JOURNAL OF GOVERNANCE AND INTEGRITY (JGI)

ISSN: 2600-7479 e-ISSN: 2600-786X

VOL. 6, ISSUE 1, 426 - 440

DOI: https://doi.org/10.15282/jgi.6.1.2023.8827



ORIGINAL ARTICLE

BOARD STRUCTURE, DIRECTORS' REMUNERATION DISCLOSURE LEVEL AND FIRM VALUE IN MALAYSIA

Sonia Johanthan¹*, Nurul Afidah Mohamad Yusof ¹·, Zam Zuriyati Binti Mohamad ¹, and Krishna Moorthy ²

- ¹ Faculty of Business and Finance, Universiti Tunku Abdul Rahman, Kampar, Perak, Malaysia,
- ² School of Economics and Management, Xiamen University Malaysia, Sepang, Selangor, Malaysia.

ABSTRACT - This study aims to determine the impact of corporate governance mechanism on the directors' remuneration disclosure level and firm value. Data were collected from annual reports of 200 selected companies listed in Bursa Malaysia from 2013 to 2019. Pooled OLS, longitudinal data and 2SLS was carried out to accomplish the objective. The results show that board independence significantly impact the directors' remuneration disclosure level while CEO duality and board size are insignificant on the directors' remuneration disclosure level. Another finding revealed that directors' remuneration disclosure level and board size were significant in affecting the firm value. It was also found that directors' remuneration disclosure does not mediated the relationship between board structure and firm value. This finding deserves the attention of the stakeholders, investors, policymakers, and organizations in modelling a high-level disclosure and governance structure in the corporate environment in enhancing firm value.

ARTICLE HISTORY

Received: 28-10-2022 Revised: 1-11-2022 Accepted: 4-4-2023

KEYWORDS

Corporate governance Disclosure Board structure Board independence Firm Value

INTRODUCTION

The 1997 financial crisis in Asia led numerous corporate organizations to collapse, compelling Asian countries, including Malaysia, to call for enhanced transparency (See, Pitchay, Ganesan, Haron, & Hendayani, 2020). Few factors were recognised as the cause, nevertheless, economists have identified the failure of the corporate governance systems as the primary factor (Khalid, 2018). Therefore, in order to enhance corporate governance, the Malaysian Code on Corporate Governance (MCCG) was established in 2000 to stabilise market conditions by prioritizing transparency, followed by a series of MCCG in 2007, 2012, and 2017. Despite the substantial improvement made on MCCG, Malaysia is still rated below the average in terms of governance (Forum for a New World Governance, 2011) and transparency (Transparency International, 2016). The recent evidence for the lack of urgency on strict corporate governance practice can be observed in the recent debacle of the 1Malaysia Development Berhad (1MDB), which led to a severe information asymmetry, and consequently, the collapse of an entity (Johan, 2022).

The presence of information asymmetry is deemed to be caused by the lack of disclosure when the annual report is prepared by managers to generate better impressions for personal benefits (Haryati & Cahyati, 2015). Information asymmetry arises when managers have more data than other stakeholders (Nasution et al., 2020). As a loophole that managers can take advantage of in disclosure practice, implementing a control mechanism that can align the differences in interests between owners and managers is essential. One mechanism that can reduce the information asymmetry issue is implementing a corporate governance mechanism (CGM) to enhance disclosure practice (Barus & Setiawati, 2015). Particularly, directors' remuneration arrangement is one of the governance methods that primarily aims to synchronize the interest of managers and owners, thus minimizing information asymmetry.

Nevertheless, a previous researcher (Segarra-Moliner, 2022) emphasised that remuneration could lead to significant information asymmetry problems when the compensation process and the value are not transparently disclosed. As directors' remunerations are expected to be associated with the firm's performance, the manager can choose arrangements that favour them instead of the company. Hence, comprehensive disclosure of directors' remuneration is among the effective means to resolve the information asymmetry problem between owners and managers (Bel-Oms & Segarra-Moliner, 2022). Prior studies have explained the importance of corporate governance towards a positive financial impact. Nonetheless, corporate governance cannot necessarily be associated directly with enhanced firm value (Reguera-Alvarado & Bravo-Urquiza, 2020) but indirectly through the board of directors' decision-making strategies (Castro et al., 2016). Therefore, the disclosure of directors' remuneration in the annual report as a mediator between CGMs and firm value will be the study's central theme, which will pique the interest of practitioners and academics due to its strategic solution to the information asymmetry issue (Arye et al., 2003).

The gap in the literature is addressed by incorporating the most recent updates to the corporate governance rules, namely MCCG 2012 and 2017 in this study. The updates comprise the removal of individual directors' disclosure recommendations in MCCG 2012 and the addition of stakeholder's assessment of whether the remuneration of directors

is commensurate with their performance in MCCG 2017, which was not investigated in earlier studies (Malak, 2012; Khalid, 2018). The present study adds to the literature by adding to the corporate governance framework by exposing whether differences exist in publicly listed firms' remuneration disclosure practices, based upon a sampling period from 2013 to 2019 (pre and post-MCCG 2017). Secondly, this study explores the link between CGM with firm value through a mediating variable, namely directors' remuneration disclosure. Limited studies were conducted on the indirect relationship of directors' remuneration disclosure with CGM and firm value that may assist policymakers to scrutinise the current disclosure regulations.

Problem Statement

The lack of enhanced corporate governance practices in companies has led to a stream of negative discernment towards Malaysian corporate governance and consequently has shaken the confidence of the investors (Abdullah, Said & Caliyurt, 2019; Norwani et al., 2011). Evidence of the lack of urgency on strict corporate governance practice can be observed in the recent debacle when Serba Dinamik removed the auditor when the executive was unhappy with the audit findings (The Malaysian Institute of Corporate Governance, 2021). The action contradicts the central purpose of external audits. The dispute should have raised the alarm bells for the seriousness of the matter and the crucial need for a robust corporate governance practice across all companies. Unfortunately, the issue appears to be still ignored (Ahmad & Sulaiman, 2017).

According to the Executive Chairman of the Securities Commission Malaysia, Datuk Syed Zaid Albar (2021), "there is a strong need for good corporate governance and board leadership, especially as companies navigate the prolonged post-pandemic recovery period." This study aims to determine how the exposure of the most personal information regarding directors, particularly their salary affects the firm's value. The impact on firm value is examined in the present study since the firm value is critical data in investment decisions (Robiyanto et al., 2019).

The issues highlighted above lead to the following research objectives. First, this study explores the impact of CGM on directors' remuneration disclosure levels. Second, to investigate the impact of directors' remuneration disclosure level on firm value. Third, to investigate the impact of CGM on firm value and finally to investigate if directors' remuneration disclosure level mediates the relationship between CGM and firm value.

CONCEPTUAL FRAMEWORK & HYPOTHESES DEVELOPMENT

The conceptual framework for this study is supported by two prominent theories in corporate governance namely agency theory and signalling theory. These theories are relevant to this study since it examines the impact of CGM on the directors' remuneration disclosure level and firm value (El-Deeb et al., 2021; Karim, 2021). The minimal regulation on remuneration disclosure in Malaysia has led to a lack of transparency, leading to serious information asymmetry (Arye et al., 2003). The agency and signalling theories suggest that encouraging disclosure is crucial in minimising information asymmetry (Katmon & Al Farooque, 2015). Since transparency is vital, companies can indicate a steadfast obligation to continue delivering more transparent information by attaining high disclosure quality. Hence, the companies can gain the benefit of higher firm value.

This framework consists of three independent variables, one dependent variable, five control variables and one mediating variable. Board structure association with the directors' remuneration disclosure level and firm value are the main variables of this research study. Audit quality, firm size, leverage, sales growth and profitability are the control variables included in this research model.

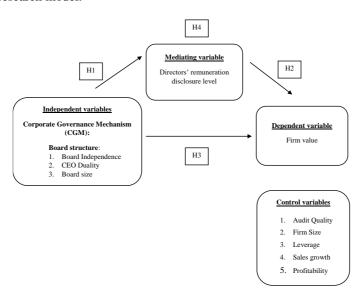


Figure 1. Conceptual framework

Previous studies linking corporate governance and disclosure studies in Malaysia revealed a growing, beneficial, and significant relationship over time (Mohd Ghazali & Weetman, 2006; Haniffa & Cooke, 2005). The findings demonstrate that the improvement of the corporate governance framework seems to impel greater disclosure after several years of applying the regulation. Considering that effective corporate governance is a critical mechanism for firms to determine the reporting of directors' remuneration amount, this study investigates which aspects of its internal corporate governance element influence the decision-making process. Several prior studies found a significant relationship between board structure (Chau & Gray, 2010; Ho & Taylor, 2013) on disclosure level concerning directors' remuneration in developing markets. Therefore, the motivation lies in the board structure, proxy by independent board directors, CEO duality, and the board size as these corporate governance attributes impact remuneration disclosure. As a result, the following hypotheses are suggested:

Hypothesis 1a: Board independence has a significant impact on the directors' remuneration disclosure level Hypothesis 1b: CEO duality role has a significant impact on the directors' remuneration disclosure level Hypothesis 1c: Board size has a significant impact on the directors' remuneration disclosure level

Previous accounting literature generally presumes that disclosure is value-relevant and disputes the aspects such as board structure impede disclosure (Verrecchia, 2001). Sheu et al. (2010) showed experiential proof that highlights the significant positive effect on firms' market value as a result of comprehensive disclosure of directors' compensation. The study further found that extended disclosure on overall compensation is more than the minimum mandatory requirements, even with lower transparency levels. Thus, the extended disclosure still contributes to creating market value. Literature suggests that disclosure is linked with higher firm value because investors gain more confidence in a corporation that is more transparent (Botosan & Plumlee, 2002; Sheu et al., 2010). Therefore, the following hypothesis is developed:

Hypothesis 2: Directors' remuneration disclosure level has a significant impact on the firm value

The relationship between CGM and firm performance has been a subject of interest for many researchers. Many researchers found that corporate governance characteristics significantly affect a company's performance (Khana et al., 2021; Torres & Augusto, 2021). Nevertheless, these conclusions might not be applicable to developing nations such as Malaysia mainly due to the cultural factors that have varieties in terms of disclosing behaviour where the enforcement practice is not as strict as in developed countries (Khalid, 2018). Therefore, this study focuses on examining corporate governance elements in Malaysian publicly listed firms and the firm value. Several prior studies found a significant relationship between board structure (Chaghadari, 2011; Ganguli & Deb, 2021) on firm value. Hence, this study concludes that this corporate governance attributes impact firm value. Thus, the following hypotheses are developed:

Hypothesis 3a: Board independence has a significant impact on firm value Hypothesis 3b: CEO duality role has a significant impact on firm value Hypothesis 3c: Board size has a significant impact on firm value

Haniffa and Cooke (2002) stated that disclosure might be affected by corporate governance, mainly because the board of directors are responsible for administering the disclosure of information in annual reports (Gibbins et al., 1990). The board of directors mainly influences the disclosure of voluntary items in annual reports, the quantity of information, and the timeline for this information. Therefore, in relation to the agency theory, the board of directors that is independent of the management and undertake their responsibilities to stakeholders tends to disclose all relevant information, inclusive of voluntary items. Kinkel (2014) showed that disclosure is a mediating variable for the linkage between corporate governance and firm value. Based on the significance of the disclosure aspects (Haniffa & Cooke, 2002; Oh, 2003) in Malaysia's corporate governance and firm value, the final part of this study examines if the level of directors' remuneration disclosure acts as a mediator in the association between CGM and firm value. Hence, the subsequent hypothesis is formed:

Hypothesis 4: Directors' remuneration disclosure level has a significant mediating effect between CGM and firm value.

METHODOLOGY

The present study employed content analysis and panel data regression. Data for the remuneration-related information was manually retrieved from firms' annual reports among corporations listed on Bursa Malaysia from 2013 to 2019 as a sampling period. Bursa Malaysia is an integrated platform that offers various services related to the Malaysian stock exchange. According to Sekaran and Bougie (2013), the sample size should be more than 30 and less than 500 for most research. They also determined that the sample size should be 186 for a population of 750, while the sample size should be 201 for a population of 800. Based on the total number of companies listed on the main board of Bursa Malaysia, 741 companies were selected, excluding banks and financial institutions which were eliminated due to differences in laws and regulations (Haniffa & Hudaib, 2006). The current study utilised a sample size of 200 companies since the population for this study is 741. Stratified random sampling was employed to ensure that certain industries are adequately represented in the study through the assignment of strata. Microsoft Excel 2013 was utilised to perform the random selection of

companies by selecting the function 'rand' in mathematical calculation. This technique eliminates bias as it is a computer-generated result. This method was also used by Katmon et al. (2019), who also employed secondary data.

Data in this research were analysed using the STATA statistical software version 11 due to its suitability for panel data regression. The primary analysis utilised pooled ordinary least squares (OLS). The OLS regression equation was expressed using the following models to determine CGM's effect on disclosure and firm value in Malaysia. These models integrated the theoretical perspectives explored in the literature review and hypothesis development, in addition to the control variables of dummies for years and industry classifications. The models are:

Model 1

DISCit= β 0+ β 1BINDit+ β 2DUALit+ β 3BSIZit+ Σ β cControlit+ ϵ it

Model 2

EVAit=β0+β1DISCit+β2BINDit+β3DUALit+β4BSIZit+Σ&c Controlit+εit

Model 3

 $EVAit=\beta 0+\beta 1BINDit+\beta 2DUALit+\beta 3BSIZit+\Sigma Controlit+\varepsilon it$

Measurement of Variables

Dependent Variables

EVA = Differences between Net Operating Profit after Tax (NOPAT) and the Weighted Average Cost of Capital (WACC)

Independent Variables

BIND = Percentage of independent board members

DUAL = CEO/Chairman duality role (1 if the roles of CEO and chairman of a company are split, otherwise, the

value is 0)

BSIZ = Total number of directors on board

Mediating Variables

DISC = Disclosure of directors' remuneration index

Control Variables

BIG4 = Audited by Big Four audit firms (1 audited by Big Four, otherwise, the value is 0)

FSIZE = Market value per share X number of the outstanding ordinary share

LEV = The ratio of total debt and total assets

GROW = Current year sales ratio to previous year's sales and profit, proxy by earning per share (net income as at

year-end over the respective share capital)

ROA = Return on Asset = Net Income / Total Assets

<u>Definition of Disclosure Scoring Index</u>

This research established a disclosure scoring index that contains eight (8) weighted items and seven (7) unweighted items to assess the disclosure level. The list of the disclosure comprises short-term benefits (cash salary, bonuses, fees, and other special allowance), long-term benefits (long-term incentive plan, options, grants, termination), and the related process that derives the remuneration amount, such as the remuneration policy and narrative of a pay-performance link (Muslu, 2010; Riaz et al., 2015). For the unweighted index, dichotomous scores, where 1 is given for the item disclosed and 0 is given for the item not disclosed. Conversely, the weighted index is mainly assigned to items that require narrative disclosure. 3 is given if there were detail and extensive elaboration on the disclosure which includes a specific amount which is similar to Katmon, Mohamad, Norwani and Al Farooque (2019). 2 is given if there was full disclosure, 1 is given when it was partially disclosed, and 0 is given when it was not disclosed at all (Khalid, 2018). Following Marston and Shrives (1991), a not-applicable (N/A) is given when a company did not disclose an item when it is not applicable for them to disclose.

RESULT & DISCUSSION

The first analysis is to establish remuneration disclosure from 2013 to 2019 using the descriptive analysis followed by pairwise correlation analysis was performed to determine whether there is any autocorrelation between each independent variable and dependent variable (Khalid, 2018). Pooled OLS, longitudinal data and 2SLS were carried out to accomplish the primary objective which is to examine the impact of CGM on directors' remuneration disclosure level and firm value.

Descriptive Findings

Firstly, the descriptive statistics were performed and the results of the descriptive analysis are presented in Table 1.

Table 1. Summary statistics for all variables from 2013 to 2019

Variable	Mean	Std Dev	Min	Med	Max
Disclosure Index (DISC)	0.509	0.121	0.261	0.522	0.889
EVA	-47.17	469.63	-7884.82	1666.78	1998.64
Board Independence (BIND)	0.464	0.118	0.000	0.444	0.875
CEO Duality (DUAL)	0.828	0.379	0.000	1.000	1.000
Board Size (BSIZ)	9.629	2.435	5.000	9.000	15.00
Audit Quality (BIG4)	0.862	0.346	0.000	1.000	1.000
Firm Size (FSIZE)	10.610	0.511	9.436	10.578	11.824
Leverage (LEV)	0.232	0.160	0.000	0.193	0.659
Sales growth (GROW)	0.089	0.203	-0.673	0.067	1.250
Profitability (ROA)	7.672	11.750	-4.957	4.489	72.360

Descriptive statistics of the variables in the full sample are reported in Table 1. The mean disclosure index from 2013 to 2019 for directors' remuneration is 50.9% and the range is 26.1% to 88.9%. The mean for EVA is -47.17. According to Rakshit, Mitra and Kurmi (2017), a positive value of EVA creates the shareholders' value whereas a negative EVA indicates that the business firm did not make enough profit to cover the capital charges. The negative result is consistent with EVA mean reported by Al Mamun and Mansor (2013) which was -121.71.

The average number of directors on board is nine while the average board composition consists of independent directors 46.4%. As for the audit quality, a majority of the firms are audited by the Big 4 audit firms with an average of 86.2%. The result is similar to sampling by Chau and Gray (2010) who noted that a high proportion of sample firms (93%) were audited by Big 4 firms in Hong Kong. The other control variables suggest wide spreads that imply the disclosure provisions and the sampled firms have been appropriately selected, thus reducing the possibility of sample selection bias.

Correlation analysis

Table 2. Pairwise Correlation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
DISC										
(1)	1.00									
EVA										
(2)	0.20	1.00								
BIND										
(3)	0.06	0.25	1.00							
DUAL	-									
(4)	0.08	-0.18	-0.00	1.00						
BSIZE										
(5)	0.05	0.04	0.01	0.12	1.00					
BIG4	-									
(6)	0.01	0.03	-0.00	-0.06	-0.03	1.00				
FSIZE										
(7)	0.11	0.12	0.04	0.13	0.08	0.03	1.00			
LEV										
(8)	0.20	0.26	-0.10	0.16	0.25	0.11	0.22	1.00		
GROW										
(9)	0.21	0.14	-0.02	-0.35	-0.37	-0.06	-0.12	0.13	1.00	
ROA	-									
(10)	0.04	-0.04	0.04	-0.12	-0.15	0.00	0.00	0.06	0.11	1.00

Correlation analysis was performed to determine whether there is any autocorrelation between each independent variable and dependent variable. The correlation analysis carried out in this study as per Table 2 is a pairwise correlation. The pairwise correlation enables researchers to observe the relationship's direction (positive or negative) between variables and detect any multicollinearity issues. Multicollinearity is the situation where two or more variables are highly

correlated and this has a damaging effect on the regression analysis results (Hassan *et al.*, 2009). Multicollinearity problems occur when the coefficient value is more than 0.90 (Hassan *et al.*, 2009). Therefore, there was no multicollinearity problem here.

As shown in Table 3, Model 1 presents the OLS regression between CGM elements with remuneration disclosure. Model 2 determines the influence of remuneration disclosure and CGM mechanism on the firm value measured by EVA. Model 3 identifies the influence of the CGM mechanism on firm value. The control variables presented in Table 3 are audit quality (BIG4), firm size (FSIZE), leverage (LEV), sales growth (GROW), and return on asset (ROA).

Table 3. Ordinary least square (OLS) regression result

Variables	MODEL 1 Coef t statistic	MODEL 2 Coef t statistic	MODEL 3 Coef t statistic
Disclosure		82.70***	82.70***
(DISC)		7.84	7.84
Board Independence	0.11***	14.05	14.05
(BIND)	2.65	1.19	1.19
Board Duality	0.02	0.01	0.01
(DUAL)	(0.02)	(0.02)	(0.02)
Board Size	0.00	4.04***	4.04***
(BSIZ)	(0.05)	4.43	4.43
Audit Quality	0.03**	0.05***	0.05***
(BIG4)	(0.01)	(0.01)	(0.01)
Firm Size	0.05***	0.05***	0.05***
(FSIZE)	(15.28)	(15.63)	(15.63)
Leverage	0.17***	0.16***	0.16***
(LEV)	(0.04)	(0.05)	(0.05)
Sales Growth	0.01	0.01	0.01
(GROW)	(0.02)	(0.02)	(0.02)
Return on Asset	-0.00	-0.00	-0.00
(ROA)	(0.00)	(0.00)	(0.00)
Constant	-0.90***	-6.79	-6.79
	-10.77	-0.54	-0.54
Observations	1400	1400	1400
R-square	0.467	0.356	0.356
Year Effects	Yes	Yes	Yes
Industry Effects	Yes	Yes	Yes

Significant at *** p < 0.01, ** p < 0.05, * p < 0.1

Discussion on CGM and Remuneration Disclosure using OLS

The results from regression in Model 1 concerning the board structure revealed that the proportion of independent boards of directors significantly and positively influenced the remuneration disclosure. The finding is consistent with Abdul Hadi and Hanefah (2014) and Cuadrado-Ballesteros (2015). The possible reason highlighted by previous researchers pointed towards the independent directors, who were highly sensitive to social demand and prestige-conscious. For instance, they believed disclosing remuneration information would improve their reputation (Garcia-meca et al., 2015). Contrarily, no relationship was observed for CEO duality. Thus, the findings indicated that the separation between CEO and chairman duties is unable to influence the directors' remuneration disclosure among Malaysian public listed companies. These findings are similar to Khalid (2018). Besides, the findings revealed that the board size was insignificant with remuneration disclosure similar to Cheng and Courtenay's (2006) findings.

Discussion on the Influence of CGM, Remuneration Disclosure towards Firm Value

Based on Model 2, the remuneration disclosure was found to be significantly and positively influenced by firm value (EVA). The findings align with previous literature on disclosure and firm value (Bidhari & Siti Aisjah, 2013). The findings imply that firms with more disclosure would obtain higher EVA. Furthermore, this finding provides empirical evidence that firms can enjoy the benefits (higher firm value) by providing more information to the public (Bidhari & Siti Aisjah, 2013). The disclosure acts as communication that links the company to the management and can reduce information asymmetry (Mallin *et al.*, 2014). The findings further support the agency theory that providing remuneration information reduces agency expenses since enhanced transparency can improve company value by boosting the real cash flow that accrues to shareholders as a consequence of reduced agency issues (Hassan *et al.*, 2009).

Model 3 presents the findings of CGM elements and firm value. Consistent with Mohd Nor *et al.* (2014), the present study found that board size is positively associated with firm value, indicating that board size associates with firm value. As a result, a larger number of board members would be able to provide more advice to the CEO on business initiatives, particularly in large businesses. Thus, the agency and signalling theories are supported in this context as a larger board size creates greater firm profitability and value. In addition, the current study shows that board size was positively and significantly related to firm value. In terms of the independent board of directors, the outcome showed an insignificant effect on firm value.

Discussion on the Control Variables towards Disclosure and Firm Value

Audit quality showed a significant positive influence on remuneration disclosure. The findings are similar to Azmi *et al.* (2021), who implied that the audit firm's expertise was able to monitor the information provided. The Big 4 audit companies would maintain their reputation by examining the company's annual report to give confidence to investors to invest, thus increasing a firm's market capitalisation (Azmi *et al.*, 2021). The study found that the firm's size influences remuneration disclosure, corroborating previous literature findings (Hermalin & Weisbach, 2012; Bowrin, 2013). According to Branco and Rodrigues (2008), large companies are more socially visible and exposed to public scrutiny. Another possibility to explain the findings is that larger firms may be able to devote better disclosure as they have greater resource slack (Liu & Anbumozhi, 2009).

Akin to Lan *et al.* (2013), company leverage was positively significant in this study. The finding interprets that firms with high financial leverage disclosed more directors' remuneration information to enable them to reduce agency costs. Their findings confirmed the agency theory because debt providers tend to protect their interests by establishing agreements and disclosing additional information (Prihatiningtias, 2012). Scholars suggest that leverage helps create firm value by allowing the management to signal its transparency in cash flow distribution and closely monitor the financial institutions (Al-Akra & Ali, 2012). Furthermore, sales growth and return on assets did not significantly influence the disclosure and firm value. Thus, these two variables have an insignificant role in the directors' remuneration disclosure and firm value.

Panel Data Regression

The analysis was extended to panel data using fixed effect and random effect to attest to the pooled OLS regression's reliability. In panel data, companies were observed at several points in time. Specifically for the random effects model, the companies' specific effects were a random variable that was uncorrelated with the explanatory variables. Model 1 presents the results for analysis using random effect. In brief, the proxies for CGM elements did not show a significant influence on the remuneration disclosure for Model 1.

Another panel data analysis performed in this study was fixed effect. In the fixed effect model, the company's specific effect was a random variable allowed to correlate with the explanatory variables. The results are shown in Model 2 under Table 4. Variables do not show any significant influence on remuneration disclosure in Model 2.

Finally, the panel data analysis was done to observe the longitudinal influence of remuneration disclosure on EVA. Table 5 presents the results of the regression for remuneration disclosure and EVA.

Variables	MODEL 1	MODEL 2
	Coef t statistic	Coef t statistic
Board Independence	0.02	-0.00
(BIND)	(0.61)	(-0.19)
CEO Duality	0.00	-0.00
(DUAL)	(0.44)	(-0.43)
Board Size	0.00	0.00
(BSIZ)	(0.65)	(0.09)
Audit Quality	0.07*	0.02
(BIG4)	(4.25)	(1.41)
Firm Size	0.02*	0.00***
(FSIZE)	(5.38)	(1.76)
Leverage	-0.01	-0.03
(LEV)	(-0.37)	(-1.39)
Sales growth	0.00	0.00
(GROW)	(0.11)	(0.21)
Profitability	0.01	-0.01

(-0.09)

(ROA)

Table 4. Panel Data Regression

(-0.92)

Variables	MODEL 1 Coef t statistic	MODEL 2 Coef t statistic
Panel data Model Type	Random	Fixed
Constant	-0.36* (-3.37)	
Observations	1400	1400
Wald chi²/ F	115.43	3.02
R-squared	0.366	0.163
Year effects	Yes	Yes
Industry effects	Yes	Yes

Significant at *** p<0.01, ** p<0.05, * p<0.1

Table 5. Panel Data Analysis for EVA

Variables	MODEL 3	MODEL 4
	Coef t statistic	Coef t statistic
Disclosure	0.41	28.30**
(DISC)	(0.04)	(2.54)
Board Independence	7.83	1.27
(BIND)	(0.78)	(1.08)
CEO Duality	-0.05	0.25
(DUAL)	(-0.09)	(0.52)
Board Size	0.72	1.29*
(BSIZ)	(1.00)	(1.74)
Audit Quality	-2.62	8.91***
(BIG4)	(-1.40)	(2.85)
Firm Size	-0.86	0.86
(FSIZE)	(-0.35)	(-0.37)
Leverage	2.87	4.37
(LEV)	(0.44)	(0.74)
Sales growth	-0.69	-0.71
(GROW)	(-0.64)	(-0.67)
Profitability	-0.81	1.38
(ROA)	(-0.58)	(0.80)
Panel data Model Type	Fixed	Random
Constant	17.97	-4.33
	(1.83)	(-0.45)
Observations	1400	1400
Wald chi ² / F	0.74	28.47
R-squared	0.000	0.238
Year effects	Yes	Yes
Industry effects	Yes	Yes

Significant at *** p<0.01, ** p<0.05, * p<0.1

Overall, the results of the model that was developed from fixed effect and random effect showed consistent results among the models, whereby there had been no significant relationship between CGM elements and remuneration disclosure. Taking into consideration that CGM elements are not a time-varying variable (Prihatiningtias, 2012), it is not surprising that the result showed an insignificant relationship between CGM elements and remuneration disclosure in panel data analysis.

Endogeneity Issues

Consistent with Fauzi and Locke (2012), the current study performed a Durbin and Hausman test to check if there is an endogeneity problem. The result showed that board structure (i.e. board independence, CEO duality and board size) is not subjected to an endogeneity problem. This report continues with an analysis of remuneration disclosure and firm value. After identifying the existence of endogeneity issues, the current study employs 2SLS as given in Table 6.

Table 6. 2SLS Regression of Remuneration Disclosure and Firm Value

	Remuneration disclosure 1st Stage 2SLS Coef t	Firm Value – EVA 2 nd Stage 2SLS
	statistic	
Disclosure		47.15*
(DISC)		(6.36)
Board	0.01	16.40
Independence (BIND)	(0.68)	(1.32)
CEO Duality	0.02	11.46
(DUAL)	(0.63)	(1.41)
Board Size	0.01***	0.01***
(BSIZ)	(4.47)	(4.86)
Audit Quality	0.02***	6.60***
(BIG4)	(4.56)	(4.62)
Firm Size	0.01**	-5.13*
(FSIZE)	(2.66)	(-1.77)
Leverage	0.01	1.33
(LEV)	(0.58)	(0.34)
Sales growth	0.00	1.48
(GROW)	(0.46)	(0.80)
Profitability	-0.00	-0.00
(ROA)	(-0.06)	(-0.46)
Portfolio rank (IV)	0.11***	
	(40.19)	
Constant	-5.03	-12.63
		(-1.01)
Observations	1400	1400
R-squared	0.724	0.331
Year effects	Yes	
Industry effects	Yes	

Significant at *** p<0.01, ** p<0.05, * p<0.1

Instrumented: DISC

Instruments: BIND, DUAL, BSIZ, BIG4, FSIZE, LEV, GROW, ROA, LAGDISC, INDUSTRY

An endogeneity test was performed on the regression between remuneration disclosure and firm value. It revealed that endogeneity issues existed in the regression between disclosure and firm value when the firm value was measured using EVA. Thus, an IV estimator on 2SLS regression had been performed to solve the endogeneity. In this study, the portfolio rank of remuneration disclosure had been used as IV for regression between remuneration disclosure and EVA. The finds showed a consistent result with the outcome from OLS regression.

Mediating Analysis Findings

The current study employed the conditions outlined by Baron and Kenny (1986) to determine the mediation effect on the relationship between CGM and firm value. For the first condition, the independent variable should significantly contribute to mediating variables. In this study, the condition applies to regression between CGM and remuneration disclosure.

The second condition states that the independent variable should significantly contribute to the dependent variable. This study involves firm value and CGM in the second condition. The third condition implies that the prior significant relationship between the independent and dependent variables is no longer significant, or the significant effect is reduced when mediation is included in the regression between the independent variable and dependent variable. According to Saeed *et al.* (2015), no mediation exists if the direct link is still significant after the inclusion of the mediator. The result shown in Table 7 suggests no mediation effect because the significant effect has not been reduced.

Table 7. Regression analysis result of remuneration disclosure as a mediator in the relationship between CGM and EVA using steps by Baron and Kenny (1986)

	Step 1	Step 2	Step 3	Type of effect
Independent Variables				
(CGM)				
Board Independence	-0.16***	-14.00	-4.61	
(BIND)	-4.71	-1.61	-0.54	
Board Duality	0.00	-11.50	-11.15	
(DUAL)	0.07	-0.94	-1.04	
Board Size	0.03	30.62**	23.74***	
(BSIZ)	0.55	3.22	2.66	
Mediator Remuneration			82.70***	
Disclosure	-	-	7.84	
${f F}$	30.78	5.06	7.39	
R-square	0.467	0.250	0.356	

Significant at *** p < 0.01, ** p < 0.05, *p < 0.1

Discussion on Disclosure that Mediates the Relationship between CGM and Firm Value

The findings of the mediation analysis showed that the remuneration disclosure does not mediate the association between CGM (i.e. board independence, CEO duality and board size) with EVA. This mediation demonstrated that board independence, CEO duality and board size have direct effects on EVA. The direct effect occurs without any mediation on remuneration disclosure. In this situation, it is concluded that board structure has a direct effect on firm value which suggest that the board structure itself has the monitoring role as a decision-maker in reducing agency cost thus directly impacting firm value (Wahab, Sapuan, & Abdinazarovich, 2022; Sulong & Nor, 2008). Overall, the mediation analysis reported that the remuneration disclosure does not mediate the relationship between CGM and firm value.

CONCLUSION

The summary of the overall findings is presented in the tables below.

Table 8. Summary of Regression Result for the Impact of CGM on Directors' Remuneration Disclosure Level

Hypothesis statement	Result	Remark
Hypothesis 1a: Board independence has a significant impact on the directors' remuneration disclosure level	Significant	Support
Hypothesis 1b: CEO duality role has a significant impact on the directors' remuneration disclosure level	Not significant	Do not support
Hypothesis 1c: Board size has a significant impact on the directors' remuneration disclosure level	Not significant	Do not support

Table 9. Summary of Regression Result for the Impact of Directors' Remuneration Disclosure Level on Firm Value

Hypothesis statement	Result	Remark
Hypothesis 2: Directors' remuneration disclosure level has a significant impact on the firm value	Significant	Support

Table 10. Summary of Regression Result for the Impact of CGM on Firm Value

Hypothesis statement	Result	Remark
Hypothesis 3a: Board independence has a	Not significant	Do not support
significant impact on firm value		
Hypothesis 3b: CEO duality role has a	Not significant	Do not support
significant impact on firm value		
Hypothesis 3c: Board size has a significant	Significant	Support
impact on firm value		

Table 11. Summary of Mediating Effect on the relationship between CGM and firm value

Hypothesis statement	Result	Remark
Hypothesis 4a: Directors' remuneration disclosure level has a significant mediating effect between board independence and firm value.	Not significant	Do not support
Hypothesis 4b: Directors' remuneration disclosure level has a significant mediating effect between CEO duality role and firm value.	Not significant	Do not support
Hypothesis 4c: Directors' remuneration disclosure level has a significant mediating effect between board size and firm value.	Not significant	Do not support

Theoretical Implications

Agency theory suggests that strong corporate governance leads to better monitoring of management, where managers will enhance the level of disclosure to narrow the information asymmetry. The study's findings show that board independence positively influences remuneration disclosure, implying that the agency theory supported the relationship between corporate governance and remuneration disclosure in the board independence context. According to signalling theory, high disclosure level ensures lower information asymmetry. Based on the findings, remuneration disclosure is positively significant to firm value. Hence, these findings align with the signalling theory, which implies that managers disclose more information to signal to external parties that they perform better than their peers. Subsequently, the company will also gain stakeholder confidence by attracting investors to invest in the company.

Managerial Implications

The directors' remuneration disclosure level was positively significant towards firm value based on the results. This study provided robust evidence of the importance of the information reported by the firm. Thus, this study can be utilised as a reference, motivation, and reliable document for the company's management to ensure that the firm will be aware of the significant influence exerted by directors' remuneration disclosure level on firm value. This study will also be beneficial to the policymakers, namely Bursa Malaysia and the Securities Commission. Additional effort must be taken in promoting the importance of remuneration disclosure, which indirectly encourages firms to improve their responsibility to the public.

Limitations

Nevertheless, this study's findings should be interpreted in light of several limitations. Firstly, this study only relied on the annual report to collect data for remuneration disclosure. Other methods, such as media or online resources, can disseminate remuneration disclosure information in this globalised era. Secondly, the longitudinal panel data for seven years from 2013 to 2019 was unable to prove the extent effect between CGM and remuneration disclosure. The board composition is a time-consistent characteristic and does not vary, as the selected companies did not change over time. Thirdly, the current study focused on quantitative research methodology. The data collection method may be varied into qualitative methods (interviews, case studies, and observation) to understand better the board's decision-making process.

Recommendations

This study provides insight that might interest policymakers, practitioners, managers, and regulators despite the above limitations. The findings also present ideas for future research. Future research should expand the disclosure scoring index with other types of disclosure, such as external remuneration surveys, press releases and any informal channels (interim reports), instead of solely focusing on annual reports. Moreover, future research should broaden this study by examining a longer period of study. This study is essential for the researcher to support Malaysian regulators, who are serious about ensuring directors' remuneration is transparent as per stakeholders' expectations.

REFERENCES

- Abdul Hadi, I., & Hanefah, M. M. (2014). Board Diversity and Corporate Social Responsibility in Jordan. In 3rd Conference on Management, Economics and Finance (pp. 1-18).
- Abdullah, M., Evans, L., Fraser, I., & Tsalavoutas, I. (2015). IFRS Mandatory disclosures in Malaysia: the influence of family control and the value (ir)relevance of compliance levels. *Accounting Forum*, 39(4), 328-348.
- Abdullah, W. N., Said, R., & Caliyurt, K. (2019). The Effect of Internal Governance on Corporate Financial Crime of Companies in Malaysia. *Journal of Governance and Integrity*, 2(2), 53-64.
- Al Mamun, A., & Mansor, S.A. (2013). EVA as Superior Performance Measurement Tool. *Journal of Economic Development, Management, It, Finance and Marketing, 5*(2), 100-110.
- Al-Akra, M. and Ali, M. J. (2012) 'The value relevance of corporate voluntary disclosure in the Middle-East: The case of Jordan', *Journal of Accounting and Public Policy*. Elsevier Inc., 31(5), 533–549.
- Arye, L. et al. (2003) 'Executive Compensation as an Agency Problem', Journal of Economic Perspectives, 3(3), pp. 71–92.
- Azmi, N. A., Sata, A., Hanim, F., Abdullah, N., Ab Aziz, N. H., & Ismail, I. S. (2021). Institutional investors ownership and firm value: evidence from Malaysia. Asia-Pasific Management Accounting Journal, 16(1), 1-20.
- Baron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.
- Barus, A. C., & Setiawati, K. (2015). Pengaruh asimetri informasi, mekanisme corporate governance, dan beban pajak tangguhan terhadap manajemen laba. *Jurnal Wira Ekonomi Mikroskil*, 5(1), 31-40.
- Bel-Oms, I., & Segarra-Moliner, J. R. (2022). How Do Remuneration Committees Affect Corporate Social Responsibility Disclosure? Empirical Evidence from an International Perspective. *Sustainability*, *14*(2), 860.
- Bidhari, S. C., & Siti Aisjah, U.S. (2013). Effect of Corporate Social Responsibility Information Disclosure on Financial Performance and Firl Value in Banking Industry Listed at Indonesia Stock Exchange. *European Journal of Business and Management Vol.5*, No.18, 2013, 5(18), 39-47.
- Botosan, C. a. and Plumlee, M. a. (2002) 'A Re-examination of Disclosure Level and the Expected Cost of Equity Capital', Journal of Accounting Research, 40(1), 21–40.
- Bowrin, A.R. (2013). Corporate social and environmental reporting in the Carribean. *Social Responsibility Journal*, 9(2), 259-280. http://doi.org.10.1108/SRJ-08-2011-0074
- Branco, M. C., Rodrigues, L. L. (2008). Factors influencing social responsibility disclosure by Portuguese companies. *Journal of Business Ethics*, 83(4), 685-701.
- Castro, I., Galán, J. L., & Casanueva, C. (2016). Management of alliance portfolios and the role of the board of directors. *Journal of Business Economics and Management*, 17(2), 215-233.
- Chaghadari, M. F. (2011). Corporate Governance and Firm Performance. In 2011 International Conference on Sociality and Economic Development (Vol. 10, pp. 484-489).
- Chau, G. and Gray, S. J. (2010) 'Family ownership, board independence and voluntary disclosure: Evidence from Hong Kong', *Journal of International Accounting, Auditing and Taxation*. Elsevier Inc., 19(2), 93–109.
- Cheng, E. C. M. and Courtenay, S. M. (2006) 'Board composition, regulatory regime and voluntary disclosure', International Journal of Accounting, 41(3), 262–289.
- Cuadrado-ballesteros, B. (2015). The role of independent directors at family firms in relation to corporate social responsibility disclosures. *International Business Review*, 24, 890-901.
- El-Deeb, M. S., Halim, Y. T., & Elbayoumi, A. F. (2021). Disclosure tone, corporate governance and firm value: evidence from Egypt. *Asia-Pacific Journal of Accounting & Economics*, 1-22.
- Fauzi, F., Locke, S. (2012). Board structure, ownership structure and firm performance: a study of New Zealand listed-firms. *Asian Academy of Management Journal of Accounting and Finance*, 8(2).
- Forum for a new World Governance (2011) World Governance Index.
- Garcia-meca, E., Garcia-sanchez, I., & Martinez-ferrero, J. (2015). Board diversity and its effects on banks performance: An international analysis. *Journal of Banking & Finance*, *53*, 202-214.
- Ganguli, S. K., & Deb, S. G. (2021). Board composition, ownership structure and firm performance: New Indian evidence. *International Journal of Disclosure and Governance*, 1-13.
- Gibbins, M., Richardson, A., & Waterhouse, J. (1990). The Management of Corporate Financial Disclosure: Opportunism, Ritualism, Policies, and Processes. *Journal of Accounting Research*, 28(1), 121-143.
- Haniffa, R. M. and Cooke, T. E. (2002) 'Culture, Corporate Governance and Disclosure in Malaysian Corporations', *Abacus*, 38(3), 317–349.
- Haniffa, R. M. and Cooke, T. E. (2005) 'The impact of culture and governance on corporate social reporting', *Journal of Accounting and Public Policy*, 24(5), 391–430.
- Haniffa, R., & Hudaib, M. (2006). Corporate Governance Structure and Performance of Malaysian Listed Companies. *Journal of Business Finance & Accounting*, 33(7-8), 1034-1062.
- Haryati, R., & Cahyati, A. (2015). Pengaruh good corporate governance (gcg) terhadap earnings management pada perusahaan yang terdaftar di jakarta islamic index (JII). *JRAK*, 6(1), 16-37.
- Hassan, O. A., Romilly, P., Giorgioni, G., & Power, D. (2009). The value relevance of disclosure: Evidence from the emerging capital market of Egypt. *The International Journey of Accounting*, 44(1), 79-102.

- Hermalin, B.E., & Weisbach, M.s. (2012). Information Disclosure and Corporate. The Journal of Finance, LXVII(1).
- Ho, P.L. and Taylor, G. (2013) 'Corporate governance and different types of voluntary disclosure: Evidence from Malaysian listed firms', *Pacific Accounting Review*, 25(1), 4–29.
- Johan, S. (2022) Corporate Governance Principles in Sovereign Wealth Fund (The Case of Indonesia Sovereign Wealth Fund).
- Karim, S. (2021). An investigation into the remuneration—CSR nexus and if it can be affected by board gender diversity. Corporate Governance: The International Journal of Business in Society.
- Katmon, N., & Farooque, O. Al. (2015). Exploring the Impact of Internal Corporate Governance on the Relation Between Disclosure Quality and Earnings Management in the UK Listed Companies. *Journal of Business Ethics*.
- Khalid, A. A. (2018). Determinants and impacts of directors' remuneration disclosure: evidence from Malaysian FTSE30 companies (Doctoral dissertation, Brunel University London).
- Khana, N., Shafqatb, M. M., & Qureshic, S. A. (2021). CEO Duality and Firm Performance in the Pharmaceutical Industry of China: The Moderating Role of Ownership Type
- Kinkel, T. (2014). Board diversity and firm performance. University van Amsterdam.
- Lan, Y., Wang, L., & Zhang, X. (2013). Determinants and features of voluntary disclosure in the Chinese stock market. *China Journal of Accounting Research*, 6(4), 265-285.
- Liu, X., & Anbumozhi, V. (2009). Determinant factors of corporate environmental information disclosure: an empirical study of Chinese listed companies. *Journal of Cleaner Production*, 17(6), 593-600.
- Malaysian Institute of Corporate Governance (MICG) (2021). micg.org.my
- Malak, S. S. D. A. (2012) The Impact of Changes in Malaysian Regulatory Framework on the Disclosure of Executive Directors' Remuneration.
- Mallin, C., Farag, H., & Ow-Yong, K. (2014). Corporate social responsibility and financial performance in Islamic banks. *Journal of Economic Behavior & Organization*, 103(March 2013), 1-18.
- Mohd Ghazali, N. a. and Weetman, P. (2006) 'Perpetuating traditional influences: Voluntary disclosure in Malaysia following the economic crisis', *Journal of International Accounting, Auditing and Taxation*, 15, 226–248.
- Mohd Nor, M., Shafee, N.B., & Samsuddin, N. (2014). Board Characteristics and Malaysian Firm Performance, *Global Journal of Business Research in Accounting, Auditing and Business Etchics*, (3), 139-147.
- Muslu, V. (2010) 'Executive Directors, Pay Disclosures, and Incentive Compensation in Large European Companies', Journal of Accounting, Auditing & Finance, 25, 569–605.
- Nasution, N., Putri, D. H., & Faruqi, F. (2020.). The Effect of Asymmetry Information and Corporate Governance Mechanism on Earning Management in Companies Listed in the Islamic Index Period of Jakarta 2015–2018. Proceedings of the Annual International Conference on Accounting Research (AICAR 2019) (pp. 78-81). Atlantic Press.
- Oh, E. (2003), "In pursuit of transparency", The Star (Bizweek), 18, 5.
- Prihatiningtias, Y. W. (2012). Gender diversity in the boardroom and firm performance: evidence from Indonesian publicly listed financial firms. University of Cranberra.
- Rakshit, D., Mitra, S., & Kurmi, M. K. (2017). EVA verses Traditional Accounting-based Financial Performance Measures: An Evaluation of Relative and Incremental Information Content in explaining Variation in Stock Return.
- Reguera-Alvarado, N., & Bravo-Urquiza, F. (2020). The impact of board diversity and voluntary risk disclosure on financial outcomes. A case for the manufacturing industry. Gender in Management: An International Journal.
- Riaz, Z., Ray, S., Ray, P. K., & Kumar, V. (2015). Disclosure practices of foreign and domestic firms in Australia. *Journal of World Business*, *50*(4), 781-792.
- Saeed, S., Basiruddin, R., & Rasid, S. Z. A. (2015). The Mediating Role of Intellectual Capital in Corporate Governance and the Corporate Performance Relationship. *Mediterranean Journal of Social Sciences*, 6(5), 209-219.
- See, J. K. P., Pitchay, A. A., Ganesan, Y., Haron, H., & Hendayani, R. (2020). The effect of audit committee characteristics on audit quality: the moderating role of internal audit function. *Journal of Governance and Integrity*, 3(2).
- Sekaran, U. and Bougie, R. (2013) Research Methods for Business: A Skill-Building Approach. 6th Edition, Wiley, New York.Shehata, N. F., Salhin, A., & El-Helaly, M. (2017). Board diversity and firm performance: evidence from the U.K. SMEs. Applied Economics, 49.
- Sheu, H.-J., Chung, H. and Liu, C.-L. (2010) 'Comprehensive Disclosure of Compensation and Firm Value: The Case of Policy Reforms in an Emerging Market', *Journal of Business Finance & Accounting*, 37(9–10), 1115–1144.
- Sulong, Z., & Nor, F. M. (2008). Dividends, ownership structure and board governance on firm value: Empirical evidences from malaysian listed firm. *Management & Accounting Review (MAR)*, 7(2), 55-94.
- Torres, P., & Augusto, M. (2021). Attention to social issues and CEO duality as enablers of resilience to exogenous shocks in the tourism industry. *Tourism Management*, 87, 104400
- Verrecchia, R. E. (2001) 'Essays on disclosure', Journal of Accounting and Economics, 32(1-3), 97-180.
- Wahab, N. A., Sapuan, N. M., & Abdinazarovich, O. A. (2022). Internal Corporate Governance Mechanism: A Review. *Journal of Governance and Integrity*, 5(2), 237-248.
- Weisbach, S. M. (1988). Outside directors and CEO turnover. Journal of Financial Economics, 20, 431-460

CONFLICT OF INTEREST

The author(s), as noted, certify that they have NO affiliations with or involvement in any organisation or agency with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, jobs, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, expertise or beliefs) in the subject matter or materials addressed in this manuscript.

AUTHORS' BIOGRAPHY



Author's Full Name: Sonia Johanthan Author's Email: sonia@utar.edu.my

Author Professional Bio: Sonia Johanthan is affiliated to Universiti Tunku Abdul Rahman. Sonia is currently holding the position as Head of Commerce & Accountancy Department and providing service as Lecturer. Sonia is also currently persuing her PhD in the area of Corporate Governance and she has presented papers in international conferences. She is also a Certified Chartered Accountant recognized by MIA. Her research interests include Corporate Governance, Accounting and Auditing.



Author's Full Name: Dr. Nurul Afidah binti Mohamad Yusof

Author's Email: afidahi@utar.edu.mv

Author Professional Bio: Dr. Nurul Afidah Mohamad Yusof is an Assistant Professor at the Faculty of Business and Finance, Universiti Tunku Abdul Rahman (UTAR), Malaysia. She graduated in Bachelor of Accounting (Hons) from Multimedia University, MSc. in Finance from University of Sheffield, U.K., and Ph.D in Islamic Banking & Finance from International Islamic University Malaysia (IIUM). Her main research interests are corporate governance, Shariah governance, and finance.



Author's Full Name: Dr. Zam Zuriyati Binti Mohamad

Author's Email: zuriyati@utar.edu.my

Author Professional Bio: Dr Zam Zuriyati is currently an Assistant Professor at Universiti Tunku Abdul Rahman, teaching financial accounting and reporting. Her research area is in accounting, corporate governance, green innovation, adoption of digital technology and sustainable development.

439



Author's Full Name: Dr.Krishna Moorthy Manicka Nadar

Author's Email: krishna.manicka@xmu.edu.my

Author Professional Bio: Dr Krishna is currently an Assistant Professor at School of Economics and Management, Xiamen University Malaysia. His research area including Internal Controls, Management Accounting, Management,

Marketing, Financial Accounting.

journal.ump.edu.my/jgi ◀