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Earnings Management, Corporate Governance and Corporate Performance Among Malaysian Listed Companies

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Abstract

There are several explanations for lack of transparency regarding financial reporting however the most significant is earnings management activities that managers follow. Admittedly, managers manipulate accounting information by using EM (Earnings Management) practices to achieve certain results. Corporate governance, which its primary objective is to spot possible structures in which a corporation's shareholders have greater power and control over managers to protect and further their rights, and it has recently brought an interesting topic to researchers and policymakers around the world. Most research has emphasized the relationship between corporate governance and company performance, but still, only a few investigations have looked at the moderator characteristic of corporate governance on corporate performance from different perspectives. This study aims at investigating whether corporate governance, utilizing data from listed companies in Bursa Malaysia, impacts the relationship between earnings management and the firm 's performance. This study utilizes panel data analysis and uses FTSE Russell data by applying the intersection method to the constituents of the FTSE Top 100 Bursa Malaysia from 2011 to 2015. The findings show that DAs have a considerable impact on the ROA, ROE, Tobin's Q and EVA of companies in a poor governance system. This research reveals that managers in weakly managed companies are far more likely to misuse accounting powers than in well managed companies, leading to a decline in corporate performance. Managers are likely utilizing DAs to modify the financial profits; however, this produces a rather more significant reversing impact in corporate interest in the period ahead. Likewise, DAs inside an efficient governance structure are strongly and substantially related to firm performance.

Keywords: Corporate governance; Firm performance; Earnings management

1 Introduction

In recent years there has been an increase in the number of studies that have examined the performance of firms, which has subsequently led to an expansion in the body of literature. Due to the significant importance of performance measurements implemented in various corporate firms, evaluation of firm performance has become increasingly essential. Furthermore, the challenges that various firms encountered during the Asian and global financial crises, has consequently impacted the performance of these corporate firms (1). When a business is incapable of achieving its obligation commitment, it results in poor performance. Since the stock market plays a significant role in a countries' economic growth, its performance measurement has become a central topic in management research on financial performance (2). The increasing number of companies in the competitive environment has emphasized the need for addressing their performance. A companies' performance listed in the stock market can be evaluated by assessing the past and current trends and subsequently determining future estimates. In order to achieve short and long-term obligations, various factors that may potentially influence performance, should be examined.

Moreover, earnings management (EM) is essential for shareholders and regulators globally. This is because EM is correlated to executives conducting themselves purposefully, in particular misrepresenting financial reports. (3). To order to control earnings, management uses accounting strategies to adjust the accounting figures and to control accrual identification, i.e. 'accounting choice management.' In addition, managers can shape various operational choices that could impact actual cash flow transactions, i.e. 'economic benefit management'(3-10). Managers are usually compelled to manage earnings because of various market pressures as well as the need for self-preservation to prevent breaking contractual agreements (11-13). Moreover, during a financial crisis, there would be a higher tendency among managers to manage earnings (14), as listed below. The following. A few of the largest corporations were behind the global economic crisis that emerged in the united states (15, 16). Crotty (2009) called it the "severe economic collapse since the Great Depression"(17, 18). The extreme recession "pushed the world economy to the verge of depression" as said by Crotty

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(2009) (17). Rudd (2009) has also referred to the financial collapse as "one of the biggest attacks on world economic stability," triggering a "significant slump in world trade and global financial crisis"(3, 16, 19). The US financial crisis immediately reached the globe, negatively impacting the world's economy and world capital markets (20-23). Ultimately, the Asian economies also were disrupted by the global financial meltdown, including the Malaysian economy (24-26).

About 2008 the adverse impact of the United States financial crisis in the Malaysian economy had detrimental impacts on financial and trade networks (19, 27). In the fourth quarter of 2008, Malaysian Gross Domestic Product (GDP) declined by 12 percent and declined significantly in the subsequent year. In early 2009, exports dropped dramatically by 28% compared to the prior year (28). Furthermore, foreign direct investments plummeted 17 percent in 2008 compared to the previous year, however direct investments overseas by Malaysian companies increased (28). This was indicative of funds flowing out of Malaysia during this particular financial crisis, which contributed further in adversely affecting Malaysia's real economy, causing a loss in industrial production and jobs (28). According to The World Bank Report (2009), as much as 120,000 workers were reported to have been retrenched in Malaysia (29). In addition, during the financial crisis, the Malaysian stock market was more volatile and had increased leverage. Consequently, managers of Malaysian companies were more pressured to manage earnings during this crisis period and following it, to retain investors amidst the highly volatile stock market, and also to avoid violating debt covenants during increased leverage. These various reasons may have pushed them to make the decisions they did, to try and safeguard the survival of their company, and subsequently avoiding retrenchment of their employees (30, 31).

Conversely, as reported by the International statistics, the Asian financial crisis was believed to affect Asian economies more than the global financial crisis (22, 32). Thus, it was believed that Asia was not affected as severely by the global financial crisis in comparison to other continents. From the literature (33) it has been demonstrated that, during a crisis phase, companies are inclined to use income decreasing EM. The discretionary accrual method of deliberately reducing earnings management through the "theory of big bath " (3). Thus, Malaysian companies could also have resorted to applying the reverse during the global financial crisis phase, by managing earnings downwards (decreasing revenue) instead of upwards (increasing revenue). So, it is extremely likely that Malaysian companies conducted EM during the global financial meltdown (34). They may have studied more EM or introduced more revenue-enhancing EM procedures, or more revenue-decreasing EM practices. There is, however, a lack of EM research by Malaysian firms during the global financial crisis, and the investigation is therefore required in order to analyse EM in Malaysia during the recent global financial crisis (35).

In order to evaluate and predict the severity of EM practices by Malaysian companies during a crisis period, EM must initially be assessed during a non-crisis period (36). ASEAN countries were faced with the financial crisis in 1998 and the current research is likely to be more representative and effective, as this study aims to investigate specific nations from the Asian market that were clearly affected by the Asian financial crisis. Taking into consideration these criteria, a developing and rapidly growing economy like Malaysia would be the most suitable selection.

This study aims to investigate whether the relationship between earnings management and firm performance is affected by corporate governance, in the Malaysian context. Since a corporate governance mechanism involves a set of comprehensive structures that could comprise of opposing attributes, the various factors of governance should be incorporated with specific objective criteria, when evaluating the quality of governance of an organization (37).

A brief summary of the development of the Malaysian Corporate Governance Code will be presented. This study attempts to elucidate the role of corporate governance in influencing the association between earnings management and company performance and identifying which particular components might have a greater impact on this relationship. This study explores two fundamental issues related to corporate governance and corporate performance that have yet to be addressed sufficiently in the existing literature, specifically how different components of corporate governance may potentially affect the relationship between earnings management and firm performance. This study also considers the relevant existing literature and will elaborate on the processes of corporate governance and concentrates particularly on the concept of agencies. The importance of this study will be further demonstrated through an academic and technical context. The current study will investigate corporate governance in the Malaysian context, as it is a good model as an emerging market that is developing. Thus, transparency of information is necessary in order to achieve more stable and smooth trends, as well as to limit fraud potential.

2 Background of study

During the global financial crisis, EM was studied in Europe by two key reports, Iatridis and Dimitras (2013) and Filip and Raffournier (2014). The research study of Iatridis and Dimitras (2013) included firms comprising five European countries, namely Greece, Ireland, Italy, Portugal and Spain; while the sample of Filip and Raffournier (2014) included 16 European countries. In order to evaluate EM, the former used discretionary accruals, and their findings showed that Portugal, Italy and Greece were involved in more EMs, and Ireland was involved in no EMs. In Spain, however, the results for EM were in dispute (38, 39). In order to evaluate EM and smoothing income controls, Filip and Raffournier (2014) have used discretionary accruals. Throughout the period 2006 to 2009, during which European businesses implemented IFRS, the analysis was carried out. Based on the result obtained, the EM decreased dramatically in the financial crisis era, which contributed both to positively and negatively excesses. (39). The Cimini (2015) report also explored European EM activities but for a longer period, from 2006 to 2012. It was found similar results, with a decrease in abnormal accruals across most of the euro nations investigated during the crisis (40).

The Generally Accepted Accounting Principles (GAAPs) facilitate managers to practice flexibility throughout the accounting process while preparing financial reports. Managers apply various accounting options to improve interrelated decision-making like expense control, capital budgeting and transfer pricing (41). However, this also allows managers to potentially abuse their authority while taking advantage of the interests of other groups involved. There has been a lengthystanding controversy in accounting research, concerning managers who may potentially exploit specific financial instruments in a manipulative way. (11, 42).

Earlier studies have demonstrated how managers prefer specific accounting techniques and how certain methods influence the quality of corresponding corporations. Holthausen (1990) presented three viewpoints on the use of accounting methods namely, duplicitous behaviour, effective contracting and data (43, 44). Several previous research seemed to concentrate on the opportunistic point of view, indicating that business executives are likely to misuse accounting efficiency in order to increase their own money at the cost of shareholders (45-48). Conversely, the active contracting view suggests that accounting practices are effective when managers look after the interests of investors and successfully apply accounting decisions to mutually maximize decision-making, as well as react appropriately to various circumstances (49, 50). Specifically, accounting methods can be selected to demonstrate the assumptions of management regarding future cash flows of an organization, which would lead to increased information about earnings that is compatible with the information context (51, 52). Accounting strategies could thus attain substantial benefits and stockholders (53-55).

Previous studies have demonstrated the diverse consequences of earnings management on corporate performance. The manipulation of profits may be practiced under opportunistic circumstances by managers by exploiting the flexibility of accounting however, the framework of corporate governance plays an integral part in curbing deceptive earnings management and consequently making sure that managers work in the favour of investors (51, 52). In recent years, extensive research has been carried out to investigate whether corporate governance prevents or controls the “avaricious actions” of managers in terms of accounting preferences (56-58) and increases firm benefit (59-62). Organizations that employ powerful governance systems are generally less likely than organizations with weak governance mechanisms, to practice EM (56, 57). Tang (2012) indicated that entities with larger boards, higher institutional ownership and a non-dual management structure are more vulnerable to scrutiny and consequently much less likely to gain from risky accounting options than issuers without these components (62). Chen et al. (2007b) indicated that effective corporate governance could theoretically mitigate the manipulation of versatility in accounting and thus increase financial performance (56).

Corporate ownership is focused in East Asia, whereas in the U.S. and UK it differs from prevalent ownership. Practices in developing economies usually make use of “pyramid frameworks” and “crossholdings” between organizations in order to improve their control rights, which leads to an extensive gap between their control rights and cash flow rights (63). Thus in East Asian organizations, there is usually more discord between regulating investors and minority shareholders rather than between management and investors (64, 65). Subsequently, a conflict between groups prompts owners to capture minority interests through earnings management. Leuz and Wüstemann (2003) conducted a survey regarding 31 countries to benchmark EM, and the Malaysian stock market was ranked number 20 in overall earnings management (66). Enomoto et al. (2015) compared two types of EM (accrual earnings management, AEM & real earnings management, REM) across 38 countries and found that two types of EM in Malaysia are more pervasive than other nations, particularly REM. Out of the four South East Asian countries, EM in Malaysia is worse than Thailand, Taiwan, India, and Pakistan. Due to the importance of EM and its wealth of research, little is known about earnings management in family ownership (67). Furthermore, top 15 families in Malaysia were also found to control assets worth 76% of the country’s gross domestic product (GDP) as reported by the Malaymail online on April 17, 2015, edition (68).

According to Berle and Means (1930), the distribution of equity among financial investors tends to decrease control and moves authority to the managerial groups. Administrative staff and shareholders have specific profits, and potential conflicts could arise that could be problematic to the organization (69). Jensen and Meckling (1976) explained how under such circumstances where the investor is the principal and the supervisor the agent, could be potentially problematic and have a negative impact on firm performance and its value (70).

Likewise, Jensen and Meckling described how conflicts could arise from the debt link between creditors and organizations. Furthermore, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997) reported that(71), both major and minor investors are being subjected to additional serious agency problems, particularly in nations which have inadequate investor security. It is apparent that various factors and conditions affect agency relationships within an organization. Thus, overcoming these conflicts, specific principles and guidelines should be implemented in order to guarantee that organizations are well governed and efficiently organized to improve and sustain progress. Without such guidelines and procedures in place, these potential problems could adversely affect firm performance (63, 72). The agency theory has suggested two kinds of governance elements for reducing agency problems namely; external and internal structures. The external structure includes, the market for corporate control, the variable and product market and the legal structure (70).

The internal systems, on the other hand, include the arrangement of ownership, the board of directors, remuneration of the company, and financial policies. Agency theory control instruments could potentially provide the required assurances as well as provide balanced governance into the processes of an organization. Additionally, more order is placed on both investors and administration due to these factors. A number of studies carried out in various countries have investigated the correlation between corporate performance, earnings management and corporate governance mechanisms. These studies revealed that undeniably corporate governance practices could protect shareholders, the organization's value as well as improve corporate governance (73-77).

3 Research objectives

To examine the effect of corporate governance mechanisms on the relationship between earnings management activities and firm performance in listed companies of Bursa Malaysia.

4 Data analysis and Scope of the study

Preliminary analysis of the data collected was completed to reflect the period of the years 2011 until 2015. At this stage, corporations with any missing data were excluded from the research, whereby the final sample size was reduced to 84 listed companies in Bursa Malaysia from FTSE Top 100 index. To evaluate the interactions proposed from the hypotheses as stated in the conceptual platform, the STATA 12.1 statistical program and SPSS 22 were utilised. In this study, panel data analysis was applied, and different steps were available for a diagnostic test.

5 Hypotheses and Models

Based on the literature regarding the objective, this study recommends Hypotheses 1 to 4 and model 1 to 4 as follows:
Hypothesis 1: Corporate governance activities have a significant effect on the relationship between earnings management and the ROA of the listed companies in Bursa Malaysia.

Model 1

$$ROA_{it} = \alpha_0 + B_1DAC_{it} + B_2CEOD_{it} + B_3 DS_{it} + B_4SBS_{it} + B_5BM_{it} + B_6SBM_{it} + B_7 ID_{it} + B_8 NID_{it} + B_9 FO_{it} + B_{10} SX_{it} + B_{11} WB_{it} + B_{12} AMG_{it} + B_{13} NRCM_{it} + B_{14} ACI_{it} + B_{15} (DAC_{it} * CEOD_{it}) + B_{16} (DAC_{it} * DS_{it}) + B_{17} (DAC_{it} * SBS_{it}) + B_{18} (DAC_{it} * BM_{it}) + B_{19} (DAC_{it} * SBM_{it}) + B_{20} (DAC_{it} * ID_{it}) + B_{21} (DAC_{it} * NID_{it}) + B_{22} (DAC_{it} * FO_{it}) + B_{23} (DAC_{it} * SX_{it}) + B_{24} (DAC_{it} * WB_{it}) + B_{25} (DAC_{it} * AMG_{it}) + B_{26} (DAC_{it} * NRCM_{it}) + B_{27} (DAC_{it} * ACI_{it}) + B_{28} LEV_{it} + B_{29} LMV_{it} + B_{30} MB_{it} + e_{it}$$

Hypothesis 2: Corporate governance activities have a significant effect on the relationship between earnings management and the ROE of the listed companies in Bursa Malaysia.

Model 2

ROE it = α0 + B1DACit + B2CEODit + B3 DS it + B4SBS it + B5BM it + B6SBM it + B7 ID it + B8 NID it + B9 FO it + B10 SX it + B11 WB it + B12 AMG it +B13 NRCM it +B14 ACI it +B15 (DACit * CEODit) + B16 (DACit * DS it) + B17 (DACit * SBS it) + B18 (DACit * BM it) + B19 (DACit * SBM it) + B20 (DACit * ID it) + B21 (DACit * NID it) + B22 (DACit * FO it) + B23 (DACit * SX it) + B24 (DACit * WB it) + B25 (DACit * AMG it) + B26 (DACit * NRCM it) + B27 (DACit * ACI it) + B28 LEV it +B29 LMV it + B30 MB it +e it

Hypothesis 3: Corporate governance activities have a significant effect on the relationship between earnings management and TQ of the listed companies in Bursa Malaysia.

Model 3

TQ it = α0 + B1DACit + B2CEODit + B3 DS it + B4SBS it + B5BM it + B6SBM it + B7 ID it + B8 NID it + B9 FO it + B10 SX it + B11 WB it + B12 AMG it +B13 NRCM it +B14 ACI it +B15 (DACit * CEODit) + B16 (DACit * DS it) + B17 (DACit * SBS it) + B18 (DACit * BM it) + B19 (DACit * SBM it) + B20 (DACit * ID it) + B21 (DACit * NID it) + B22 (DACit * FO it) + B23 (DACit * SX it) + B24 (DACit * WB it) + B25 (DACit * AMG it) + B26 (DACit * NRCM it) + B27 (DACit * ACI it) + B28 LEV it +B29 LMV it + B30 MB it +e it

Hypothesis 4: Corporate governance activities have a significant effect on the relationship between earnings management and the EVA of the listed companies in Bursa Malaysia.

Model 4

EVA it = α0 + B1DACit + B2CEODit + B3 DS it + B4SBS it + B5BM it + B6SBM it + B7 ID it + B8 NID it + B9 FO it + B10 SX it + B11 WB it + B12 AMG it +B13 NRCM it +B14 ACI it +B15 (DACit * CEODit) + B16 (DACit * DS it) + B17 (DACit * SBS it) + B18 (DACit * BM it) + B19 (DACit * SBM it) + B20 (DACit * ID it) + B21 (DACit * NID it) + B22 (DACit * FO it) + B23 (DACit * SX it) + B24 (DACit * WB it) + B25 (DACit * AMG it) + B26 (DACit * NRCM it) + B27 (DACit * ACI it) + B28 LEV it +B29 LMV it + B30 MB it +e it

Corporate Governance as moderator (CEOD = CEO Duality, DS = Board size, SBS = Supervisory Board Size, BM = Board Meetings, SBM = Supervisory Board Meetings, ID = %Independent non-executive Directors, NID = % Non-independent Directors, FO = % Foreign Ownership, SX = % Shares Executives, WB = Women on board, AGM = Annual general meeting, NRCM = Nomination and remuneration committee meeting, ACI = Audit committee independence)
Earnings management as an independent variable (DAC = Discretionary accruals)
Firm performance persistence as dependent (TQ = Tobin's Q, ROE = Return on equity, ROA = Return on total assets, EVA = Economic value added)
Controlling variables (LEV = Leverage, LMV = Log Market Value, MB = Market-to-Book Value)

5 Results

The results show the effect of earnings management on Return on total assets is impacted by the interaction of Discretionary accruals as a proxy of earnings management and corporate governance (CEO Duality, Annual general meeting, Board size, Supervisory Board Size, Board Meetings, Supervisory Board Meetings, Percentage of Independent non-executive Directors, Percentage of Non-independent Directors, Percentage of Foreign Ownership, Percentage of Executives Shares, Women on board, and Audit committee independence) as moderating variables.

The results show the effect of earnings management on Return on equity is impacted by the interaction of Discretionary accruals as a proxy of earnings management and corporate governance (CEO Duality, Annual general meeting, Supervisory Board Size, Supervisory Board Meetings, and Audit committee independence) as moderating variables. In terms of Tobin's Q results show that the effect earnings management is impacted by the interaction of Discretionary accruals and corporate governance (Annual general meeting, Supervisory Board Meetings, Percentage of Executives Shares, and Audit committee independence) as moderating variables. Finally, the results of this study show that the effect of earnings management on Economic value added is impacted by the interaction of Discretionary accruals as a proxy of earnings management and corporate governance (CEO Duality, Annual general meeting, Board Meetings, Supervisory Board Meetings, and Percentage of Independent non-executive Directors) as moderating variables.

The results of this study are consistent with the past studies in which a significant effect of corporate governance was found on the relationship between earnings management and ROA(73, 76-82). and a significant effect of corporate governance was found on the relationship between earnings management and ROE (81).

Furthermore, the results of this study in terms of the third objective are consistent with the past studies which stated corporate governance has a significant effect on the relationship between earnings management and EVA (79, 82). The results also represent a significant effect of corporate governance on the relationship between earnings management and Tobin's Q (73, 76, 78, 79, 81, 82). In the other studies, there were found a significant effect of corporate governance which led to an increase in firm value and firm performance (83-85). Also, some studies stated that corporate governance decreases the effect of earnings management (86-93).

In addition, regarding the control variables, the results show that LEV and MB have a significant effect on ROA whilst LMV has an insignificant effect on ROA. However, LEV does not have a significant effect on ROE whilst LMV and MB has a significant effect on ROE. Furthermore, the results show that all three control variables have a significant effect on Tobin's Q and EVA. The results of this study found that the moderating role of corporate governance has a significant effect on the relationship between earnings management and p firm performance. So that hypotheses 9, 10, 11, and 12 are not rejected. Overall, the study provides evidence that the models 9 to 12 regarding hypotheses 9 to 12 of this study are supporting the problem statement.

The results are supported by agency theory since corporate governance plays a moderator role that could eliminate the effect of earnings management's effect on the firm's performance. Agency theory explains the relationship between the owners of the business who are the principal and the managers who are the agents of the owners. In modern firms, due to the size of the firm, the dispersion of ownership in which their huge number of shareholders and the nature of the business which requires professionalism, the owners of the business cannot manage the operations, hence they hire managers to operate the business on their behalf. The manager though is required to operate for benefit of the owners, some time they operate at their own interest hence causing principal agent problem.

Corporate governance is a method used to minimize the burden of an organization resulting from a conflict of interest between management and investors. The controversy originates, almost generally, because as the separation of ownership and management of the contemporary business places managers in a position of privilege that provides them with the ability to make decisions that could also combine with or reinforce the company's objective of maximizing value. Managers can thus use their control over the business to achieve specific goals at stakeholder cost. Kang and Kim (2011) mentioned in this regard that management may impact reported earnings by attempting to make accounting choices or making operating decisions in a discretionary way. So this discretionary decision to modify retained income is incorporated into accrual accounting (78).

There are very impressive studies which investigate the effect of corporate governance and corporate performance in both developed and developing countries. Although there has been significant controversy of the interaction between corporate governance and the financial reporting quality or opportunistic accounting. That most of these research suggests that effective governance processes could affect managers' discretionary effort. (94, 95). Moreover, studies have demonstrated that boards with far more external independent executives use earnings management less regularly via abnormal accruals (90, 95).

While the measurement and trajectory of these correlations vary substantially between the academics and fields of study, some of these researches indicate convincing evidence of the different effect of corporate governance on firm performance and earnings management. Nevertheless, combining two mechanisms presents a fairly complicated situation requiring more study. In that regard, Cornett et al (2008) note that, since corporate governance mechanisms influence both revenue administration and corporate performance, the effect on the recorded performance of these governance mechanisms is seen to be, at least in part, simply cosmetic. In order to determine the real effect of corporate governance on organizational efficiency, these performance metrics must be excluded from the control of discretionary accruals. This gives an overview of the effects of governance mechanisms on both pre-managed (true) and controlled (adjusted) performance because it enables the correlation between the two. (92).

Table 1: Summary of the findings based on model 1 to 4

	ROA	**ROE**	**TQ**	**EVA**
DAC				
CEOD	(+)	(+)		(−)
AGM	(−)	(−)	(−)	(−)
CEOD*DAC	(−)	(−)		(+)
AGM*DAC	(+)	(+)	(+)	(+)
DS		(+)		
SBS	(−)	(−)		(+)
BM	(−)			(−)
SBM	(+)	(+)	(+)	
ID	(+)	(+)		(+)
NID				
FO	(−)		(−)	(−)
SX	(+)			
WB				
NRCM				
ACI	(−)	(−)	(−)	
DAC*DS	(+)			
DAC*SBS	(+)	(+)		
DAC*BM	(+)			(+)
DAC*SBM	(−)	(−)	(−)	(−)
DAC*ID	(−)			(−)
DAC*NID	(+)			
DAC*FO	(−)			
DAC*SX	(−)		(−)	
DAC*WB	(−)			
DAC*NRCM				
DAC*ACI	(+)	(+)	(+)	
Control Variables				
LEV	(+)		(+)	(+)
LMV		(−)	(+)	(+)
MB	(+)	(+)	(+)	(+)

5 Conclusion

The present research plays a significant role in the current literature focusing on corporate governance, earnings management and firm performance by analysing the effect of corporate governance components on the relationship between earnings management and firm performance in the top 100 listed companies of Bursa Malaysia. It is shown in what way these particular components could indicate the answerability to shareholders along with other stakeholders via corporate performance. This study's findings could contribute significantly to researchers, investors, regulators and corporate managers who wish to study, include worth or promote the proper corporate governance mechanism which is extracted to contribute to the upswing of the economy and lead to the obtainment of the primary goal. Researchers can rely on this study to broaden information and create a corporate governance structure. Similarly, investors who wish to invest in corporations could consider the corporate governance practices in position and examine their effect on the firm's long-term value. Financial regulators can consider the regions of corporate governance which are most crucial to incorporate financial value to stockholder wealth, reduce bankruptcies and promote financial growth. The outcomes of this research would also assist corporate managers who seek corporate governance change to concentrate on mechanisms which could improve financial worth. Although lots of studies have been conducted in this area, there is no particular study that examined incentive and monitoring elements of corporate governance systems on estimated Tobin's Q, ROE, ROA, EVA and earnings management activities in Bursa Malaysia.

Ethical issue

Authors are aware of, and comply with, best practice in publication ethics specifically with regard to authorship (avoidance of guest authorship), dual submission, manipulation of figures, competing interests and compliance with policies on research ethics. Authors adhere to publication requirements that submitted work is original and has not been published elsewhere in any language.

Competing interests

The authors declare no conflict of interest that would prejudice the impartiality of this scientific work.

Authors' contribution

All authors of this study have a complete contribution for data collection, data analyses and manuscript writing.

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