FINANCIAL REPORTING QUALITY: THE ROLE OF INDEPENDENT AND GREY DIRECTORS, BOARD CONTINUOUS TRAINING AND INTERNAL AUDIT FUNCTION

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ABSTRACT

In this paper, we examine the relationship between board monitoring mechanism, continuous training and financial reporting quality in Malaysian context. The paper employed a sample of top 100 Malaysia firms identified by the Malaysia Shareholder Watchdog Group (MSWG) between the periods 2010-2011. Feasible GLS (FGLS) regression estimation method was used to test the relationship between the dependent variable of interest. The regression result reveals that while the proportion of grey directors in boardroom positively and significantly relates with both accrual and real earnings management, the proportion of independent directors was negative, but not significant. Board continuous training and outsourcing of internal audit function is however negatively and significantly affects accrual and real earnings management. The study's findings have implication for future regulatory initiative, as our result suggests that board mechanisms, specifically, board composition are not effective in improving the quality of reported figures. This study extend previous studies by testing whether board experience measured by the number of continuous education training program- trainings relating to corporate governance and financial reporting attended by board members improve the quality of financial reporting.

Keywords*: board continuous training, grey directors, independent director, and internal audit function.*

1.0 INTRODUCTION

Events in the past years, especially those related to financial crisis and the collapse of large companies, partly due to earnings manipulation and overly aggressive financial reporting, bring forth regulatory interventions. These events ignited the issuance and review of codes of corporate governance around the globe. For instance, the Sarbanes-Oxley Act 2002 and the Malaysia Code of Corporate Governance 2012 (MCCG 2012). Codes of corporate governance across the globe are unequivocal on the dominance of independent directors on corporate board and subcommittee in ensuring international best practice. The reviewed code (MCCG 2012) gives some recommendation on how to strengthen corporate governance practise in order to curb corporate malfeasances. Key among the recommendations is strengthening and reinforcing board independence and fostering board commitment. MCCG 2012 reemphasised the significant role of independent directors, separation of CEO and the chairperson role in internal control monitoring.

In addition, the new code makes provision for board continuous education programme. MCCG 2012 makes a case for the role of internal audit function in monitoring and enhancing the quality of the financial report. Although the role of and function of internal audit department is well entrenched in the earlier version, MCCG 2012 extends this role by mandating the establishment of internal audit function for all listed firms and mandating the disclosure of information regarding its function in the annual report among other provisions. A priori, when agent incentive is aligned with the interest of the principal, agency cost reduces (Jensen & Meckling 1976).

In essence, the primary purpose of these provisions is to strengthen governance practice among Malaysia public listed firms by ensuring sound corporate governance practice. As noted by Lin and Hwang (2010), "good corporate governance structure helps to ensure that management properly utilizes the enterprise resources in the best interest of absentee owners and fairly report financial condition and operating performance of the enterprise". Globally, the Codes of Corporate Governance recommend more inclusion of independent non-executive directors. The rationale for this requirement is that independent non-executive directors provide independent monitoring and objective evaluation of management activities since they are not socially tied to management (Fama & Jensen 1983). Therefore, their mission on board is to protect the interest of the shareholders by preventing management distortionary activities. Consistent with the notion that independent non-executive director on board improves company governance (Hsu & Wu 2014), corporate governance studies have mainly focused on independent directors' role on corporate board (Borokhovich, Boulton, Brunarrski, & Harman 2014). However, empirical findings from extant studies that examine the role of independent non-executive directors are inconsistent regrading the impact of independent directors on board (Lin & Hwang 2010).

Similarly, the role of non-independent non-executive directors otherwise called grey directors is yet to receive much empirical attention. Thus, the role of grey directors is not well understood in corporate governance literatures. By their nature, grey directors have social ties with the company's management, hence lack independence, and does not resolve the agency conflict. It is due to this reason that prior studies and in fact regulator rarely advocates for their role. Interestingly, new evidence emerging from the literature suggests that the economic and personal tie between the company (management) and directors as obtainable in grey directorship help align board interest with the shareholders. Westphal (1999); Hsu and Wu (2014) report that social tie between board of directors and management encourage

synergy. Management are more willingly to solicit for board advisory advice and the board of directors are as well incentivise to provide an adequate advisory service, which will eventually improve performance. For example, as opined by Borokhovich et al. (2014), share ownership by grey directors motivates them to behave like independent non-executive directors. Hsu and Wu (2014) report that, the under representation of grey directors on board inhibit board advisory function which makes firms susceptible to failure. Hsu and Wu (2014) finding is consistent with board collaborative hypothesis. The board collaborative hypothesis extend the role and function of the board of directors beyond monitoring to include the provision of advisory functions.

In another vein, extant studies theorized that good corporate governance extends beyond balance composition of independent directors. Board experience, skills, and knowledge are as well vital to the successful delivery of board charter (Gul & Leung 2004; Keasey & Hudson 2002). As earlier mentioned, part of the requirements of the MCCG 2012 is the board continuous training program. This is necessary due to the high level of uncertainty that characterized business and economic landscape. Board members need to update their knowledge and skills to match up with the changing dynamics of the business through continuous training program. This makes board members resourceful and equipped with better horn skill require for charting the company's course efficiently. An example is the recent global adoption of International Financial Reporting Standard (IFRS). Board of directors needs a good understanding of accounting practices as the majority of their functions revolves round financial reporting (Keasey & Hudson, 2002).

Although numerous studies (Ahmed & Duellman 2007; Al-Dhamari & Ku Ismail 2014; Armstrong et al., 2014) establish a link between sound corporate governance and earning management (proxy for financial reporting quality). In this paper, we extend previous studies by investigating the extent to which some specific provisions in the MCCG 2012 improve financial reporting quality. Specifically, we test the effect of independent non-executive directors, grey directors, board continuous training, and internal audit sourcing arrangement based on the sample of top 100 Malaysian firm identified by the Malaysia Shareholder Watchdog Group (MSWG) between the periods 2010-2011.

Using discretionary accrual earnings management and real earnings management (i.e. abnormal production, abnormal CFO, and abnormal expenses) as measures of financial reporting quality, our result suggests that grey director is significantly and positively related to absolute discretionary accrual. However, the number of grey directors scaled by board size does not have any significant relation with our proxy for earnings management. Board of director's continuous education and training reveals a negative, but not a significant relationship in all our measures of financial reporting. Similarly, internal audit function outsourcing arrangement is significantly positively associated with absolute discretionary accruals. Likewise, using real earnings management proxies the result of internal audit outsourcing has positive, but not significant influence on abnormal production and abnormal expenses. For abnormal CFO, outsourcing arrangement has negative insignificant impact.
Our study contributes to the extant literature on corporate governance by focusing on new perspective concerning the relationship between earnings management and corporate governance mechanisms. Specifically, we contribute by examining the role of grey directors and board of director's continuous training in improving the quality of reported financial information. The inclusion of grey director's members on board should improve board advisory role due to the fact that board social tie with management build a relationship that improves board-management working relationship. Consistent with previous studies,

(Beasley 1996), we contend that the inclusion of more independent non-executive directors on the board of directors should improve board monitoring effectiveness. In addition, board knowledge, as evidenced by the number of continuous training programmes attended by board member should add more value to this effectiveness. From a policy point of view, our result suggests that boardroom composition as measured by the proportion of grey directors and independent directors in boardroom are weak in improving the quality of reported figures. However, the results of board continuous training and outsourcing of Choosing a time period surrounding the revision of MCCG whose various provisions are expected to improve quality of reported figure, our findings produce valuable insights into how board composition and process affect the quality of reported financial figures.

The paper proceeds as follows. Section 2 presents a discussion of related literature and hypotheses development. Section 3 is the research design detailing sample selection process, measurement and estimation techniques. The study's analysis and finding are presente in section 4, and section 5 includes the conclusion of the study.

2.0 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Board composition and financial reporting quality

The board of directors is the highest decision-making body in companies (Fama & Jensen, 1983). The body is saddle with the pivotal role of monitoring and evaluating the performance of top-level management. However, the extent to which board discharges this function is determined by the composition of the board. A well composed board is an essential governance tool that affects managerial decision in the contemporary business environment (Srinidhi, Gul & Tsui, 2011). A balanced board should have the right mix of independent non-executive directors and non-independent executive directors (grey director). It also requires that board members should be made up of right combination of knowledge, expertise, skill and establishing appropriate board committees as the case maybe dictate.

As mentioned earlier, the board is primary saddled with the responsibilities of monitoring and advising top management (Westphal, 1999). All existing corporate governance theories (agency theory inclusive) tout board independence as a vital ingredient necessary to achieve board statutory responsibilities (Hoitash, 2011). Empirical investigation into the governance structures of firms indicates that board structures dominated by independent non-executive directors provide superior performance monitoring. While, Baysinger and Butler (1985) report that firm performance increase with the additional representation of independent directors, Beasley (1996) reveals that, the numbers of independent directors reduce the probability of fraud incidence. Dalton and Daily (2001) investigate investors reaction to the presence of independent directors during IPOs. Findings from their study shows that investors react positively to the presence of independent directors as investors are of the opinion that independent directors will avoid joining board with low quality as it may damage their reputation. Bushman and Smith (2003) report a positive relationship between timeliness and proportion of outside directors. The presence of independent directors on the corporate encourage timely report bad news (Beekes et al., 2004; Ahmed & Buellman, 2007), which increase earnings informativeness (Petra, 2006; Al-Dhamari & Ismail, 2014). Similarly, Bowen et al. (2008), Klein (2002), Peasnell et al. (2005) and Armstrong et al. (2014) demonstrate that independent directors enhance board monitoring, thereby constrained earnings management, which lead to increased corporate transparency.

Though the majority of the studies suggest that as more independent directors are present on board, financial reporting quality improves, some other literature suggests otherwise. In

reality, some authors argue that independent directors lack sufficient knowledge about the company's operation and their independence compromised (Gilson & Kraakman, 1991; Patton & Baker, 1987). Therefore, in the presence of these factors independent directors cannot effectively discharge their monitoring function. In examining the monitoring role of independent directors in family-controlled business, Abdullah et al. (2010), Mohammed et al. (2012); Aishah and Ibrahim (2013) did not find evidence that the number of independent directors strengthen board monitoring. While, Al-Dhamari and Ku Ismail (2014) reveals that independent directors reduce earnings ability to predict future cash flows in the Malaysian context. Other studies, Vefeas (2002) finds no statistical support to justify the claim that independent directors help improve the relationship between reported earnings and share return. Abdullah and Nasir (2004); Saleh et al. (2005); Abdul Rahman and Ali (2006); Osma and Noguer (2007) report an insignificant relationship between independent directors and earnings management. Despite the conflicting findings, the agency theory and the 2012 MCCG code suggest that, the presence of more independent non-executive director improves board monitoring and financial reporting process, our study hypothesis that:

H1: The higher the proportion of independent director the higher the financial reporting quality

The first hypothesis now leads us to our the second hypothesis. Contrary to the widely held believe that the board of director's close ties with management obstruct board processes; recent empirical evidence suggests that it rather improves board effectiveness (Hoitash, 2011). Falaye, Hoitash and Hoitash (2011) argued that both independent non-executive directors and grey directors improve board-monitoring role, but the later performs better in an advisory role. Westphal (1999) developed a collaborative board model where he demonstrated that *"Board social tie with outside directors enhances the propensity of top managers to solicit their advice on strategic issue while also increasing the outside directors tendency to offer such advice".*

A substantial number of literatures provide evidence on the benefits of including balanced proportion of grey directors inside the boardroom. For instance, Hsu and Wu (2014) found that, dominance of grey directors on the board reduces the likelihood of firm's failure. In relation to CEO replacement, Borokhovich et al. (2014) noted that in the absence of succession plan, grey directors put the interest of shareholders first and are more disposed to hire a high-quality replacement. While Beasley (1996) provided evidence suggesting that firms that experienced financial statement fraud have few number of grey directors inside the boardroom, Hoitash (2011) documented that a material weakness in internal control and firm financial misstatement is less when social ties exist between managers and directors. Based on the previous argument, when independent directors (i.e. grey directors) are bonded, there are a greater chance that financial reporting quality will increase. Therefore, we hypothesise that:

H2: The higher the proportion of grey directors the greater the financial reporting quality.

2.2 Board Continuous Training and Financial Reporting Quality

Good corporate governance extends beyond balance composition of independent directors. Board experience, skills, and knowledge are as well vital to the successful delivery of board charter (Gul & Leung, 2004; Keasey & Hudson, 2002). The contemporary business environment is characterised by high level of uncertainty due to changes in business and economic landscape. As such, board members are required to update their knowledge and

skill along these changes through continuous educational training. To say the least, continuous education training programme for board members is a key requirement of the MCCG 2012. Keasey and Hudson (2002) and Beekes, Pope and Young (2004) agreed that independent and non-executive directors need a good understanding of accounting practices since most of their functions revolve around financial reporting. Hence, companies are investing heavily in director's training. This is in part due to rapid changes in the regulatory environment. Thus, board training programme is designed to keep board members abreast of changes in the environment in order to enhance board job-specific knowledge and skill. Morin and Renaud (2004) investigated the effect of corporate university training on employees' job performance. Findings from their study reveal a linear relationship between job performance and corporate university training, suggesting that corporate university training improves job performance. Several others studies investigate the effect of training on the business result and found that it is positively associated with productivity, quality, labour turnover and the financial result (Sanchez et al., 2003). Bartel (1994), Bishop (1994), Huselid (1995), and D'Arcimoles (1997) findings are consistent and indicates that firm's that invest heavily on employee training receive returns in terms of profitability. Since all the study reviewed on the role of training are suggestive of positive benefits to the firm, we therefore hypothesise that:

H3: The higher the number of financial and corporate governance training programmes attended by board members during the financial year the higher the financial reporting quality.

2.3 Internal audit function sourcing arrangements and financial reporting quality

Internal audit function has gained prominence in the recent time due to its important monitoring role. As information, asymmetry arises due to separation of ownership from control, so also does the incentive of top-level management differs from those at the lower level and this create internal agency cost (Ettredge et al., 2000). Accordingly, the internal audit function serves as an effective monitoring mechanisms use by the top-level management to assess the effective deployment of firm's resources by managers. Consistent with agency theory, top-level management incur cost (otherwise called bonding cost) to convince their principal that the company's internal control process and risk management are effective (Sarens & Abdolmohammadi, 2011). Among the types of bonding cost is the amount invested in internal audit function. The top-level management could either outsource an internal audit function or create a department (in-house) to oversee the function. Although, outsourcing internal audit function could be justified on a company's strive to reduce cost and improve efficiency (Swanger & Chewning, 2001) through economies of scale and specialization. However, concerns abound most especially on the cost of outsourcing or retaining internal audit function in-house.

Consistent with the economic bonding theory, literature advocate that outsourcing internal audit to external auditors impair their independence due to lucrative remuneration (Lindberg & Beck, 2004; Simunic, 1984). Consequently, this practice results to fraudulent financial figures. Abott et al. (2007) found that companies with an effective audit committee are less likely to outsource the routine function to external auditors. Other issues aside economic bonding highlighted by Prawitt et al. (2012) when inter audit is outsourced is that, outsourced internal auditor lacks proper understanding of internal control process and good understanding of the business itself. More so, the extent of outsource internal auditor's commitment and using the right audit procedure as client situation demand are issues highlighted by Prawitt et. (2012). The presence of one or all of these issues may as well affect

the quality of reported figures. In contrast, knowledge spillover theorists suggest that outsourcing the internal audit function improves the quality of the financial report. Prawitt et al., (2012) examine the risk associated with outsourcing internal audit procedure to external auditors. Prawitt et al., (2012) found evidence consistent with knowledge spillover theory which suggest that the risk of financial misstatement will reduce by 23 percent when internal audit functions are outsourced to external auditors. Based on the conflicting arguments this study hypothesis that

H4: *There is a relationship between outsourcing of internal audit function and financial reporting quality*

3.0 RESEARCH DESIGN

3.1 Sample selection

This study focus on the top companies listed on the main market of Bursa Malaysia as rated by the Minority Shareholders Watchdog Group (MSWG) in 2011. The selection criteria as provided for in MSWG 2011 annual report is based on the level of compliance with best practices, quality of disclosure, financial stability, and commitment to corporate social responsibility initiatives. We observe the companies over four year periods from the year 2010 to 2013. Firms operating in the financial sector were eliminated due to the variation in financial reporting requirements with other companies. In addition, we exclude firms with missing financial information for the sample period. Table 1 Panel A gives the full summary of our selection process while Panel B provides the industry breakdown of the sample firm. We end up with 300 firm year observations.

3.2 Measurement of dependent, experimental and control variables

Dependent Variable: To proxy for financial reporting quality (FRQ), both the discretionary accrual earnings management and real earnings management are used to assess FRQ. We estimate discretionary accrual earnings management using Kothari et al. (2005) performance matched cross-sectional model. Performance matched accrual is necessary in order to control for firm extreme performance. Thus, consistent with Kothari et al. (2005) we included ROA as an explanatory variable in our accrual model. Following previous studies such as Warfield et al. (1995) and Frankel et al. (2002), we use absolute value of discretionary accruals as it captures the effect of both income increasing and income-decreasing accrual earnings management. The model is as described below in equation 1

$$\frac{TA}{Asset_{t-1}} = \partial_1 \frac{1}{Asset_{t-1}} + \partial_2 \frac{\Delta REV - \Delta REC}{Asset_{t-1}} + \partial_3 \frac{PPE}{Assets_{t-1}} + \partial ROA_{t-1} + \varepsilon_{it} \ldots\ldots equation\ 1$$

Where:

TA= total accruals computed as the difference between earnings before extraordinary items and discontinued operations and operating cash flows

Asset $_{t-1}$ = lagged of total asset

ΔREV= change in revenues

ΔREC= change in receivable

PPE= property, plant and equipment

ROA $_{t-1}$ = lagged return on asset calculated as net income before extraordinary items of the prior period divided by lagged total asset.

Discretionary accruals (DA) are residuals obtained from equation one consistent with Mitral et al. (2009) and we run the cross-sectional regression for each industry and year.
Since firms are likely to employ real operational activities to manipulate earnings when their ability to manage through discretionary method is constrained due to strict regulations (Roychowdhury, 2006), we as well examine real earnings management activities over the sample period. We adopt Roychowdhury (2006) proxies for our real earnings management estimation. We generate the normal level of cash flow from operation (CFO) for each industry and year using equation 2 below:

$$\frac{CFO_t}{Asset_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{Asset_{t-1}} + \beta_1 \frac{Sales_t}{Asset_{t-1}} + \beta_2 \frac{\Delta Sales_t}{Assets_{t-1}} + \varepsilon_{it} \dots\dots Equation\ 2$$

Where all other variables are as previously defined except for;
CFO_{it} = the actual CFO minus the normal level of CFO calculated using the estimated from equation 2.
$Sales_t$ = sales during period t
$\Delta sales_{it} = Sales_t - Sales_{t-1}$
Next, we model the normal level of discretionary expenses using equation 3

$$\frac{DISC_{it}}{Asset_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{Asset_{t-1}} + \beta_1 \frac{Sales_{t-1}}{Asset_{t-1}} + \varepsilon_{it} \dots\dots\dots\dots\dots Equation\ 3$$

All the variables in the model are defined previously except for;
$DISC_{it}$ = DISC is discretionary expenditures calculated as the sum of advertising expenses, R&D expenses and selling, general, and administrative expenses.
In addition, we estimate normal level of production cost as:

$$\frac{PROD_{it}}{Asset_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{Asset_{t-1}} + \beta_1 \frac{Sales_{it}}{Asset_{it-1}} + \beta_2 \frac{\Delta Sales_{it}}{Assets_{t-1}} + \frac{\Delta Sales_{it-1}}{Assets_{t-1}} + \varepsilon_{it} \dots\dots Equation\ 4$$

All the variables are consistent with previous definition, in addition:
$PROD_{it}$ = production cost, calculated as the sum of cost of goods sold (COGS) and changes in inventory during the year. The residual is obtained from equation 5 and equation 6.

$$\frac{COGS_t}{Asset_{t-1}} = \alpha_1 \frac{1}{Asset_{it-1}} + \beta_1 \frac{Sales_{it}}{Asset_{it-1}} + \varepsilon_{it} \dots\dots\dots\dots Equation\ 5$$

$$\frac{\Delta INV_{it}}{Asset_{it-1}} = \alpha_1 \frac{1}{Asset_{it-1}} + \beta_1 \frac{\Delta Sales_{it}}{Asset_{t-1}} + \beta_2 \frac{\Delta Sales_{it-1}}{Assets_{t-1}} + \varepsilon_{it} \dots\dots\dots Equation\ 6$$

Note: Abnormal CFO, abnormal production cost, and abnormal discretionary expenses are the difference between the actual value and the normal levels predicted in equation (2), (3), and (4).

Table 1
Sample selection and industry breakdown of the sample firm

Panel A: Sample selection	Number of Observation	%
Initial sample of firms with sectors reported in MSWG (2011)	100	
Less: firms operating in the financial sector	10	
Less: firms with missing data	15	

Final sample	75	
Panel B: Distribution of sample firms by industry		
Construction	16	5.3
Consumer	36	12
Industrial product	56	18.7
IPC	12	4
Plantation	36	12
Properties	36	12
Trade and services	108	36
Total	300	100

3.3 Estimation method

We employed Feasible GLS (FGLS) estimation techniques, which takes care of contemporaneous correlation[1] and heteroscedasticity[2] in panel data. The FGLS is more suitable for analyses for estimation bias arising from unobserved heterogeneity. Accordingly, the below model is developed.

Empirical model

$$FRQ_{it} = \beta 0 + \beta 1GRYD_{it} + \beta 2BODT_{it} + \beta 3OUTSOURCE_{it} + \beta 4IND_{it} + \beta 5BIG4_{it} + \beta 6LOGAF_{it} + \beta 7LOGTA_{it} + \beta 8QUICKRATIO_{it} + \beta 9CFO_{it} + \beta 10ROA_{it} + \beta 11CURRENT_{it} + \beta 12DEBT_{it} + \beta 13YEAR_{it} + \beta 14INDUSTRY_{it} + \mu_{RQ} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{ equation 7}$$

Where:

FRQ_{it} = Accrual earnings management and real earnings management;

$GRYD_it$= Number of grey director scaled by board size;

$BODT_{it}$= Board training measured by the log of number of corporate training that board members attended during the financial year;

$OUTSOURCE_{it}$ = Dummy variable 1 for firms that outsource internal control function and 0 if otherwise;

IND_{it} =Number of independent directors scaled by board size;

$BIG4_{it}$ = a dummy variable 1 for big4 audit firm and 0 if otherwise.

$LOGAF_{it}$ = log of audit fees;

$LOGTA_{it}$ = log of total asset;

QUICK $RATIO_{it}$ = current asset minus inventory divided by total current liabilities;

CFO_{it} = cash flow from operating activities divided by lagged total asset;

ROA_{it} = Net profit before tax divided by total asset;

$CURRENT_{it}$ =current assets divided by total assets;

$DEBT_{it}$ = total debt divided by total equity.

Finally, we control for variation between year and industry.

4.0 ANALYSIS AND FINDINGS

Table 2 provides the descriptive statistics of the variables used in our regression analysis. From the table the mean value of ABDAC, ABCFO and ABEXP are 0.339, 0.109, and 1.528 respectively. While, the mean value for the proportion of grey directors (GRYD) is 2.187, that of the independent directors (IND) is 4.137 indicating that the number of independent directors in boardroom is more than the proportion of grey directors, which is consistent with

[1] Wooldridge test for autocorrelation in panel data fail to reject the hypothesis of no first-order autocorrelation as the P-value is 0.00525.

[2] Likewise, the Modified Wald test for groupwise heteroscedasticity in fixed effect regression model fail is significant at 0.000 percent suggesting the presence of heteroscedasticity.

the requirement of the MCCG. Meanwhile, the average number of training attended by the directors during the year is approximately four (4) training programmes with maximum of 36 training attended by the directors.. Further, 48% of the sampled firm outsourced their internal audit function with about 90% of the sampled firms been audited by big4 audit firm. The average audit fees paid by the sampled firm is RM94,497 during the sampled period and the average size of the sampled companies as measure by total asset (TA) is RM7,449,434.

Table 3 report the correlation statistic among the explanatory variables used in our regression analysis. On the overall, majority of our explanatory variables falls below the threshold value of 0.80 as indicated in econometrics literature (see Gujarati, 2004). The implication of this is that the degree of Multicollinearity between our variables is not severe. In addition, the mean VIF of 2.29 as displayed in table 4 suggest that our result is not likely to be adversely affected by Multicollinearity.

Table 2
Descriptive statistics and Univariate result of continuous variable

Variable	Obs	Mean	Std. Dev.	Min	Max
ABDAC	299	0.339	2.156	0.000	25.725
ABCFO	299	0.107	0.493	0.000	7.058
ABEXP	299	1.528	4.427	0.000	37.445
ABPROD	298	0.000	0.000	0.000	0.001
GRYD	300	2.187	1.856	0.	9
IND	300	4.137	1.305	0	9
BODT	287	3.983	4.451	0	36
OUTSOURCE	300	0.480	0.500	0	1
BIG4	300	0.907	0.291	0	1
AF (‘000)	300	96497.630	344971.400	0.400	2538000
TA (“000)	300	7449434	13500000	44621	99000000
QUICKRATIO	292	105.248	964.295	0.150	10939
CFO	300	275540.700	676616.600	123	4569500
ROA	297	0.673	4.481	-0.090	51.119
CURRENT	296	2795521	4292254	20808	25000000
DEBT	300	20658.240	130214	-0.996	1178385

Variable definition

ABDAC = Absolute discretionary accruals computed from cross-sectional performance adjusted accrual model of Kothari et al., (2005); ABCFO = absolute value of abnormal cash flow from operating activities and ABEXP = absolute value of abnormal expenses as measured (Roychowdhury, 2006). ABPROD = abolsute value of abnormal discretionary production; ABDAC, ABPROD, ABCFO, and ABEXP are our measure of financial reporting quality. Other variables are as defined above.

Table 3
Correlation statistic for variables used in the main analyses (n= 300)

	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ABDAC	1															
2	ABCFO	0.35	1														
3	ABEXP	0.61	0.71	1													
4	ABPROD	0.27	0.36	0.55	1												
5	GRYD	0.06	0.08	0.11	0.03	1											
6	BODT	-0.02	-0.02	0.01	-0.03	0.10	1										
7	OUTSOURCE	-0.01	-0.02	0.00	0.04	0.03	-0.31	1									
8	IND	-0.02	0.04	-0.01	-0.02	0.04	-0.01	0.13	1								
9	BIG4	0.08	0.05	0.07	0.04	0.06	0.01	0.09	0.07	1							
10	AF (‘000)	-0.02	-0.02	0.03	-0.04	0.23	-0.09	0.22	0.17	0.08	1						
11	TA(‘000)	0.03	0.13	0.04	-0.03	0.14	0.14	0.12	0.30	0.07	0.33	1					
12	QUICKRATIO	0.03	0.00	0.01	0.00	0.13	0.01	-0.11	0.08	0.04	-0.03	-0.06	1				
13	CFO	0.05	0.21	0.07	0.00	0.19	0.06	0.11	0.34	0.11	0.37	0.87	-0.02	1			
14	ROA	0.06	0.02	0.00	0.00	0.04	-0.02	-0.07	0.02	0.09	-0.10	-0.18	0.56	-0.06	1		
15	CURRENT	0.03	0.11	0.06	-0.03	0.16	0.15	0.10	0.27	0.05	0.36	0.89	-0.06	0.65	-0.20	1	
16	DEBT	0.10	0.02	0.01	0.00	0.09	-0.04	-0.04	0.16	0.05	-0.05	-0.08	0.77	-0.02	0.80	-0.10	1

50

4.3 Multivariate panel data result

Table 3 provides the result of the FGLS estimation technique for the four (4) models based on FGLS estimation techniques. However before the discussion of the analysis, it is noteworthy to state that the result of the Breusch-Pagan Lagrange Multiplier test rejects the null hypothesis of no effect in the cross sectional unit over the period as the P-value is 0.000 suggesting that pool OLS is not appropriate. The Hausman test result shows that FE model is preferable to the random effect model.

In model 1, absolute discretionary accruals (ABDAC) was regressed on the ratio of grey directors (GRYD) in boardroom, the ratio of independent directors (IND) in boardroom, board continuous training (BODT) and firm internal audit sourcing arrangement (OUTSOURCE) with other firm specific controls. The result shows the coefficient of the grey director to be significantly positive at 1 percent level (t-value of 3.520); suggesting that the ratio of grey directors inside the boardroom reduce the quality of reported figures in the financial statement. Our findings contrast the theoretical arguments of Westphal (1999), Falaye et al. (2001), Hoitash (2011) that argued that the grey directors in boardroom improve board performance because grey directors are good in advisory capacity. The regression coefficient on the proportion of independent directors was negative, which indicates that independent directors are efficient in monitoring capacity. Interestingly, the coefficient of board continuous training (BODT) and firm internal audit function arrangement (OUTSOURCE) are negatively significant at 5 percent (t-value of -2.210) and 1 percent (t-value of -2.272) respectively.

Table 4
Multivariate panel data result

	DISCRETIONARY ACCRUAL	REAL EARNINGS MANAGEMENT			VIF
	MODEL 1(ABDAC)	MODEL 2(ABCFO)	MODEL 3(ABEXP)	MODEL 4 (ABPROD)	
GRYD	0.166	0.088	1.063	0.000	1.48
	(3.520***)	(2.28***)	(1.830**)	(-0.83)	
IND	0.027	0.064	0.075	0.000	1.56
	(-0.52)	(-1.51)	(-0.13)	(-4.340***)	
BODT	-0.014	-0.006	0.111	0.000	1.35
	(-2.210***)	(0.780)	-1.000	(2.230***)	
OUTSOURCE	-0.036	-0.031	-0.083	0.000	1.28
	(-2.720***)	(-2.730)	(-0.520)	(3.720***)	
BIG4	0.050	0.004	0.092	0.000	1.15
	(2.180***)	(-0.290)	(-0.500)	(-0.180)	
LOGTA	-0.004	0.003	-0.038	0.000	2.65
	(-0.520)	(-0.470)	(-0.410)	(-1.810)	
LOGAF	-0.003	0.001	0.025	0.000	1.30
	(-1.620)	(-0.674)	(-0.890)	(-1.160)	
QUICKRATIO	0.000	0.000	0.000	0.000	3.57
	(-1.840**)	(-2.160)	(-0.500)	(-0.810)	
CFO	0.000	0.000	0.000	0.000	1.90
	(-1.320)	(-0.880)	(-0.510)	(-0.170)	
ROA	-0.045	0.031	-0.038	0.000	2.92
	(-0.700)	(-0.840)	(-0.080)	(-2.800***)	
CURRENT	0.000	0.000	0.000	0.000	2.90
	(2.270***)	(-0.220)	(-0.550)	(-0.370)	
DEBIT	0.000	0.000	0.000	0.000	5.46
	(-2.780***)	(2.390***)	(-1.370)	(-3.370***)	
YEAR & INDUSTRY	YES	YES	YES	YES	
_cons	-0.009	-0.047	0.601	0.000	
	(-0.080)	(-0.600)	(-0.500)	(-3.520***)	

Mean VIF					2.29
NO Obs	300	300	300	300	
F-statistic	0.0000				

Variable definition

ABDAC = Absolute discretionary accruals computed from cross-sectional performance adjusted accrual model of Kothari et al., (2005); ABPROD = abolsute value of abnormal discretionary production; ABCFO = absolute value of abnormal cash flow from operating activities and ABEXP = absolute value of abnormal expenses as measured (Roychowdhury, 2006). ABDAC, ABPROD, ABCFO, and ABEXP are our measure of financial reporting quality. Other variables are as defined above.

*p<.05, **p<.01, *** p<.001indicate level of significance.

In model 2, the absolute value of abnormal cash flow (ABCFO) was regressed on the ratio of grey directors (GRYD) in boardroom, the ratio of independent directors (IND) in board room, the log of board continuous training (BODT) and firm internal audit function arrangement (OUTSOURCE), with other control variables. The coefficient on GRYD is positively significant at 1 percent level (t-value of 2.280) consistent with the findings in the first model, thus indicating that the proportion of grey directors inside the boardroom reduce the quality of reported figures.

Similarly, the coefficient of IND and BODT is negative but not significant while the firm outsourcing arrangement is negatively significant at 1 per cent (t-value 2.272), which indicate that outsourcing internal audit function to external firms improves the quality of reported figures. Just like the previous two models, the proportion of grey directors is positive and significant in model 3 however, it turns negative and insignificant in model 4. Likewise, the proportion of independent directors in boardroom is negative and insignificant in model two (2) but it became significant in model 4. Furthermore, BODT and OUTSOURCE coefficient are negative and not significant. In model (4), both variables turned positive and were significant.

5.0 CONCLUSION

In the present study, we investigate the link between corporate governance mechanisms with emphasis on grey directors, independent directors, director financial related training, and internal audit function sourcing arrangement and financial reporting quality. We focused on the period 2010-2013 following the review of the code of corporate governance. Using 300 firm's year observations for firms listed on the main market of Bursa Malaysia, our FGLS result shows that the proportion of grey directors in boardroom significantly induce managerial discretionary accrual manipulation, thus reducing the quality of reported figures. Board training reveals a coefficient sign that indicate that board training reduce accrual earnings management thus, improving the quality of reported figures. In our real earnings management models, the coefficient signs of the explanatory variables remain similar with the coefficients of variables in model 1 though, with the exception of few variables in model. Thus, we find evidence suggesting that firm OUTSOURCING arrangement and board

continuous training improves the quality of reported financial information. Although, across the model, the sign of the coefficient of the proportion of independent directors in boardroom is negative, but not significant. The implication of this finding is that the independent directors are not able to make significant impact in the board even though all the criteria requires for their independent as enshrined in the code of corporate governance is adequately met. It is likely that since their appointment is subject to management nomination, some form of indirect social ties might still exist between them. The study contributes to the extant literature by focusing on the efficacy of corporate governance mechanisms in improving the quality of reported financial information in the wake of MCCG 2012.

Nevertheless, it is imperative to state that several literatures exist in this context, our study provides fresh insight to the understanding of how the presence of grey directors affects reported figures. Secondly, we provide insight as to whether listed companies investment in training provides value with respect to the quality of reported figures. From policy perspectives, our result implies that regulatory authorities need to further strengthened composition most especially as it relates to the nomination of independent directors in order to improve the quality of reported accounting information. This assertion is consistent with the view of earlier studies like Ismail et al. (2009), Abdullah et al. (2010), and Al-Dhamar and Ismail (2014). Future studies could expand the sample of this study to give a more robust finding. Secondly, future studies could further expand this model to include some institutional factors such as political connections, ethnicity, and activities of institutional investors to gain further understanding on how the explanatory variables interact with them.

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