal of Business Ethics*, 115(July), 367–382.
- Rahayu, U. A., & Astuti, C. D. (2023). Faktor-faktor yang mempengaruhi intention whistleblowing. *Jurnal Informatika Ekonomi Bisnis*, 5(1), 111–117.
- Rahman, R. A., Hashim, H., Ishak, N., Zaini, N., & Rohani, S. R. S. (2023). Whistleblowing of academic dishonesty: Does integrity culture matter? *International Journal of Academic Research in Business and Social Sciences*, 13(3), 1–12.
- Rashid, N. R. A., Ahmad, A. N., Dahlal, N. M., & Abdullah, M. A. (2023). Applying ethical climate theory in whistleblowing intentions study among employees in halal food companies: A protocol. *Halal-sphere*, 3(1), 47–54.
- Saha, R. (2022). Corporate governance, voluntary disclosure and firm valuation relationship: Evidence from top listed Indian firms. *Journal of Accounting in Emerging Economies*, 14(1), 187–219.
- Saha, R., & Kabra, K. C. (2020). Corporate governance and voluntary disclosure: A synthesis of empirical studies. *Business Perspectives and Research*, 8(2), 117–138.
- Said, R., Abdul Rahim, A. A., & Hassan, R. (2018). Exploring the effects of corporate governance and human governance on management commentary disclosure. *Social Responsibility Journal*, 14(4), 843–858.
- Salleh, M. F. Md., Yusoff, W. S., & Basnan, N. (2019). Whistleblowing disclosure policy and cost of equity in ASEAN 5 publicly listed companies: A new establishment of regional whistleblowing disclosure scoring index. *Jurnal Pengurusan*, 55(10), 125–133.
- Sharma, J. P., Kanojia, S., & Sachdeva, S. (2018). Comparison of whistleblower protection mechanism of select countries. *Indian Journal of Corporate Governance*, 11(1), 45–68.
- Sofi, M. F., & Yahya, M. H. (2020). Shariah monitoring, agency cost and fund performance in Malaysian mutual funds. *Journal of Islamic Accounting and Business Research*, 11(5), 945–972.
- Streukens, S., & Leroi-Werelds, S. (2016). Bootstrapping and PLS-SEM: A step-by-step guide to get more out of your bootstrap results. *European Management Journal*, 34(6), 618–632.
- Talpur, S., Lizam, M., & Zabri, S. M. (2018). Do audit committee structure increases influence the level of voluntary corporate governance disclosures? *Property Management*, 36(5), 544–561.
- Vadasi, C., Tasios, S., & Bekiaris, M. (2021). Corporate governance and voluntary disclosure: The case of listed firms on the Athens stock exchange. *Journal of Accounting and Taxation*, 13(4), 270–282.
- Waweru, N. (2020). Business ethics disclosure and corporate governance in Sub-Saharan Africa (SSA). *International Journal of Accounting and Information Management*, 28(2), 363–387.
- Yusoff, N. M., Ahmad, A. N., & Dahlal, N. M. (2023). The degree of whistleblowing intention and its determinants among halal food manufacturing employees. *Journal of Fatwa Management and Research*, 28(2), 14–37.
- Zakaria, M., Rahman, R. A., & Bustaman, H. A. (2020). Exploring a model of whistle blowing system for Malaysian municipal council. *International Journal of Financial Research*, 11(3), 62–72.

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