DIVERGENCE IN GOVERNANCE COMPLIANCE BETWEEN EARNING AND NON-EARNING MANIPULATING FIRMS AND ADHERENCE DEFICIENCY: AN ANALYSIS OF BURSA MALAYSIA'S PUBLIC LISTED COMPANIES

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Abstract

This paper examines whether corporate governance compliance differs between earning and non-earning manipulating firms and the area of compliance deficiency in view of an improvement in corporate governance codes of best practices. Governance compliance was measured using corporate governance index based on 'ASEAN Corporate Governance Scorecard' (ACGSC). Samples of earnings manipulating firms were identified using the M-score model, matched against non-earnings manipulating firms by year and sector classification within 2012 and 2013, subsequent to issuance of ACGSC and Malaysian Codes of Corporate Governance 2012 (MCCG 2012). Differences in corporate governance compliance were analysed using 'independent samples t-test', 'Wilcoxon Mann-Whitney test', and 'Chi-Square test'. The result revealed "corporate governance compliance in aggregate", and specific governance areas of "stakeholders' whistleblowing and protection", "timely release of quality annual report", and "boards' appointment and remuneration criteria" were significantly different between earning and non-earning manipulating firms. Furthermore earning manipulating firms tend to have deficient governance compliance compared to opposite. This study implicates firms to adopt full compliance of corporate governance codes mainly in areas of "stakeholders' whistleblowing and protection", "timely release of quality annual report", and "board members appointment and remuneration criteria" to overcome potential earnings manipulation scheme.

Keywords: *corporate governance index; earnings manipulation; m-score model; ASEAN corporate governance scorecard; Malaysian codes of corporate governance 2012*

1.0 INTRODUCTION

Fraudulent financial reporting continues to be the focus point of stakeholders concern subsequent to Enron and WorldCom scandals, despite constant improvement made in fortifying the corporate governance codes of best practices. The two latest financial accounting fraud cases were conferred by Toshiba Corporation of Japan in 2015 with an overstatement of profits worth USD 1.2 billion (Yan, 2015), and Tesco PLC with profit overstated up to £265 million cumulatively from 2012 till the first half of 2014

(Jenny, 2014). In addition, the median amount of losses due to such accounting fraud scandals was expected to be worth USD 1 million as reported by Association of Certified Fraud Examiners (2014). Besides, between the two decades of 2007 until 1998 and 1997 until 1987, an increasing pattern of fraudulent financial reporting cases were evident from 294 to 347 as highlighted by Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2010). The resulting consequences from this among others lead to decline in equity values, insolvency, and stock market trading termination on the firms involved (Center for Audit Quality, 2010; COSO, 2010).

Domestically, Malaysian fraudulent financial reporting scandals were evident in recent cases involving Megan Media Holdings Bhd, Mems Technology Berhad, Transmile Group Bhd, Axis Incorporation Berhad and Silver Bird Berhad as reported on Bursa Malaysia and Securities Commission Malaysia's websites. On top of this, there was also a continuing trend in the number of financial statements restatements cases subsequent to year 2012 to 2015 comprising of 18 main board companies as reported by Bursa Malaysia on its website, despite the recent establishment of Malaysian Codes of Corporate Governance 2012 (MCCG 2012) and ACGSC in 2011 which were supposed to enhance further firms' financial reporting integrity. In addition, majority of fraudulent financial reporting cases reported were consequent from earnings manipulation scheme in line with COSO (2010), US Government Accountability Office (USGAO) (2013) and Kamal, Salleh, & Ahmad, (2016).

As financial statements fraud scandals still persist despite formation of ACGSC and MCCG (2012), this study sets in examining whether corporate governance compliance differs between earnings manipulating and non-earnings manipulating firms and their area of compliance deficiency. This study varies from previous research as it adopts corporate governance index replicated from ACGSC to quantify company compliance with codes of best practices. This is to ensure better representation of corporate governance mechanism in practice being used instead of adopting limited sets of individual governance attributes as adopted in majority of prior research.

2.0 LITERATURE REVIEW

2.1 Corporate Governance and Financial Statements Fraud

The integrity and reliability of financial reports issued by firms can be improved through implementation of strong corporate governance based on codes of best practices (Securities Commission Malaysia, 2012; Organisation for Economic Cooperation and Development (OECD), 2004; Kalbers, 2009). This is because corporate governance involves mechanisms such as internal control, ethics and compliance measures to ensure companies conduct their business with integrity to prevent corporate misconduct (OECD 2015). Furthermore, deficiency in corporate governance practice can provide potential for commission of fraudulent financial reporting as argued by Rezaee (2005). Corporate governance mechanism in relation to financial statements fraud had been measured in past studies using limited governance attributes consisting of Board of Directors features (Beasley et al., 2000; Uzun, Szewczyk, & Varma, 2004; Agrawal & Sahiba, 2005; Chen et al., 2006; Geriesh, 2003; Lou & Wang, 2009; Hasnan, Abdul Rahman, & Mahenthiran, 2013), characteristics of Non-Executive Directors (Beasley, 1996; Chen et al., 2006), separation of power between Chairman and CEO position (Dunn, 2004; Chen et al., 2006; Beasley, 1996), characteristics of Audit Committee (Beasley et al., 2000; Uzun et al., 2004; Abbott, Parker & Peters, 2004; Agrawal & Sahiba, 2005; Carcello et al., 2011, Sharma & Iselin, 2012), external auditor attributes (Carcello, & Nagy, 2004a; Carcello, & Nagy, 2004b; Mironiuc, & Robu, 2012; Agrawal, & Sahiba, 2005), internal auditing characteristics (Beasley et al., 2000), and transactions involving related parties to corporations (Geriesh, 2003; Hasnan et al., 2013; Lou, & Wang, 2009). In addition, some had attempted to portray corporate governance in aggregate by formulating corporate governance index as seen in Bebchuk, Cohen & Ferrell (2009), Brown, & Caylor (2006), Gompers, Ishii

& Metrick (2003), Jiang, Lee & Anandarajan (2008), Leventis, & Dimitropoulos (2012), and Gaio, & Raposo (2014).

Prior studies' results which adopted limited governance attributes to assess relationship with fraudulent financial reporting were varied with some revealed significant connection. Besides, they had restricted corporate governance mechanism into limited attributes, rather than considering it in its entirety. Such restriction is not consistent with the fact that effective execution of corporate governance system can only be achieved if all of its components interact with one another (Huse, 2007). Moreover, the adoption of limited governance attributes will neglect the interaction details that is going on within a corporate governance system (Schnyder, 2012). This was further supported by Gaio, & Raposo (2014) that a complex structure of interrelated internal and external mechanism were involved in building a corporate governance mechanism which cannot merely be reflected by limited individual governance attributes. In contrast, the corporate governance index approach involved combination of all possible corporate governance attributes in line with latest codes of best practices without limiting them to specific attributes. However, it was mainly utilised to assess potential relationship with firm's valuation, rather than fraudulent financial reporting, as seen in Bebchuk, Cohen & Ferrell (2009), Brown & Caylor (2006), and Gompers, Ishii & Metrick (2003).

Studies by Bebchuk et al. (2009); Brown, & Caylor (2006); and Gompers et al. (2003) had adopted corporate governance index to assess relationship with firm's valuation and performance, rather than financial statements fraud. Only three studies by Leventis, & Dimitropoulos (2012), Jiang et al. (2008), and Gaio, & Raposo (2014) were related to earnings quality or earnings management and within the proximity of financial statements fraud. Jiang et al. (2008) had applied total governance index score in line with Brown & Caylor (2006) to measure corporate governance. The study had adopted 4311 firm-years samples within the period of 2002 to 2004, subsequent to the introduction of the Sarbanes Oxley act and the result revealed that corporate governance measured by governance index score was inversely related with the firm's level of discretionary accrual. This was also supported by Leventis & Dimitropoulos (2012) who studied the relationship between earnings management practice and corporate governance mechanism employed by banks listed in the US subsequent to the establishment of the Sarbanes Oxley act. Their study revealed non-aggressive scheme of earnings management was employed by listed banks with robust corporate governance mechanism. As for Gaio & Raposo (2014), they had attempted to analyse the relationship of corporate governance mechanism and earnings quality of firms by utilising large sample of listed companies. Corporate governance mechanism for related firms were measured using corporate governance ratings issued by both S&P Transparency and Disclosure Ranking and ISS Corporate Governance quotient. The analysis from 1990 to 2003 involved 537 firms within 35 countries and listed on the stock exchange which revealed significant negative relationship between corporate governance ratings and earnings quality, that contradicted Leventis, & Dimitropoulos (2012) and Jiang et al. (2008) findings.

On the other hand, the adoption of S&P Transparency and Disclosure Ranking and ISS Corporate Governance quotient ratings were not feasible within the Malaysian context as not all companies listed in Bursa Malaysia were represented. Moreover, the formulation of corporate governance index score made within studies attempted by Bebchuk, Cohen & Ferrell (2009); Brown & Caylor (2006); and Gompers, Ishii & Metrick (2003), and Jiang et al. (2008) were centred to the provisions generated by the IRRC (Investor Responsibility Research Centre) and more suitable for listed companies within the United States rather than Malaysia or South East Asia region companies. Their focus of studies on corporate governance index or ratings was directed towards firm values, earnings management, and earnings quality rather than financial statements fraud in a form of earnings manipulation. Thus, this study adopted corporate governance index replicated from the ACGSC to measure corporate governance mechanism of Malaysian public listed companies due to its relevance within ASEAN region and to preserve interaction details within corporate governance. The ACGSC was deemed relevant as its formulation focuses on

raising corporate governance standards and practices of ASEAN public listed companies (ASEAN Capital Market Forums & Asian Development Bank, 2013). The corporate governance index was then analysed to identify differences in compliance between earnings manipulators and non-earnings manipulators.

2.2 Earnings Manipulation and Financial Statements Fraud

The attempt by management to attain favourable financial performance results for a firm by utilising earnings management method to the extent of violating accounting rules is known as earnings manipulation (Beneish, 1999). Such action requires misstatements on financial statements committed by management on purpose, resulting in the infringement of accounting rules (Magrath & Weld, 2002), which is illegal and considered as fraudulent act. The nature of earnings manipulation scheme is also in line with the definition of fraudulent financial reporting provided by International Standards on Auditing 240 (ISA240), (2009) which involves the act of intentionally misstating and omitting figures and disclosure in the financial statements with the purpose of deceiving its users. Several prior studies provided some evidence that earnings manipulation practice corresponded to committing financial statements fraud.

In 2010, a study sponsored by Committee of Sponsoring Organizations of the Treadway Commission (COSO) had analysed public listed companies in the US investigated for engagement in financial statements fraud from 1998 to 2007. The study revealed misstatements in revenue recognition was the main 61% cases that resulted in fraudulent financial reporting. In addition, misstatements in expenses and revenue recognition represented more than 50% of the restatement cases in the US from 2005 to 2011 as evidenced in the study conducted by United States Government Accountability Office in year 2013. Meanwhile in Malaysia, misstatements in accounting of revenue and expenses were the main culprit resulting in 54% of restatement cases by public listed companies from 2002 to 2005, as reported by Abdullah, Mohamad Yusof & Mohamad Nor (2010). This was also supported by Kamal et al., (2016) who discovered 82% of Malaysian public listed companies charged for financial statements fraud were found engaging earnings manipulation scheme, identified using the M-score model. Thus, revenue and expenses misstatements, which corresponded with earnings manipulation, have found to result in significant proportions of fraudulent financial reporting and restatement cases in prior studies. Additionally, the small number of financial statements fraud companies investigated as published within authorities' websites in Malaysia may be due to successful concealment of wrongdoings by other firms to remain below the radar of detection (Chen et al., 2006; Association of Certified Fraud Examiners, 2012).

Thus, this study proposed the adoption of earnings manipulation detection model known as Beneish M-score to detect earnings manipulating firm and non-earnings manipulating firms. This is because as argued by COSO (2010), United States Government Accountability Office (2013), Abdullah, Mohamad Yusof & Mohamad Nor (2010), and Kamal et al., (2016), majority proportion of financial statements fraud and related misstatements were attributed to earnings manipulation act. Furthermore the model was preferred than another earnings manipulation detection model known as F-score, as developed by Dechow et al. (2011). This is because the F-score model had correctly identified 51.1% of earnings manipulators based on holdout sample, which was lower than Beneish M-score model performance with detection accuracy of 76% based on estimated samples and 56.1% based on holdout samples. Based on the above arguments in 2.1 and 2.2 the following hypotheses were developed.

H_0: There is no difference in corporate governance compliance between earnings manipulating firms and non-earnings manipulating firms.

H_1: Differences exist in corporate governance compliance between earnings manipulating firms and non-earnings manipulating firms.

3.0 METHODOLOGY

Cross-sectional analysis was adopted for this study, covering two years period of 2012 and 2013. These years being chosen as they were immediately subsequent to ASEAN Corporate Governance Scorecard (ACGSC) introduction and Malaysian codes of corporate governance 2012. In addition the date was consistent with the compliance requirement of the new Malaysian Financial Reporting Standards (MFRS) by Malaysian public listed companies on 1 January 2012. Furthermore, the purpose of adopting cross-sectional analysis was due to its usefulness in examining variables at a specific point in time as argued by Mann (2003) which in this case was the period subsequent to the introduction of ACGSC and MCCG 2012.

3.1 Sample Selection

Based on Table 1, the research population for this study consisted of companies listed on Bursa Malaysia's main board within 2012 and 2013, but excluded those classified under finance sector, REITS, and closed-end fund due to their differences in application of rules and regulatory requirements together with features and business operations that were unique. In accordance to Bursa Malaysia's website, 921 and 911 companies were listed as at 31 December 2012 and 31 December 2013 respectively totalling up to 1832 firm-years. Within this total, those companies listed on ACE market which was made up of 221 firm-years (2012 = 113; 2013 = 108) were removed from the samples. This resulted in total remaining samples of 1611 firm-years (2012 = 808; 2013 = 803) taken from the main board. In addition, main board companies listed under Finance, REITS, and Closed-end fund sectors were also excluded and removed from the samples by 102 firm-years (2012 = 50; 2013 = 52). As a result 1509 firm-years (2012 = 758; 2013 = 751) were adopted as samples and subjected to further analysis to categorise them as both earnings manipulators and non-earnings manipulators using the Beneish M-score model.

During this process, 104 firm-years (2012 = 67; 2013 = 37) representing samples with inadequate relevant data to calculate the model were further excluded, resulting in only 1405 firm-years (2012 = 691; 2013 = 714) being analysed. Next, the Beneish M-score results for 1405 firm-years were compared against the benchmarked score of -1.78, with a score exceeding -1.78 signals potential earnings manipulation based on Beneish et al. (2013) and Beneish (1999). In line with this, for year 2012 and 2013, 136 and 118 firm-years respectively have been detected for earnings manipulation, which made up a total of 254 firm-years. Later, those identified earnings manipulators were matched with non-earnings manipulators in accordance to year and sector categories, generating final samples of 508 firm-years for this study.

Table 1 Sample selection

Descriptions	Number of companies 2012	Number of companies 2013	Number of firm-years
Total PLCs of Bursa Malaysia as at 31 December	921	911	1832
Less: PLCs listed in ACE market	(113)	(108)	(221)
Total PLCs from the Main board	808	803	1611
Less: Finance sector	(33)	(34)	(67)
Less: REITS	(16)	(17)	(33)
Less: Closed-end fund	(1)	(1)	(2)
Non-Financial PLCs from the main board	758	751	1509
Less: PLCs with insufficient or unsuitable financial data to apply Beneish M-score model	(67)	(37)	(104)
Total PLCs from the main board taken as samples for Beneish M-score application	691	714	1405
PLCs detected of practicing earnings manipulation	136	118	254
Matched non-earnings manipulation PLCs based on year, sector type and size	136	118	254

Total earnings manipulator and non-earnings manipulator PLCs used as samples	272	236	508

Other than that, this study employed public listed companies of Bursa Malaysia's main board as their financial statements can be conveniently downloaded together with their published annual report from Bursa Malaysia's website as compared to financial statements of non-listed companies which were not available for public access. Furthermore, public listed companies' financial statements were subjected to both Companies Act 1965 and Bursa Malaysia requirements which entail them to be audited independently by appointed external auditor on annual basis, which could overcome the issue of material misstatements. Their financial statements were also prepared based on identical format as specified by the accounting standard, allowing better comparison of financial statements between periods of study. The main source of secondary data for this study was the annual report of public listed companies obtained directly from Bursa Malaysia's website. In ensuring the accuracy of data collected from the annual report, they were rechecked constantly and as for data relating to corporate governance attributes, upon collection they were verified by an academician from a reputable Malaysian public university, who was independent and having similar credibility and qualification as the researcher.

3.2 M-Score Model To Detect Earnings Manipulating Firms

In this study, Beneish M-score model was used to detect earnings manipulation practice. Beneish (1999) designed the model to differentiate between firms that engaged aggressive accrual and earnings manipulation which involved the violation of accounting rules. Seven indexes and a ratio were included as components of Beneish M-score model in line with Beneish et al. (2013), inclusive of Days Sales in Receivables Index (DSRI), Gross Margin Index (GMI), Asset Quality Index (AQI), Sales Growth Index (SGI), Depreciation Index (DEPI), Sales, General and Administrative Expenses Index (SGAI), and Leverage Index (LVGI), and Accruals ratio. To calculate the Beneish M-score model, relevant data were collected from both financial statements and notes to the accounts belonging to public listed companies of the main board, within two corresponding years (year of interest and prior year). Data collected for the model's components were then totalled to derive at total M-score, which were compared against the benchmark cut-off score of -1.78 (M-score higher than -1.78 were deemed as earnings manipulators) as suggested by Beneish (1999) and Beneish et al. (2013).

With regards on the cut-off score of the Beneish M-score model to separate earnings manipulators from other companies, a total M-score greater than -2.22 was employed by Mantone (2013), Warshavsky (2012), Omar et al. (2014) and many other researchers to hint earnings manipulation or potential financial statements fraud. This nevertheless contradicted with both Beneish (1999) and Beneish et al (2013), where both suggested a more conservative cut-off score for the model. For instance, Beneish (1999) suggested either (1) a benchmark greater than -1.89 with the model's accuracy of detection of earnings manipulation by 76%, with misclassification of 24% manipulators and 17.5% non-manipulators; or (2) a benchmark M-score higher than -1.78 with accuracy of detection of earnings manipulation by 74% and with potential misclassification of 26% manipulators and 13.8% non-manipulators. The same M-score of greater than -1.78 was also employed in Beneish et al. (2013) to detect financial statements fraud among prominent companies involved in accounting scandals with 71% success rate. Thus, to be consistent with Beneish et al (2013), M-score of greater than -1.78 was adopted for this study to differentiate between earning manipulators and other companies. Besides, companies detected with M-score higher than -1.78 were considered as earning manipulators and given with a score of 1, whereas those companies with M-score lower than -1.78 were given a score of 0.

3.3 Corporate Governance Index To Measure Governance Compliance

For the purpose of measuring corporate governance mechanism employed by firms, a corporate governance index was formed through replication of ASEAN Corporate Governance Scorecard (ACGSC) as published on ASEAN Capital Markets Forum website. ACGSC comprised of 5 main areas of corporate governance in line with OECD principles and other relevant codes of best practices. They were replicated into corporate governance index to measure disclosure on governance by firms in their annual report. Next, data on corporate governance disclosure was obtained from the annual report and measured using corporate governance index which provided the result of compliance in form of index total score and each area's score. The original ACGSC comprised of 5 areas of OECD principles with each had differing number of sub-areas and weightage assigned as in table 2.

Table 2 ASEAN corporate governance scorecards components

No.	Areas	Sub Areas	Items	Weightage
1.	Rights of Shareholders	5	26	10%
2.	Equitable Treatment of Shareholders	5	17	15%
3.	Role of Stakeholders	4	21	10%
4.	Disclosure and Transparency	9	42	25%
5.	Responsibilities of the Board	21	79	40%
	Total	44	185	100%

Additionally, it employed two levels of score measurement such as level 1 measuring 'OECD principles fulfilment' and level 2 assessing 'bonus and penalty' to compute the total score. Level 1 covered basic expectations of OECD principles based on the 5 areas and regulations and requirements of each ASEAN member countries. As for level 2, it consisted of Bonus (11 items) and Penalty (34 items). Bonus items reflected other good practice on top of level 1 and penalty items reflected poor governance events. Bonus point (1 for each item) was added and penalty point (1 for each item) was subtracted from the total score in level 1 to arrive at the final score. Measurement components within corporate governance index were similar to ACGSC in every aspect except for the following variances. For level 1, although 5 areas were included, their respective numbers of sub-areas were reduced to reflect only those matters available in the annual report. This was based on Botosan (1997) that annual report contained good representation of voluntary disclosure made by firms throughout all mediums of disclosure. Furthermore, details from minutes of general meeting were excluded from corporate governance index though being part of ACGSC's assessment due to difficult access and time constraint of doing this research. Next, all items within sub-areas that attained consistent similar score of either 1 or 0 for all samples were excluded including those items that require full compliance by statutory regulation. Thus, the number of sub-areas and respective items for corporate governance index was as in table 3.

Table 3 Corporate governance index components replicated from acgsc

No.	Areas	Sub Areas	Items
1.	Rights of Shareholders	2	2
2.	Equitable Treatment of Shareholders	4	5
3.	Role of Stakeholders	3	18
4.	Disclosure and Transparency	5	13
5.	Responsibilities of the Board	14	49
	Total	28	87

'One point' was allocated for each item in level 1 when related disclosure was found within sample's annual report, otherwise 'zero' was assigned if no disclosure being observed. In addition, to avoid multiple penalties on samples, those that were penalized initially with 'zero' for not disclosing specific

matter were later assigned with 'not applicable' for corresponding items related to penalized item. For illustration, when one of the items within the CG index required company to establish a Remuneration Committee which was not complied by a sample, the score of 0 will be allocated to the item. The rest of corresponding items pertaining to Remuneration Committee such as independence of members and meeting frequency were allocated with 'not applicable' alternative.

Next, the total score was computed for the 5 areas of governance in level one, both individually and in aggregate by adding all related items. The governance index adopted in this study did not assign weightage on each of the 5 areas in level 1 as compared to ACGSC and each item score was treated equally. This was in line with Botosan (1997) argument that replacement of weighted score with non-weighted score does not lead to results being different. Then, items from level 2 containing bonus and penalty were assessed against disclosure. Observed disclosure of bonus item was given with a score of 'one' while observed penalty item was given with 'negative one' and they were added or subtracted from the total aggregate score of level 1 respectively in accordance to ACGSC. The completed corporate governance index was also reviewed and tested by three independent persons with similar academic background as researcher and having profession as academician from institution of higher learning. They were required to examine the adequacy of corporate governance index's components in measuring corporate governance disclosure and reliability of assessment made. Feedback was obtained and amendment was made to corporate governance index components accordingly. In addition, 10 samples of firm-year observations were selected for assessment by independent reviewer using corporate governance index.

The results were later compared against the researcher's own corporate governance index score for the 10 samples to assess differences. Later, differences in corporate governance index assessment were identified and rectification was made as agreed with the reviewer. In the end, the margin of difference was reduced to 5% between the reviewer's assessment and researcher's assessment on corporate governance index score. Annual report was the main source of data for this study as most of the past research relating to financial statements fraud and corporate governance mechanism had relied on it. Furthermore, this was supported by Sloan (1996), who argued that the best source of reference for both financial data and disclosure on governance is the annual report in light of information constraints from the other sources. After collecting relevant data on corporate governance disclosure and earnings manipulation practice on samples, STATA software was utilised to execute descriptive statistical analysis comprising of mean and median score for both groups earnings manipulators and non-earnings manipulators. This was followed by the test of difference in mean score of corporate governance index between the two groups.

4.0 EMPIRICAL RESULTS

4.1 Earning Manipulating Firms

Public listed companies found of engaging earnings manipulation as identified by the Beneish M-score model were shown in Table 4. Immediately after the introduction of ACGSC in year 2012, 19.7% (136 from 689) of public listed companies from the main board were found engaging earnings manipulation. The percentage exceeded year 2013 detection by 3.12%.

Table 4 Companies engaged earnings manipulation in 2012 and 2013 by Bursa Malaysia's sector

Sector/ Year	2013			2012		
	Number of Earnings Manipulators	%	Total companies by sectors	Number of Earnings Manipulators	%	Total companies by sectors
Consumer product	14	11.8	122	23	16.9	122
Industrial product	25	21.1	228	40	29.4	222
Construction	15	12.7	41	11	8.	40
Trading	29	24.5	169	25	18.3	157
Properties	21	17.7	78	22	16.1	75
Plantation	8	6.7	38	7	5.1	38
Hotels	0	0	4	0	0	4
Technology	5	4.2	26	7	5.1	25
Infrastructure	1	0.8	6	1	0.7	6
Total	118	100	712	136	100	689

Based on the observation between 2012 and 2013, three major sectors comprising of industrial product, trading and property had been identified for engaging in earnings manipulation. This was in line with Abdullah et al. (2010) who revealed majority of listed companies facing financial statements restatements cases were from trading, industrial product and property sectors. This argument was also supported by Ku Ismail & Syed Abd Rahman (2011) who concurred that trading, industrial product, property and consumer product sectors within Bursa Malaysia lead other sectors in terms of financial statements restatements. In aggregate, by comparison of 2013 against 2012, the number of companies committing earnings manipulation showed a reducing pattern of 18 by 13.2%. The establishment of ACGSC and MCCG 2012 may have lead more companies in the Bursa Malaysia to engage in continuously improving their sets of corporate governance mechanism to reflect the recommended codes of best practices, which in turn may resulted in the reduction of suspected financial statements fraud.

4.2 Descriptive Statistics and Univariate Analysis

Table 5 below displayed the results using descriptive statistic on the corporate governance index score attained by both earnings manipulating and non-earnings manipulating firms for 2012 and 2013 based on 508 firm-year observations. The results on corporate governance index score was measured both by aggregate and by individual components. On the other hand, Table 6 showed result of univariate analysis pertaining to corporate governance index score both in aggregate and by its components.

Table 5 Corporate governance index score for firm-year observations 2012 and 2013

	Earnings Manipulator (N=254)			Non-earnings manipulator (N=254)		
	Mean	Std deviation	Median	Mean	Std devtn.	Median
CG index total	.594	.083	.59	.627	.106	.61
CG index components:						
A (Shareholders rights)	.415	.352	.5	.427	.352	.5
B (Shareholders equitable treatment)	.609	.184	.67	.618	.197	.67
C (Stakeholders roles)	.422	.193	.5	.469	.224	.46
D (Disclosure and transparency)	.495	.132	.43	.537	.160	.5
E (Board responsibilities)	.636	.086	.63	.662	.098	.65
CG index sub-components:						
A1 (Basic shareholders rights)	.610	.488	1	.610	.488	1
A5 (exercise of ownership rights by all shareholders)	.220	.415	0	.244	.430	0
B2 (Notice of AGM)	.360	.322	.5	.377	.336	.5
B5 (Minority shareholders protection)	.925	.263	1	.921	.269	1
C1 (Rights of stakeholders respected)	.431	.203	.47	.471	.231	.5
C3 (Performance enhancing mechanism for employees)	.432	.263	.4	.462	.273	.4
C4 (Stakeholders whistleblowing rights)	.194	.375	0	.340	.454	0
D2 (Annual report disclosure quality)	.315	.189	.25	.370	.209	.25
D6 (Medium of correspondence)	.403	.397	.5	.440	.405	.5
D7 (Timely release of annual financial report)	.407	.194	.33	.478	.241	.33
E1 (Board duties and responsibilities)	.968	.174	1	.984	.124	1
E2 (Board code of ethics and conduct)	.307	.313	.25	.357	.352	.25
E4 (Board structure and composition)	.665	.153	.71	.684	.157	.71
E6 (Board chairman)	.772	.241	.83	.778	.248	.83
E7 (Board meeting and attendance)	.788	.153	.75	.775	.155	.75
E10 (Board access to information)	.055	.228	0	.059	.236	0
E11 (Nominating committee)	.804	.102	.8	.814	.108	.8
E12 (Board appointment and re-election)	.850	.357	1	.944	.228	1
E13 (CEO/MD appointments and performance)	.177	.298	0	.202	.309	0
E14 (Board appraisal)	.369	.250	.33	.437	.278	.33
E15 (Directors appraisal)	.356	.235	.33	.431	.280	.33
E16 (Committee appraisal)	.720	.449	1	.767	.423	1
E17 (Remuneration committee)	.740	.149	.8	.774	.144	.8
E20 (Independent internal audit)	.307	.326	.5	.332	.342	.5

Table 6 Univariate analysis on corporate governance index scores for firm-year observations 2012 and 2013

	2-samples T-test		Wilcoxon Mann-Whitney test		Chi2 test	
	t value	Pr(|T| > |t|)	z value	Prob > |z|	Pearson chi2(1)	Pr
CG index total	3.909	0.0001***	-	-	-	-
CG index components:						
A (Shareholders rights)	-	-	0.384	0.700	-	-
B (Shareholders equitable treatment)	-	-	0.700	0.742	-	-
C (Stakeholders roles)	-	-	2.128	0.033**	-	-
D (Disclosure and transparency)	-	-	2.562	0.010**	-	-
E (Board responsibilities)	-	-	2.846	0.004***	-	-
CG index sub-components:						
A1 (Basic shareholders rights)	-	-	-	-	0.00	1.000
A5 (exercise of ownership rights by all shareholders)	-	-	-	-	0.397	0.528
B2 (Notice of AGM)	-	-	0.516	0.605	-	-
B5 (Minority shareholders protection)	-	-	-	-	0.027	0.868
C1 (Rights of stakeholders respected)	-	-	1.935	0.053*	-	-
C3 (Performance enhancing mechanism for employees)	-	-	1.000	0.317	-	-
C4 (Stakeholders whistleblowing rights)	-	-	3.821	0.0001***	-	-
D2 (Annual report disclosure quality)	-	-	2.485	0.012**	-	-
D6 (Medium of correspondence)	-	-	1.032	0.302	-	-
D7 (Timely release of annual financial report)	-	-	3.744	0.000***	-	-
E1 (Board duties and responsibilities)	-	-	-	-	1.365	0.243
E2 (Board code of ethics and conduct)	-	-	1.378	0.168	-	-
E4 (Board structure and composition)	-	-	1.175	0.240	-	-
E6 (Board chairman)	-	-	0.459	0.646	-	-
E7 (Board meeting and attendance)	-	-	-0.925	0.355	-	-
E10 (Board access to information)	-	-	-	-	0.036	0.848
E11 (Nominating committee)	-	-	1.157	0.247	-	-
E12 (Board appointment and re-election)	-	-	-	-	12.340	0.000***
E13 (CEO/MD appointments and performance)	-	-	1.029	0.303	-	-
E14 (Board appraisal)	-	-	2.737	0.006***	-	-
E15 (Directors appraisal)	-	-	2.992	0.002***	-	-
E16 (Committee appraisal)	-	-	-	-	1.488	0.222
E17 (Remuneration committee)	-	-	2.676	0.007***	-	-
E20 (Independent internal audit)	-	-	0.769	0.441	-	-

***significant at p-value <0.01, **significant at p-value <0.05, *significant at p-value <0.10

Based on the results in both Table 5 and Table 6, firm-year observations deemed as non-earnings manipulators scored higher in terms of corporate governance index total (mean 0.63; median 0.61) against earnings manipulators (mean 0.59; median 0.59). In addition, the corporate governance index mean score was significantly different between earnings manipulators and non-earnings manipulators as diagnosed with the 2-samples T-test analysis (p-value <0.01). Furthermore, three corporate governance index

components consisting of 'C: Stakeholders roles', 'D: Disclosure and transparency' and 'E: Board responsibilities' depicted that earnings manipulators had lower mean and median score in contrast to non-earnings manipulators. Rather than that, these three components were also significantly different between the two groups with component 'C: Stakeholder roles' attained a p-value <0.05 and both components 'D: Disclosure and Transparency' and 'E: Board responsibilities' with p-value <0.01. These findings may also be connected with the fact that non-earnings manipulators tend to make more corporate governance disclosure relating to matters concerning roles of stakeholders, disclosure and transparency and board responsibilities as compared to earnings manipulators.

The subcomponents score of corporate governance index was also analysed using both descriptive and univariate analysis. As expected, both earnings manipulators and non-earnings manipulators displayed significant difference in terms of sub-components score that were part of components 'C: Stakeholders roles', 'D: Disclosure and Transparency' and 'E: Board Responsibilities'. Two of the subcomponents of area 'C: Stakeholders roles', consisted of 'c1: Rights of stakeholders respected' and 'c4: Stakeholders' whistle-blowing rights' had shown higher mean and median by non-earnings manipulators against earnings manipulators with significant difference in p-value < 0.10 and p-value < 0.01 respectively. Furthermore, higher mean score was attained by non-earnings manipulators in both subcomponents 'd2: Annual report disclosure quality', and 'd7: Timely release of annual financial reports' which were part of component 'D: Disclosure and Transparency' in contrast to earnings manipulators. Both subcomponents were also significantly different with subcomponent d2 obtains a p-value <0.05 and subcomponent d7 with a p-value <0.01.

Component 'E: Board responsibilities' comprised of the most subcomponents with higher mean scores for non-earnings manipulators against earnings manipulators which were significantly different with subcomponents 'e12: Board appointment and re-election', 'e14: Board appraisal, 'e15: Directors appraisal' and 'e17: Remuneration committee' displaying p-value < 0.01 respectively. Based on the result, earnings manipulating firms inclined towards having lesser governance mechanism disclosure as supported by lower corporate governance index score in contrast to non-earnings manipulating firms. This was also in line with Leventis & Dimitropoulos (2012) and Jiang et al. (2008) that firms engaging aggressive earnings management tend to have lesser corporate governance compliance. The higher corporate governance index scores for non-earnings manipulators were contributed by more disclosure and compliance made regarding '1: Roles of stakeholders and their rights on whistleblowing', '2: Disclosure and transparency relating to quality of annual report and its timely release, and '3: Board responsibilities pertaining to board appointment, appraisal and remuneration. Thus, H_1 notion that differences exist in corporate governance compliance between earnings manipulating and non-earnings manipulating firms is supported by this study, while H_0 is rejected.

5.0 DISCUSSION AND CONCLUSION

This study assessed whether corporate governance compliance differs between earnings manipulating and non-earnings manipulating firms and their area of compliance deficiency in view of improvement in corporate governance codes of best practices brought by ACGSC and MCCG 2012 in 2012 and 2013. This study found that the disclosure made on corporate governance based on compliance with corporate governance index was significantly different between earning and non-earning manipulating firms with the latter scored higher mean. Such differences were obvious in compliance with 'stakeholders whistleblowing and protection', 'timely release of quality annual report', and 'board members appointment and remuneration criteria'.

Thus improvement in compliance within these areas may not only increase the corporate governance index score but also potentially reduce the likelihood of firms committing earnings manipulation. It is

also recommended that compliance on corporate governance should be made mandatory especially in areas highlighted and should undergo a verification process to ensure actual compliance took place as disclosed. Some limitations of this study can be attributed to Beneish M-score model used to identify earnings manipulators. The model although appropriate, can still misclassify 26% of earnings manipulators as non-earnings manipulators and 13.8% of non-earnings manipulators as earnings manipulators (Beneish 1999). The adoption of the model was far more cost-effective rather than treating all cases as non-earnings manipulators (Beneish 1999). In addition, compliance on corporate governance codes of best practices were observed mainly from their annual report disclosure instead of other available public sources as it was readily accessible and being commonly referred to. For the purpose of future study, it is suggested that similar corporate governance index is adopted together with other fraud risk factors to study their effect on financial statements fraud occurrence.

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