THE EFFECT OF BOARD MONITORING ON OPERATING CASH FLOWS MANIPULATION AMONG MALAYSIAN FIRMS

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ABSTRACT

Agency Theory explains the relationship between board of director's monitoring upon any mismanagement activities. Board credibility, independence, and competency are part of essential internal control mechanisms to monitor the management against financial figures manipulation. These directors have the clout to mitigate earnings management activities due to their authority and position in the firms. This study examines the effectiveness of board in mitigating operating cash flow manipulation among public listed firms in Malaysia. Board's effectiveness attributes are measured by board directors index (BDI) that comprise of their size, independence, expertise, meeting attendance, gender, and foreign status. The sample of this study is based on 2,460 firm-year during 2013 – 2017. Based on static panel analysis with firm and year fixed effects, the study retrieved boards data from the annual report, whilst the remaining variables were collected from the Datastream. The study finds that BDI has a negative and significant relationship on operating cash flow manipulation. Additional test reveals that board independent is able to curb operating cash flow manipulation. Meanwhile, board size and expertise have a positive and significant effect each on operating cash flow manipulation. This study contributes to the body of literature by focusing on the other measurements of board monitoring and revised Malaysian Code of Corporate Governance (MCCG 2017). This findings could suggest a refinement on the MCCG by focusing on the right balance of board composition in ensuring better governance.

Keywords: Board Attributes, Board of Directors Index, Real Earnings management

INTRODUCTION

The board of directors is an essential internal control mechanism to monitor the management against manipulating financial figures. In the internal governance research, the roles of the board of directors in large firms can be categorised into three types, and they are (1) control – refers to the roles of directors to monitor the manager to ensure they act in the best interest of shareholders and to reduce agency cost; (2) service – refers to the board's role in providing valuable advice to managers on the managerial issue and decision-making process; and (3) resources dependence – refers to the board's role in acquiring valuable resources, including acquisition of information from external networks (Lee et al., 2012). The board of directors play a crucial role in the contribution of ideas, opinions and monitoring the quality of financial reports. Kamal Hassan, Aljaaidi, Abidin, & Nasser (2018) categorised board's function into monitoring management and providing expert advice.

In Malaysia, the Malaysian Code of Corporate Governance (MCCG) had continuously emphasized the board roles, responsibilities, tenure, composition, designation, and board remuneration. In detail, studies on the board of directors' attributes focus on board size, board gender, board independence, board meeting, and board expertise in relation to financial reporting quality. Appointing directors with the right credibility, independence and qualification is a precedence to secure high financial reporting quality. Corporate governance literature has been studied extensively and inconclusive findings were found in the context of the board of directors and earnings manipulation (An, 2016; Ferris & Liao, 2019; Kapoor & Goel, 2019). In addition, the director's effectiveness significantly influences the level of financial statement disclosure and improves the quality of corporate governance (Haldar & Raithatha, 2017). Outstanding directors are more likely to disclose authentic financial statement to stakeholders. The board of directors is also intertwined with the quality of financial statement (Alzoubi, 2014).

The MCCG 2017 puts a great deal of emphasis on board gender composition and board tenure. This code also limited the number of board tenure to nine years to reduce the odds of jeopardising the board independence in debilitating internal control quality (Kagzi & Guha, 2018). This is because board gender composition and tenure may promote or compromise the board quality. Based on the Corporate Governance Watchdog statistics, 785 independent directors had a record of over nine years on the board with the longest tenure recorded of 40 years (Corporate Governance Monitor, 2019). This statistic shows that directors are risking their independence if they serve the board beyond the ideal timeframe. The directors served longer periods of time shows they belong to the management and this can jeopardise the level of independence (Mcfarland, 2017).

The MCCG 2017 highlights the board gender composition since female directors are better, if not equal, in efficient monitoring than their male counterpart (Félix & David, 2019; Triki Damak, 2018). Furthermore, female directors are proven to be more effective in constraining earnings management (Orazalin, 2019). The presence of female directors has a negative effect on earnings management (Sial, Vo, Al-Haddad, & Trang, 2019). Based on a Malaysian statistics, only 5% of corporate crimes implicated female directors (Omar, Said, & Johari, 2016). This provides evidence that female directors can be characterised by their reluctance to manipulate earnings, play a better role in monitoring, and have high professional skepticism than males. However, there are contradictory findings between board gender and financial reporting quality. It is due to the low number of female directors in Malaysia, this factor limits female directors from controlling the firm's decision-making (Kweh, Ahmad, Ting, Zhang, & Hassan, 2019).

The MCCG also requires to have a majority of independent directors in the boardroom. Board independence would have better monitoring over earnings manipulation activities (Busirin, Zakaria, Azmi, & Hermawan, 2016; Johari, Mohd Saleh, Jaffar, & Hassan, 2009; Saona, Muro, & Alvarado, 2020). More studies have also documented that independent directors are more effective in monitoring with the outcomes of better compliance to corporate governance and producing credible financial reports (Kapoor & Goel, 2019). Wu, Sorensen, & Sun (2019) document that the presence of independent directors in the boardroom can reduce the firm's information asymmetry arise from agency problem. The results suggest that board independence can improve corporate governance and reducing earnings manipulation activities.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Internal government mechanism work as an internal watchdog to the corporate governance compliance. The parties that involved in internal government mechanism is management, directors, audit committee, and internal auditors. The Malaysian Code of Corporate Governance (MCCG) emphasis more on the board of directors, such as its roles, responsibility, structure, and remuneration. The MCCG highlights three core principles regarding the board of directors, which are (1) leadership and effectiveness, (2) effective audit and risk management, and (3) integrity in corporate reporting (MCCG, 2017). These principles promote greater internalisation of corporate governance culture. The directors as the main streams of corporate governance have the power to encourage or reduce the earnings manipulation activities in the firms.

The board of directors has enormous roles and responsibilities. Directors duties were highlighted many times since the introduction of the MCCG. The board of directors has responsibilities in ensuring internal control, compliance to regulations and standards, and alignment with corporate governance practices. Besides that, board also need to instil the internalized moral perspective from authentic leadership dimension. These are leaders who have self-regulation guided by high moral standards and values in generate decision making and behaviour, although social pressure from management and other stakeholders may force them to act otherwise (Anita, Abdillah, & Zakaria, 2020).

The agency theory explain board of directors should have responsibility to ensure director and shareholders' interest alignment (Fama & Jensen, 1983; Jensen & Meckling, 1976). In addition, the board of directors are responsible to monitor the top management from manipulating earnings figures while reducing agency cost. Although the board delegates most of the firm's heavy-lifting tasks to the top management, the board retains ultimate control over the firm's operation (Beasley, 1996). Haldar & Raithatha (2017) found that the quality of internal governance mechanisms (board of director attributes) can significantly improve the financial disclosure of firms. Thus, independent directors play an essential role in monitoring the quality of reported earnings.

Despite a considerable amount of research on board effectiveness and earnings manipulation, there is still no consensus among researchers. Based on the Malaysian scenario, Johari et al. (2009) found that board independence, integrity, and competency lead to better monitoring over earnings manipulation activities. This finding is in the same tune with the results of Busirin et al., (2016), who also discovered that board independence and board meeting can reduce earnings manipulation activities in firms. Meanwhile, international directors with financial expertise can minimise financial fraud (Shiah-Hou & Cheng, 2012) and real earnings management (Almashaqbeh, Shaari, & Abdul-Jabbar, 2019). In addition, board effectiveness can reduce real earnings management activities while increase financial reporting quality (Sani, Abdul Latif, & Al-Dhamari, 2020).

However, An (2016) added that the quality of director independence and external directors does not influence the earnings manipulation activities in the firms. In addition, Mohd Fadzilah (2017) found that board independence and meeting have a positive association with earnings management. These results contradicted with other studies because the quality of directors is ineffective in family firms in Korea and Malaysia. Besides that, the board tenure and board gender were debated when these topics were underlined in the MCCG 2017. The presence of a female director on the board and board tenure have a significant negative impact on real earnings manipulation (Hashim & Susela, 2008; Sial et al., 2019).

Based on argument from prior studies and revised of MCCG, this study consider that board monitoring can improve financial reporting quality by limiting earnings manipulation among public listed firms in Malaysia. Supported by Haldar and Raithatha (2017) that reveals board composition can improve the quality of governance practices and financial disclosure practices. Meanwhile, the MCCG 2017 also requires all public listed firms to employ and retain directors with the right skills, knowledge, and experience. Hence, this study proposed the following hypothesis:

H1Firms with higher board monitoring have low earnings manipulation.

RESEARCH METHODOLOGY

Dependent Variable

This study used operating cash flow manipulation from real earnings manipulation model by Roychowdhury (2006). Roychowdhury (2006) explained that this model has power to measure financial statements distortions or preconditions and managers tend to use real based method to manipulate earnings. Firms are considered involving in operating cash flow manipulation when they give excessive sales discounts or lenient credit sales to customers to increase their operating cash flow or revenue.

In order to calculate operating cash flow, the first step is to determine the normal levels of operating cash flow. Normal levels of cash flow from operations (CFO) are expressed as a linear function of sales and change in sales in the current period. The cross-sectional regression for estimating the normal levels of CFO for every industry and year is shown below:

Normal levels of Operating Cash Flow (CFO)

$$\frac{CFO_t}{TA_{t-1}} = \alpha_0 \frac{1}{TA_{t-1}} + \beta_1 \frac{S_t}{TA_{t-1}} + \beta_2 \frac{\Delta S_t}{TA_{t-1}} + s_t \quad (1)$$

Where,

CFO_t is cash flow from operation of current year; TA_{t-1} is total assets of prior year; S_t is sales of current year; and ΔS is change in sales of current year.

Independent Variable

Data on board of directors were gathered from the director's profile in the annual report. The Board of Directors Index (BDI) was conceived to investigate the cumulative effect of diversification in the boardroom regarding financial reporting decision. This study replicated the methodology used by Bhatt & Bhattacharya (2017) that using index score to determine the board of director's attributes. This index score is driven and followed the best practices of corporate governance that are based on MCCG 2017 and Bursa Malaysia's Listing Requirement.

The Board of Directors Index (BDI) was constructed with six variables of the board, including; board size, board independence, board meeting, gender diversity, foreign directors, and board expertise. The composition of the board index involves the accumulation of the discrete values of each variable. The variables comprise continuous and dichotomous variables that are denoted by 0, 1, 2 and 0, 1 respectively. The Board of Directors Index (BDI) was conceived by adding the points of individual board parameters divided by total board score.

This study is aware of the effect of inverted U-shape on board size, which shows that smaller and largest board size is not effective for the firm's decision making. Even the Malaysian Code of Corporate Governance (MCCG 2017) does not explicitly give the ideal number of directors in the boardroom. Therefore, this study followed prior studies by (Geraldes Alves, 2011; Kagzi & Guha, 2018) that counts total directors in the firms as a board size. Board size was clustered into 3 groups. The board size is denoted as 0 if it has less than 7 members; denoted as 1 if board size between 8 -14 members; and denoted as 0 if board size more than 14 members (Bhatt & Bhattacharya, 2017).

Board independence was measured based on the percentage of board independent to the board size. This is consistent with the prior studies that using the same procedures for board independent (Busirin et al., 2016; Hashim & Susela, 2008; Iyengar, Land, & Zampelli, 2010; Johl, Kaur, & Cooper, 2015; Shukeri, Shin, & Shaari, 2012). Board independence is denoted as 0 if board independent less than 50% of the boardroom; denoted as 1 if board independent between 50% - 75%; and denoted as 2 if board independent over 75% of the boardroom. This classification of board independence is based on requirement by MCCG 2017 that required public listed firms to have at least half of boards that comprised of independent directors.

Board expertise was measured by dummy variable. Board expertise was defined as the director who have any professional qualification in accounting or those who have more than three years of experience in accounting, auditing, finance or taxation field (An, 2016; Azmi, Omar, Zakaria, Md-Yusof, 2013; Busirin et al., 2016). Board expertise is denoted as 1 if the directors acquired any professional qualification or having three years in accounting, auditing, finance or taxation field and 0 otherwise (García-Sánchez, Martínez-Ferrero, & García-Meca, 2017).

Board meeting was measured based on the number of meetings held in a year (Bhatt & Bhattacharya, 2017). Board meeting was classify based on 3 groups. The board meeting is denoted as 0 if number of meeting held less than 4 times in a year; denoted as 1 if board meeting held 4 - 8 times in a year; and denoted as 2 if board meeting held more than 8 times in a year. The board meeting classification is in line with the Companies Act 2016. According to the Companies Act 2016, public firms are required to organise four meetings a year with no more than 120 days laps between each consecutive meeting.

Gender diversity was measured by female director in the firms and denoted as 1 if there is a female director in the board and 0 otherwise (Orazalin, 2019). Next, this study also consider foreign directors as the measurement of board index because foreign directors are able to bring their experiences, expertise, and independence inside firms (Shiah-Hou & Cheng, 2012). Foreign directors is measured based on director's background and denoted as 1 if any of directors residence outside Malaysia and 0 otherwise (Masulis, Wang, & Xie, 2012).

Control Variable

Firm size (SIZE) may influence corporate governance compliance in the firms. In this study, firm size is measured by the natural log of the book value of the firm's total assets. This measurement consistent with Benjamin et al. (2016). Firm size is an important determinant of better governance because larger firms perform better (Bhatt & Bhatt, 2017) due to their ability to diversify risk (Abdul Wahab, How, & Verhoeven, 2007).

Firm liquidity (LIQUID) is measured by ratio of current assets to current liabilities. Firms with high liquidity are less likely to take part in accrual earnings management (Orazalin, 2019).

However, firm liquidity may increase earnings management when there is a motivation for bonus (Diri, 2018). Firms may further managed their earnings to achieve bogey line of earnings for bonus purposed (Ronen & Yaari, 2008).

Firm profitability (ROA) is measured by ratio of net income to total assets. Firm profitability is an indicator how efficient firms utilise their assets in terms of profitability. This variable gives an idea to the investors. This study control firm profitability because prior study by Koh (2007) has found profitable firms have greater incentives to manage their earnings.

Firm leverage (LEV) is a tool to access debt financing of the firm, and it is defined as the ratio of total liabilities to total assets. This study echoed study by Sincerre (2016) also discovered that firms with high leverage have incentives to manipulate their earnings with the intention to violate debt contract.

Research Model

To test hypothesis of the study and examine the effects of board of directors index and control variables on abnormal operating cash flows, the following panel regression model is employed:

$$ABCFO_{i,t} = \beta_0 + \beta_1 BDI_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 LIQUID_{i,t} + \beta_4 ROA_{i,t} + \beta_5 LEV_{i,t} + \beta_6 \text{Year Dummies} + \varepsilon \quad (2)$$

Where, $ABCFO_{i,t}$ is abnormal operating cash flows of firms *i* at time *t*; $BDI_{i,t}$ is board of directors index of firms *i* at time *t*; $SIZE_{i,t}$ is firm size of firms *i* at time *t*; $LIQUID_{i,t}$ is firm liquidity of firms *i* at time *t*; $ROA_{i,t}$ is firm profitability of firms *i* at time *t*; $LEV_{i,t}$ is firm leverage of firms *i* at time *t*; Year Dummies is year fixed effects to control unobserved heterogeneity and individual year effects; and ε is specific error term.

FINDINGS AND DISCUSSION

Descriptive Analysis

Table 1 shows the mean value of Abnormal Operating Cash Flow (ABCFO) is 0.0832 with the range of-0.6650 to 0.9983. Board directors index (BDI) compliance on MCCG 2017 is only 12.5%; while maximum compliance towards MCCG is recorded at 87.5%. The average compliance among the firms in the main market is only 47.3%, which is below than average score. This indicates board composition's compliance with MCCG among the sample firms in Main Market is still low.

The control variables that consist of firm size (SIZE), firm liquidity (LIQUID), firm profitability (ROA) and firm leverage (LEV). The natural log of total assets indicated by firm size (SIZE) is between 9.0191 and 18.7868, with the mean value of 13.2194. Firm liquidity (LIQUID) is between 0.0052 and 29.5869, with mean ratio of 2.1348 and this indicates that sample firms maintain good liquidity. Firm profitability (ROA) is between -0.4964 and 0.3940, with mean ratio of 0.0354 that implies sample firms faced low profitability. Leverage ratio (LEV) is between 0.0010 and 0.9927, with a mean ratio of 0.3745 that implies sample firms does not rely on high leverage.

Table 1
DESCRIPTIVE ANALYSIS

Variables	Denotation	Min	Max	Mean	Standard Deviation
Abnormal Operating Cash Flows	ABCFO	-0.6650	0.9983	0.0832	0.1088
Board Diversification Index	BDI	0.2500	0.8750	0.4726	0.1267
Firm Size	SIZE	9.0191	18.7868	13.2194	1.5157
Firm Liquidity	LIQUID	0.0052	29.5869	2.1348	2.8889
Firm Profitability	ROA	-0.4964	0.3940	0.0354	0.0906
Firm Leverage	LEV	0.0010	0.9927	0.3745	0.1963

Notes: ABCFO is the residual value of abnormal cash flow from operation; BDI is the percentage of board of directors index; SIZE is the natural log of total assets; LIQUID is the ratio of current assets to current liabilities; ROA is the ratio of net income to total assets; LEV is the ratio of total liabilities to total assets.

Univariate Analysis

Table 2 shows univariate results for variables used in this study. The results show all variables are significantly correlated at 1% level against ABCFO, with the exception of firm size (SIZE) significantly correlated at 10%. This finding provides early indicators that firms with better board of directors index (BDI) has high tendency to manipulate revenue recognition. Firm size (SIZE), firm liquidity (LIQUID), and firm profitability (ROA) are significantly correlated on board of directors index (BDI), except for firm leverage (LEV).

Meanwhile, firm liquidity (LIQUID, firm profitability (ROA), and firm leverage (LEV) are significantly correlated at 1% on firm size (SIZE). Then, firm profitability (ROA) and firm leverage (LEV) show significantly correlated at 1% on firm liquidity (LIQUID). Firm leverage (LEV) is negatively significant against firm profitability (ROA). Based on the univariate analysis below, the overall variables show correlation is less than 0.8 value and indicates there are no multicollinearity issues in the analysis (Hair, Black, Babin, & Anderson, 2010).

Table 2
UNIVARIATE ANALYSIS

	ABCFO	BDI	SIZE	LIQUID	ROA	LEV
ABCFO	1.0000					
BDI	0.0525***	1.0000				
SIZE	-0.0283*	0.2266***	1.0000			
LIQUID	-0.0545***	0.0258*	-0.1520***	1.0000		
ROA	0.2156***	0.0730***	0.0944***	0.2249***	1.0000	
LEV	0.1481***	0.0110	0.2145***	-0.6910***	-0.1376***	1.0000

Notes: ***, **, and * represent statistical significant at 1, 5, and 10 percent level respectively.
ABCFO is the residual value of abnormal cash flow from operation; BDI is the percentage of board of directors index; SIZE is the natural log of total assets; LIQUID is the ratio of current assets to current liabilities; ROA is the ratio of net income to total assets; LEV is the ratio of total liabilities to total assets.

Multiple Regression Analysis

This study used static panel data analysis to analyse the results. Breuch-Pagan LM and Hausman test show fixed effect model is more appropriate to be used in this study (Law, 2019). Before data analysis was carried out, further diagnostic tests were conducted to check for heteroskedasticity and serial correlation problems. The result of heteroskedasticity and serial

correlation for abnormal operating cash flow (ABCFO) shows significant at 1% level, which is lower than a threshold value of 5%. The results indicated that there were heteroskedasticity and serial correlation problem that existed in the data. Furthermore, this study also control firm and year effect. Therefore, the final data analysis will rectify the problems above.

Table 3 below shows the multiple regression results of abnormal operating cash flow (ABCFO). The estimation equation model of the abnormal operating cash flows (ABCFO) shows that F-statistics is significant at 1% level and indicates the valididity of the models with the adjusted R2 is 19.10%. The board of directors index (BDI) shows a negative and significant at 10% level on ABCFO. This indicates better board composition able to reduce revenue manipulation in the firms. The findings align with prior studies that found the quality of board of director can significantly improve the financial disclosure (Haldar & Raithatha, 2017), reduce earnings manipulation (Busirin et al., 2016), minimise financial fraud (Shiah-Hou & Cheng, 2012), limiting real earnings management (Almashaqbeh et al., 2019), and increase financial reporting quality (Sani et al., 2020).

Control variables of firm profitability (ROA) shows a positive and significant at 1% level on abnornal operating cash flows (ABCFO). This indicates high firm profitability further increase revenue manipulation in the firms. Referring to Roychowdhury (2006) revenue manipulating existed when firms give excessive sales discount or lenient credit sales to customers in order to increase their operating cash flows. This findings consistent with Ado, Rashid, & Mustapha (2020) that also found financial determinants of earnings management positively related with firm profitability (ROA).

Table 3
BOARD OF DIRECTOR INDEX (BDI) AND ABNORMAL OPERATING CASH FLOWS

	ABCFO
Constant	-0.1279
	(-0.58)
BDI	-0.0066*
	(-1.19)
SIZE	0.0181
	(1.08)
CR	-0.0060
	(-1.02)
ROA	0.1009***
	(2.96)
LEV	0.0078
	(0.94)
Firm effect	Yes
Year effect	Yes
Breusch Pagan LM Test	411.48
	(0.0000)***
Hausman Test	92.65
	(0.0000)***
Heteroskedasticity	34840.67
	(0.0000)***
Serial Correlation	30.633
	(0.0000)***
Adjusted R2 (%)	19.10
Total observations	2460
F-statistic	144.1086
P-value	0.0000

Notes: ***, **, and * represent statistical significant at 1, 5, and 10 percent level respectively (Using one-tailed test)
ABCFO is the residual value of abnormal cash flow from operation; BDI is the percentage of board of directors index; SIZE is the natural log of total assets; LIQUID is the ratio of current assets to current liabilities; ROA is the ratio of net income to total assets; LEV is the ratio of total liabilities to total assets.

Additional Analysis

Further additional tests were conducted to identify which board of director attributes were actually given an influence to revenue manipulation. Each individual directors attributes including (board size, gender, foreign, independence, meeting, and expert). The results show board size (BSIZE) is positively significant on revenue manipulation. This findings indicate that larger board size in the boardroom has high tendency to manipulate firm revenue. It is due to the effect of inverted U-shape of board size, which shows that smaller and largest board size is not effective for the firm's decision making and lead to earnings manipulation (Saona et al., 2020). Besides that Malaysian Code of Corporate Governance (MCCG) just provide general information regarding board size in the boardroom.

Then, board expert (BEXPERT) also shows a positive and significant relationship on revenue manipulation. This findings contradict with the purpose of the director expertise's formation in the boardroom by MCCG 2017. This findings shown a positive and significant relationship on revenue manipulation due to the low number of board expertise in the boardroom. Most of the public listed firms only maintain minimum number of directors who have accounting and finance background than other background. This lead directors with accounting and finance background unable to play their roles effectively in mitigating earnings manipulation activities in the firms.

Meanwhile, board independent (BIND) negatively significant on revenue manipulation. This indicates that the presence of board independence in the boardroom is able to reduce revenue manipulation. This findings consistent with Johari et al. (2009) and Busirin et al., (2016) who found that board independence have better monitoring over earnings manipulation activities. This findings show the effectiveness of board and alignment of the Recommendation No 3.5 of Malaysian Code of Corporate Governance 2012 (MCCG 2012) that required firms to maintain majority of independent directors in the boardroom in order to maintain high financial reporting quality.

Table 4
BOARD OF DIRECTOR ATTRIBUTES AND ABNORMAL OPERATING CASH FLOWS

	ABCFO
Constant	-0.1141
	(-0.50)
BSIZE	0.0040*
	(1.39)
BGENDER	-0.0082
	(-1.09)
BFOREIGN	-0.0126
	(-0.83)
BIND	-0.0620**
	(-1.62)
BMEET	-0.0014

	(-0.80)
BEXPERT	0.0284*
	(1.24)
SIZE	0.0156
	(0.92)
CR	-0.0074
	(-1.28)
ROA	0.0999***
	(2.96)
LEV	0.0063
	(0.75)
Firm effect	Yes
Year effect	Yes
Adjusted R2 (%)	19.38
Total observations	2460
F-statistic	106.5301
P-value	0.0000

Notes: ***, **, and * represent statistical significant at 1, 5, and 10 percent level respectively (Using one-tailed test)

ABCFO is the residual value of abnormal cash flow from operation; BSIZE is the total board size; BGENDER is dummy variable equal to 1 if there is female directors in the boardroom and 0 otherwise; BFOREIGN is the dummy variable equal of 1 if there is foreign directors and 0 otherwise; BIND is percentage of board independent to board size; BMEET is total number of board meeting held during a year; BEXPERT is dummy variable equal to 1 if at least one of directors have 3 years accounting and finance background and 0 otherwise; SIZE is the natural log of total assets; LIQUID is the ratio of current assets to current liabilities; ROA is the ratio of net income to total assets; LEV is the ratio of total liabilities to total assets.

CONCLUSION

This study examine the relationship between board monitoring and operating cash flows manipulation among Malaysian firms. To validate the research objective, data on board monitoring were collected from the annual reports of the firms listed on the main market of Bursa Malaysia from 2013 to 2017, while other financial data were retrieved from Eikon Datastream. Balanced panel data analysis was based on 2,460 firm-year observations. Board monitoring was measured based on board of directors index that comprise of their size, independence, expertise, meeting attendance, gender, and foreign status. Operating cash flows manipulation is measured using abnormal operating cash flow model proposed by (Roychowdhury, 2006).

We find a negative and significant relationship between board of directors index and operating cash flows manipulation. This findings align with prior studies that found the quality of board of director can significantly improve the financial disclosure (Haldar & Raithatha, 2017), reduce earnings manipulation (Busirin et al., 2016), minimise financial fraud (Shiah-Hou & Cheng, 2012), limiting real earnings management (Almashaqbeh et al., 2019), and increase financial reporting quality (Sani et al., 2020). Further additional tests were conducted to identify which board of director attributes were actually given an influence to revenue manipulation. We find board size and board expertise have a positive and significant relationship on revenue manipulation. This is due to the inverted U-Shape effect of board size (Saona et al., 2020) and low number of board expertise among Malaysian firms that incompetent to play their roles effectively in mitigating earnings manipulation.

The findings of this study provide useful feedback to the regulators to revamp and improve corporate governance compliance among public listed firms in Malaysia. The current compliance of the corporate governance does not highlight the appropriate number of board size and majority of board expertise in the boardroom. In future, other types of board attributes such as board tenure should be incorporated as indicators to detect revenue manipulation. The information gathered from this study could assist market participants in understanding the roles of board of directors in monitoring revenue manipulation in firms.

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