Board Leadership Structure and Earning Quality: A Study from the Malaysian Banking Sector

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University Malaysia Sarawak, Faculty of Economics and Business, 94300 Kota Samarahan, Sarawak

Abstract

The purpose of this study is to examine the relationship between board leadership structure and earning quality of banking sectors in Malaysia. This study purposely focuses on four sectors of board leadership structure which is board size, board independent non-executive director, board gender diversity and Chief Executive Officer (CEO) tenure. Data that is used in this study is 10 banking sectors in Malaysia that are publicly listed in Bursa Malaysia. As for the period, the data cover from the year 2016 to 2019. In order to find the value of earning quality, this study uses The Modified Jones Model by Dechow, Sloan and Sweeney (1995) since many previous studies have stated that The Modified Jones Model are the best model to measure earning quality. Based on the analysis, board size and board diversity show positive and insignificant association with earning quality while board independent and Chief Executive Officer (CEO) tenure shows negative and insignificant association with earning quality.

Keywords: Board Size, Board Independence, Board Gender Diversity, Ceo Tenure, Earning Quality

Introduction

Generally, the main goal when establishing a firm is to gain profit and at the same time to maximize shareholder profits. According to Zenger (2015), a great leader can double the profit of the firms with consistent improvement of the organizational productivity. A successful firm commonly come from a leader that have the most effective leadership style that can guide and work together with the management team to achieve the firm's goals. Apart from that, a successful organization also comes from a virtuous and competent leader.

A leader of an organization can come from the Chief Executive Officer (CEO), a Chairman or someone from a board member that steps up and wants to be a leader. Nonetheless, Murphy (2020) states that in some organizations, the Chief Executive Officer (CEO) is also the same person with Chairman of the firm hence, the person has two positions in the organization. Besides the Chief Executive Officer (CEO) and Chairman, Board of Directors (BOD) also play major roles in the performance of the firm. Arnwine (2017) mention that roles of Boards of Directors are to make strategic decisions and to supervise the organization activity so that the firm's operations are still in a right path. Generally, a board

leader will step up and fix the problem together with their team and make sure all tasks turn out perfectly fine just as the board members and the team plan based on the goal of the firms.

Other than a great leadership skill, excellent corporate governance also can help the firms to increase the performance and at the same time, increase the earning quality since corporate governance shows what is the firm's direction and the integrity of the business. Chen (2020) states that in order a firm to build trust with the investor, a firm must have good corporate governance. Moreover, a firm's board of director play major roles in influencing corporate governance since good corporate governance able to attract more investor and have high earning quality. If the firm do not have corporate governance, it can make the firm's financial performance become worst and the earning quality also become low because there are fraud and misreporting in financial report. This indicates that earning quality, can show whether the firm have better quality income or otherwise.

Literature Review
Review of Earning Quality

Earning quality is the most vital feature of financial reporting systems as earning quality shows the quality of the financial report of the firms. Earning quality are known to be the main information on the performance of the firms, as earning quality from financial report can help the investors make decisions and correct asset pricing (Yuan and Jiang, 2008). However, Dechow et al (2009) states that earning quality have broad meaning and not only depends on one meaning only. Schipper and Vincent (2003) mentions that purpose of earning quality is to forecast the future earnings better. In addition, Hussainey (2009) indicate that earnings quality information can help the investors, to evaluate the performance of the firms and estimate the firm's potential performance in the future. Ewert and Wagenhofer (2011) mention that earning quality have been use by many countries as a subject to observe in various studies and at the same time earning quality also use to evaluate the impact of changes in accounting, auditing and to investigate its association with the cost of capital.

According to Ewert and Wagenhofer (2011), high quality of earning can increase the effectiveness of the capital market, thus as user especially investors, should be more intrigue on the high-quality financial report. Dechow & Dichev (2002) have define that the characteristics of high earning quality is when more accruals in the firms are realized as cash. High quality earning able to provide more details about the attributes of the financial performance of the firm thus it is relevant to make decision based on the earning quality (Dechow et al., 2010). Furthermore, Doyle et al (2006) have discovered that low earning quality are caused by weak internal control on financial reporting, where there are many errors and intentional misreporting that have been found. Besides, Tuovila (2020) mention that the amount income of the firms that is due to higher revenues or lower cost are consider as high quality of earnings. However, a boost of net profit without an increase in cash flow from sale or the business operation are known as low earning quality.

Earning management is known as where the top management trying to manipulate report of earning by using specific accounting techniques in order to influence the earnings of the firms (Omoye & Eriki, 2014). Earnings quality of a firms can be influence by the earning management behaviour (Abdelghany, 2005) as some management of the firm like to manipulate the earning in order to attract more investors in the future and it can cause the quality of earning become poor. For instance, manipulating the accruals of the firms, as users and investors mostly making decisions based on the accruals of the firms. Moreover, the most common methods to manipulate the earning are by making some changes in the assumptions

for accounting standard (Radzi et al., 2011). According to Tuovila (2020), the real quality of a company's earning can be seen by finding and eliminating any irregularities, accounting tricks or any incidents that distort the numbers. Thus, earning quality can be found through financial report as financial report have lot information on the performance of the firm.

Review of Board Leadership Structure

Board of directors are known as a group of people that have been vote and select as the representative of the shareholders. According to Anandarajah (2001) in Malaysia, the board of directors have been introduced in year 1965 where the government introduce The Malaysian Companies Act 1965 and the origins of the acts is from English Companies Act and The Australian Companies Act. Thus, every public listed company in Malaysia are legally require having Board of Director.

Chen (2019) state that, the board of directors are known as group of people that have authority to conduct the policy and any actions of the company or firm. Therefore, board of directors are responsible to come out with policy and goals of the firms so that every decision that need to be make must be based on the goal and policy of the firms. Kosnik (1990) mention that the main objective of establishing board of directors is to observe the performance of the firms in order to protect the shareholders' interest. Heraclouse (1999) believes that board of directors are the top of management as their duties involves both external and internal functions of a company. Alves (2012) mention that board of directors are responsible to observes the firm's quality information especially on the quality of financial report. According to Vafeas (2000), the board of director should always monitor the financial reports in order to avoid the manager making unethical actions such as misleading shareholders. Hence this mean that board of director also need to monitor the manager's behaviour in order to make sure action that have been done by the manager are align with the shareholder's interest. Furthermore, the board are also in charge of any decision making and responsible operation of the company (Jensen, 1993). Anderson, Mansi & Reeb (2004) indicates that boards of directors are group of people that are responsible to monitoring, disciplining, and evaluating the management of the firms.

In every management, there must be a leader who can lead the management to achieve the firm's goal. A leader can come from the Chairman, Chief Executive Officer, or anyone from board of directors who step up as and willing to be a leader based on the vote. Generally, Chief Executive Officer (CEO) are commonly act as the leader of the daily operation of the firms. In some firms, the Chairman is also the same person with the Chief Executive Officer (CEO) therefore, the person has two position in the organization (Murphy, 2020). Nevertheless, in Malaysia according to MCCG, the Chief Executive Officer (CEO) and Chairman should not be of same person as it can cause internal control system will to fail and at the same time to avoid any unethical actions. In addition, combining the responsibilities of Chief Executives Officer (CEO) and Chairman can reduce the effectiveness of the board of directors (Brickley et al., 1997).

Hypothesis Development
Board Size

According to Dimitropoulos and Asteriou (2010), board size is one of an important board characteristic as it gives impacts towards the effectiveness of the board duties. Nevertheless, Al- Dhamari and Ismail (2014) states that when the board sizes are large, it is view that the boards members are experts in managing the firms as the board member can provide various

insightful ideas to the firms. Studies that have been done by Bradbury et al (2006) states that firms that have larger number of board member are less likely to manipulate data earnings.

Vafeas (2000) argue that if firm have small board of directors, the exchange of idea between firms and its director can be easily conducted. Dimitropoulos and Asteriou (2010) mention that firms that have small board size are easier to managed when it comes to decision making as there are less member and the probability for free riding is less too. Also, the chances of other director to oppose an idea of innovation also will be decrease. In addition, Lipton and Lorsch (1992) states that board size should be smaller, because when the board size is large, it will be difficult for the board of directors to voice out their opinion and share new ideas. Study that have been done by Vafeas (2000) have revealed that firms that have smaller board size are likely to have high earnings quality because if the board size is large, the chances of agency problem might occur. Therefore, according to agency theory, the hypothesis is developed as below.

H1: There is positive association between boards size and earning quality in Malaysia's banking sectors.

Board Independence

According to Kapoor and Goel (2016), based on agency theory, independence directors are important in order to increase the effective monitoring towards the corporate board. As independence directors can protect the shareholder from manager's behaviour that may lead to self-interest behaviour (Kiel and Nicholson, 2003). Board independence refer to board members that are n ot involve in daily operations of the business but monitor the management of the firms on behalf of shareholder in order to protect the shareholders' interest (Hanrahan, 2001).

There are numerous numbers of studies that have examine the association of board independence and earning managements. Most of the studies shows that firms that have huge number of board independence leads to higher quality earnings. For instance, study that have been done by Dechow et al. in 1996 with using data from United States, firms that have large number of independence director have high earnings quality. Moreover, study by Xie et al (2003) indicates that the chances of earning management to occur in the firms are low when the quota of independence board members are higher. Study by Dimitropoulos and Asteriou (2010) reveals that independence member are positively associates with the earning quality of the firms.

Huse (1994) states that, according to agency theory independence boards member has positive impacts towards the effectiveness of the boards. In addition, Klien (2002) mention that by appointing independence director, the effectiveness of corporate governance will be increase as corporate governance can decrease agency problem to occur in the firms and at the same time can increase the earning quality. Hence, the second hypothesis in this study is stated as below.

H2: There is positive relationship between the board independence and earning quality in Malaysia's banking sectors.

Board Gender Diversity

Since Malaysian Government have decided to establish Malaysian Code on Corporate Governance (MCCG), board diversity is one of the requirement in the latest Malaysian Code on Corporate Governance (MCCG) code. The board of large firms should be compromise 30% of women directors. According to Useem (1993), female directors play major roles in deciding

management decision making and the performance of the firms. Hence, shareholders and institutional investors demand firms to increase the board diversity by including more female members. Besides that, according to Carter et al. (2003), female directors can help improve the decision making in the board. Apart from that, the number of female directors can give impacts towards the percentage of sales growth (Rosen and Lovelace, 1991).

However, there are a few mixed findings in examining board diversity and earnings quality. Study by Hili and Affes in 2012 states that, there are no associations between gender diversity on the Board of Directors (BOD). Apart from that study by Carter et al (2010) shows that there are negative association between female directors and the ethnic minority directors towards financial performance. Another study on the impact of gender diversity towards board and senior management on earning quality by Lakhal et al (2015), shows different results. The results states that higher number of female directors will lead to less earning manipulation. Hence according to the expectation and previous study, the third hypothesis of this study is stated as below:

H3: There is negative association between Gender Diversity and the earning quality in Malaysia's banking sectors.

Chief Executive Officer (CEO) Tenure

According to Ali et. al (2019), CEO tenure refers to the number of years a person serves as Chief Executive Officer (CEO) at the firm. According to Simsek (2007), short term Chief Executive Officer (CEO) give negative impact toward the firm performance as the Chief Executive Officer (CEO) have lack of knowledge about the firm's economic environment. While, long term Chief Executive Officer can give positive impact towards the firms as they have more knowledge and experience about the environment of the firm. The effectiveness of boards in monitoring the management will be increase as the longer the boards work for the firm the higher the effectiveness of the boards' performance (Beasley, 1996). Nonetheless, study by Beasley (1996) reveals that there are negative associations between board tenure and earning quality. Besides that, study by Ali et. al (2019) indicates that there is negative relationship between Chief Executive Officer (CEO) tenure and the cost of equity of the firms. Thus, the fourth hypothesis on the association between Chief Executive Officer (CEO) tenure and earning quality is stated as below:

H4: There is negative association between Chief Executive Officer (CEO) tenure and earning quality in Malaysia's banking sectors.

Theoretical Framework

Agency Theory

Agency theory have been used in many studies especially in accounting and finance research. Agency theories are introduced in 1970s by Ross. Then the term has been analysed and relates with agency cost in 1976 by Jensen and Meckling (Shapiro, 2005). According to Eisenhardt (1989), agency theory evaluates the efficiency of the boards of director based on the supposition on the conflict of goal between the agent and the principal. The theory also mostly concerns with finding solution for problem that can occur in agency relationship. According to Deegan (2004), the viewpoint of the agency theory is that board of director's responsibility is to maximize the shareholders' value. This theory also explain the relationship between two parties where the agent, which is known as the management perform service for the principal.

Generally, agency problem usually occurs due to the agent who have self-interest and like to manipulate the financial report to attract more investors. For instance, agency problem occur in the case of Enron. Enron have become bankrupt in 2001 and it is one of the well-known corporate scandal in United States of America. The bankruptcy happens due to the executives of the company manipulate the earning of the firms and hide the actual amount of debt (Chen, 2020). Besides, Eisenhardt (1989) states that the chances of agency problem to increase is when "(a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to verify what the agent is actually doing."

According to Kunz and Pfaff (2002), one of the agency problems that might occur is when the communication between the agent and the principal are in an asymmetric manner as it can cause conflicts of interest and may lead to efficiency loss. Thus, procedure and technique are very important in order to reduce the problem. Lopes (2008) also mention that problem such as information asymmetry can increase the seriousness of agency conflict. The information asymmetry may occur within the agent and the principal as both parties have different judgement towards the benefits of sharing the risk (Li, 2014). Managers play an important role in building up the value of the firm. Therefore, managers can decrease the agency cost by reducing the asymmetrical information to increase the value of the firm.

Basically, agency theory is about investigating the effectiveness of the board based on the conflict that occur between the agent and the principal (Eisenhardt, 1989). In agency theory, the chances of agency problem occur are high when the Chief Executives Officer (CEO) and the Chairman of the firms are the same person (Yermack, 1996). According to Daily and Dalton (1994), by separating the position of Chief Executive Officer and Chairman into different person would reduce the dominance of the Chief Executive Officer (CEO) over the board of directors. Yusoff and Alhaji (2012) states that since 1932, Berle and Means have conducted studies regarding agency theory in view of corporate governance. The study focuses on separation of ownership in order to avoid agency problem. Besides, corporate governance is also a good mechanism to monitor and reduce the potential of agency problems.

Research Methodology

Research Design

This study will be using qualitative research which is secondary resources as the study involve in gathering all information from existing data which is via the annual report. Annual report of the banks are obtained from the bank's official website or Bursa Malaysia's website. The population of this study will be consisting of 10 banking firms that are listed in year 2016-2019, in Bursa Malaysia. As for the statistical analysis, this study will analyze the data using EViews. Test that will be tested are Ordinary Least Squares (OLS), Multicollinearity, Autocorrelation and Normality Test.

Estimation Model

Linear multiple regression analysis will be use in this study in order to test the relationship between the dependent variable which is earning quality of the banks and the independent variables which are, the board size, board independence, board gender diversity and Chief Executive Officer (CEO) tenure. The estimation model of this study is construct as below:

EARNQ= $\beta_0 + \beta_1\,BODSIZE + \beta_2 BODINDEP + \beta_3 BODDIV + \beta_4\,CEOTENURE + \varepsilon_t$

Where EARNQ is the earning quality, BODSIZE is the board size of the firms, as for BODINDEP is for the number of board independent of the firms, BODDIV is for board gender diversity and lastly CEOTENURE is stands for the Chief Executive Officer (CEO) tenure of the firms.

Measurement of Dependent Variable

Earning quality and earning management are not much difference. According to Dechow, Sloan and Sweeney (1995), in order to do analysis on earning management and earning quality, the best method to use is to measure the firm's discretionary accruals. Previous study by Bexter and Cotter (2009), Lee (2015), Chee and Tham (2020) have use discretionary accruals to explore the firm's manipulation accruals. Dechow and Dichev (2002) also have state that the best method to measure earning management is by measure the firm's discretionary accruals. Thus, in this study, discretionary accruals will be used to measure the earning management of the firms. Discretionary accruals can be acquired by finding the differences amount between non-discretionary accruals and total accruals. To find the discretionary accruals of the firms, the number of total accruals need to be calculate first (Soliman and Ragab, 2013). The formula to find the total accrual are as below:

$$TAC_t = Net\ Inc_t - CFOPER_t$$

TAC_t is the total accrual of the year t.

Net Inc_t is the net income of the year t.

While $CFOPER_t$ is the cash flows from operating activities of the year t.

For this study, the modified version of Jones Model will be use to find the non-discretionary accruals of this study as the Modified Jones Model are commonly being use in studies that relates with earning management and earning quality. According to Dechow et al (1995), the Modified Jones Model is used to identify the abnormal or error in measurement of discretionary accruals once the discretion are applied over the sale. Besides that, Dechow et al (1995) also mention that modified Jones Model can provide better test for earning management or earning quality instead of another model. Thus, the equation of the modified Jones Model to estimates the non-discretionary accruals is as below:

$$NDA_t = \beta1\ (1/\ A_{t-1}) + \beta2\ (\Delta REV_t - \Delta REC_t)/A_{t-1} + \beta3\ (\Delta PPES_t)/A_{t-1} + \epsilon$$

Where, NDA_t is non-discretionary accruals.

A_{t-1} is the total assets in the end of the year.

ΔREV_t is the revenue in year $_t$ – revenue in year $_{t-1}$

ΔREC_t is the receivables of the firm in year $_t$ – receivables in year $_{t-1}$

$\Delta PPES_t$ is the gross value of property plant and equipment at the end of year $_t$

$\beta1$, $\beta2$ and $\beta3$ is the firm's specific parameters.

ϵ is residuals.

Lastly, in order to get discretionary accruals for the earning management are as below:

$$DAt = TACt/A_{t-1} - NDAt$$

Where, DAt is the discretionary accruals in the year $_t$.

TACt is the total accrual of the year $_t$.

NDAt is the non- discretionary accruals of year $_t$.

Therefore, based on Dechow et al (1995) discretionary accruals method and The Modified Jones Model will be use to estimate the earning management of the firms.

Measurement of Independent Variables

As for this study, the independent variable is the board leadership structure and this study will measure four variables which are board size, board independence, the board diversity and Chief Executive Officer (CEO) tenure. First, the board size will be measured by taking the total number of boards of directors of the firms (Jamaludin et al., 2015). Next is the board independence will be measure using total average number of the board independence. The measurement is done by dividing the total number of independent directors with total number of directors on the board of directors (Martin and Herrero, 2019). As for the board gender diversity, the measurement for the variable will be based on the ratio of female director and the size of the board (Hashim et al., 2019). Lastly, Chief Executive Officer (CEO) tenure will be measured based on the duration (years) the Chief Executive Officer (CEO) have worked in the firm (Ali and Zhang, 2015).

Variable	Measurement
Dependent Variable	
Earning Quality	Discretionary Accruals (The Modified Jones Model)
Independent Variable	
Board Size	Total number of the board of directors.
Board Independence	The average of non-executive independent directors in the board.
Board Gender Diversity	The ratio of female directors and the total number of board size.
CEO Tenure	Duration (years) the person has served as the CEO of the firm.

Table 1 show the summarization of the measurement for dependent variable and independent variables.

Analysis and Findings
Descriptive Statistics

The data for earning quality, board size, board independent non-executive directors, board diversity and Chief Executive Officer tenure have been collected with the purpose to analyse the relationship between board leadership structure and earning quality in Malaysia's banking sector.

Table 2

Shows the Descriptive Analysis of this Study

	Earning Quality	Board Size	Board Independent Directors	Board Diversity	CEO Tenure
N	40	40	40	40	40
Mean	0.001400	8.38	0.61	0.26	4.59
Median	0.000867	8.00	0.60	0.27	4.00
Maximum	0.012658	12.00	1.00	0.57	17.00
Minimum	-0.003530	5.00	0.38	0.00	0.08
Standard Deviation	0.003534	2.02	0.12	0.15	3.99

The descriptive statistic table above shows the analysis that are going to be discuss in this section. The analysis are mean, median, maximum, minimum, and standard deviation. Based on the result above, the mean for earning quality is 0.001400, followed by board size with mean value of 8.38. Board independence non-executive directors mean is 0.61. Mean value for board diversity and Chief Executive Officer (CEO) tenure are 0.26 and 4.59 respectively.

As for the value of median, the largest value of median is from the board size where the value is 8.00 whereas the lowest value of median is from earning quality which is 0.000867. Then followed by Chief Executive Officer (CEO) tenure with value 4.00. Board independent non-executive director median value is 0.60 and for board diversity, the median value is 0.27.

The maximum value for earning quality is 0.012658 whereas maximum value for board size is 12.00, board independent non-executive director is 1.00, board diversity 0.57 and Chief Executive Officer (CEO) tenure is 17.00.

Next is minimum value of this study for earning quality is -0.003530. As for board size, the minimum value is 5.00 while board independent non-executive director minimum value is 0.38. Then board diversity and Chief Executive Officer (CEO) tenure has minimum value 0.00 and 0.08.

As shown in the table above, earning quality and board independent non-executive director have the lowest standard deviation which is 0.003530 and 0.12. For board size, the value of standard deviation is 2.02 while board diversity is 0.15 and for Chief Executive Officer is 3.99

Pearson Correlation Matrix

Table 3

Shows Pearson Correlation Matrix for this study

	Earning quality	*Board Size*	*Board Independent Directors*	*Board Diversity*	*CEO Tenure*
Earning Quality	1				
Board Size	0.171178	1			
Board Independent Directors	-0.209230	-0.006374	1		
Board Diversity	0.009769	-0.046316	-0.123852	1	
CEO Tenure	-0.010204	0.178054	-0.100739	0.302078	1

The main purpose of Pearson Correlation Matrix is to measure on the strength of the relationship between independent variables and dependent variable of this study (Nickolas, 2021). From the table above, there are no strong associations between the variables. As for the relationship between earning quality and board size indicates that there is positive and strong relationship between the two variables since the correlation value of the two variables are 0.171178. Besides that, results for the association between earning quality and board diversity are positive which is 0.009769. However, the results shows that the relationship between board independent directors are negative where the value of the results are -0.209230. Lastly, earning quality and Chief Executive Officer (CEO) tenure, also show weak relationship. Based on the table above, the value of correlation between earning quality and Chief Executive Officer (CEO) tenure shows -0.010204.

Diagnostic Test and Results

Ordinary Least Squared (OLS) Method

Table 4

Show OLS results of this study

Variables	Coefficient	Standard Error	t-Statistics	P-Value
C	0.002782	0.004110	0.676902	0.5029
Board Size	0.000319	0.000290	1.099242	0.2792
Independent Directors	-0.006316	0.004856	-1.300740	0.2018
Board Diversity	0.000297	0.004153	0.071474	0.9434
CEO Tenure	-6.0100000	0.000154	-0.389537	0.6992
R^2 = 0.076696		Probability (F- Statistic) = 0.579632		
Adjusted R^2 = -0.028824		F statistics = 0.726836		

Based on the Ordinary Least Squared (OLS) Method results above, the empirical model is restructured as follow:

$$EARNQ = 0.002782 + 0.000319\,BODSIZE - 0.006316\,BODINDEP + 0.000297\,BODDIV - 6.0100000\,CEOTENURE$$

Where:

EARNQ is Earning Quality.

BODSIZE is the size of the board of director which is the total number of boards of director.

BODINDEP is board independent non-executive directors.

BODDIV is board diversity.

CEOTENURE is the Chief Executive Officer's tenure.

According to the table above, the value for R^2 is 0.076696. This indicates that 7.67% changes in board leadership structure can give effect towards the earning quality of the firms. The coefficient value for the board size (BODSIZE) is positively associated to the earning quality (EARNQ). The result show that an increase of board size by 1 percent, the number of earning quality (EARNQ) will increase by 0.000319 percent. Apart from that, an increase of 1 percent of board of board diversity (BODDIV) can lead an increasing of the earning quality (EARNQ) of the firm by 0.000297 percent. However, the association of earning quality (EARNQ) and board independent director (BODINDEP) are negative. Hence, the results indicate that an increase 1 percent in the number of board independent director (BODINDEP) contribute 0.006316 percent decrease in earning quality (EARNQ). The results for Chief Executive Officer tenure (CEOTENURE) also show negative results where an increase of 1 percent in Chief Executive Officer Tenure (CEOTENURE) lead to 6.0100000 percent decrease in earning quality (EARNQ) of the firms. According to the Ordinary Least Squared (OLS), all variables such as board size (BODSIZE), board independent director (BODINDEP), board gender diversity (BODDIV) and Chief Executive Officer (CEO) tenure (CEOTENURE) p-value are above the level of significant which is 0.05 or 5%.

Multicollinearity

Table 6

Indicates VIF results for this study

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	1.69E-05	52.57186	NA
Board Size	8.42E-08	19.43438	1.044639
Independent Directors	2.36E-05	28.32940	1.020152
Board Diversity	1.73E-05	4.615368	1.123840
CEO Tenure	2.38E-08	2.717015	1.152061

Table 5

Show multicollinearity of this study

Variable	VIF	Status of predictors
Board Size	1 < 1.044639 < 5	not correlated
Independent Directors	1 < 1.020152 < 5	not correlated
Board Diversity	1 < 1.123840 < 5	not correlated
CEO Tenure	1 < 1.152061 < 5	not correlated

According to VIF test above, the centered VIF value of board size, independent directors, board diversity and Chief Executive (CEO) tenure equals to one (1.044639, 1.020152, 1.123840 and 1.152061 respectively). Based on the results of all VIF value for all variables are below 5 therefore, there are no multicollinearity problem in this study.

Autocorrelation

Durbin-Watson Test

Table 7

DW Test Result

Variables	Coefficient	Standard Error	t-Statistics	P-Value
C	0.002782	0.004110	0.676902	0.5029
Board Size	0.000319	0.000290	1.099242	0.2792
Independent Directors	-0.006316	0.004856	-1.300740	0.2018
Board Diversity	0.000297	0.004153	0.071474	0.9434
CEO Tenure	-6.0100000	0.000154	-0.389537	0.6992

R^2 = 0.076696	Probability (F- Statistic) = 0.579632
Adjusted R^2 = -0.028824	F statistics = 0.726836
Durbin-Watson stat = 2.558529	

Hypothesis for autocorrelation are developed as below:

H0: There is no autocorrelation in the model.

Ha: There is autocorrelation in the model.

Durbin Watson statistic test is used to examine the residuals from a statistical regression analysis for autocorrelation (Kenton,2021). Generally, the test result value for Durbin Watson test is between 0 and 4. Kenton (2021) also states that if the value of the test result i 2.0, it indicates that there is no autocorrelation occur in the sample. In addition, if the value of the test shows between 0 to 2, the test results indicates that there is positive autocorrelation in the sample while if the test result values are between 2 to 4, shows that there is negative autocorrelation in the sample. Based on the results above, the value for Durbin-Watson test results equals to 2.558529. Hence, the results indicate that there no autocorrelation exists in the test since the value of Durbin-Watson test is equals to 2. Hence there are no autocorrelation in the sample.

Breusch-Godfrey Serial Correlation LM Test

Besides Durbin Watson test, the most common test that are used to detect the presence of autocorrelation is known as Breusch-Godfrey (BG) Serial Correlation LM test (Lim and Midi, 2014). Hence, Breusch-Godfrey Serial Correlation LM test is conducted to determine the presence of autocorrelation.

Table 8

BG Serial Correlation LM Test

F-statistics	1.786947
Obs*R-squared	3.908683
Prob. F (2,33)	0.1833
Prob. Chi-Square (2)	0.1417

According on Breusch-Godfrey Serial Correlation LM test results above, the probability of Chi-Square indicates 0.1417. The value of the result is higher than significance level which

is 0.05 or 5%. Hence H_0 will not be rejected since the value are higher than the significance level and autocorrelation does not exist.

Normality Test
Table 9 Jarque-Bera normality test result

Mean	4.72e-19
Median	-0.000198
Maximum	0.010597
Minimum	-0.005267
Std. Dev	0.003396
Skewness	1.067704
Kurtosis	4.955089
Jarque-Bera	13.97057
Probability	0.000925

The hypothesis for Jarque-Bera normality test are developed as below:
H_0: The residuals are normally distributed.
Ha: The residuals are not normally distributed.

Based on the result of normality above, the skewness value is 1.067704 and as for the kurtosis value is 4.955089. However, the value shows that the probability of this test is equals to 0.000925 which is lower than significance level, 0.05 or 5%. Since, the value of the test are lower than the significance level, the results indicates that the data does not fit with the standard of normal distribution. Lastly, the null hypothesis (H_0) needs to be rejected since the probability value of the test are lower than 0.05 or 5%.

Discussion and Conclusion
Discussion
From the results of Ordinary Least Squared (OLS), there is a positive association between board size and earning quality where the coefficient value is 0.000319. The p-value of the two variables are 0.2792 which is not statistically significance since the value is higher than the significance level which is 0.05 or 5%. The p-value results indicate that there is no reason to reject the hypothesis as indicated above. The results show that board size does give impact towards the earning quality of the firms. The hypothesis developed are also supported since there are past research that has been conduct by Rahman and Ali (2003); Beasley (1996) which shows similar result. Both studies also show that there are positive associations between board size and earning quality. According to Rahman and Ali (2003), board size can give impact towards the earning quality since the results of the study shows that board size has positive association with the earning management. Study by Rahman and Ali (2003) also concluded that when board of director size increases, earning management also increases. The results of the study also consistent with study that had been done by Beasley in year 1996. Beasley (1996) found that there is positive association between board size and fraud when the board size is larger. From Beasley (1996), the board size does gives impact toward the earning quality of the firms. Furthermore, another empirical finding by Ghosh et al (2010) also indicates that there are strong positive association between board size since larger board size can lead to low earning management. Besides that, the finding of the study also states that firms with smaller board of director size have higher discretionary accruals, implying that

large board size and committees with broader knowledge are likely to be more competent at reviewing financial reporting. From agency theory perspectives, larger board of director have high chances to be more cautious when agency problems occur since a huge number of experienced directors are able to monitor the management (Kiel and Nicholson, 2003). According to Jensen (1993), board are more efficient when the size is smaller since larger board size can cause miscommunication between the board members. Miscommunication between board member can cause principle and agent problem. Generally, principle and agent problem occur due to miscommunication and self-interest. According to Eisenhardt (1989), agency theory evaluates the efficiency of the boards of director based on the supposition on the conflict of goal between the agent and the principal. Hence, board size gives impact toward earning quality.

Next, is the coefficient test result for independent non-executive directors and earning quality. The coefficient results indicate that there are negative association between earning quality and independent non-executive board member since the value of the coefficient test showed -0.006316. However, as for the p-value of this study, the value is 0.2018 which is higher than the level of significance value, 0.05 or 5%. Hence the results indicate that earning quality and independent non-executive director have negative association and insignificant relationship since the findings of this study does not support the hypothesis two. Previous study that has been done by Alves (2014) results shows that there are negative association between earning quality and board independence. The results also indicate that board independence non-executive directors are less likely to involve manipulation of earnings in the firm. Apart from that, Niu (2006), also indicates that the association between level of abnormal accruals and board independent are negatively associated. Other than that, study by Ebrahim (2007) also have consistent finding where the result of the study indicates that earning management have negative association with board independent and audit committee independent. The findings of the study share the same results where there are negative association between earning management, board independent and audit committee independence. In addition, Fatallah (2021) found that there is negative association between earning management and board independence. Nevertheless, according to Alves (2014), agency theory implies that member of independent director plays critical role in monitoring the financial reporting in order to achieve high earning quality. Alves (2014) mentioned that board independence has major role in monitoring the process of financial reporting which helps firms generate higher earning quality.

The third variables are earning quality and board diversity. Based on the Ordinary Least Squared (OLS) result, the coefficient is 0.000297 indicates that there are positive association between earning quality and board diversity. The p-value results show that it is higher than the significance level which is 0.05 or 5%, 0.9434 > 0.05. Thus, hypothesis three that have been developed will not be accepted since the findings of this study does not support the hypothesis three. There is previous research by Lakhal et al (2015) shows that there are positive association between earning quality and board diversity. The results of study that had been done by Lakhal et al (2015) shows that higher number of female directors will lead to less earning manipulation that occur in the firms. Apart from that, study by Srinidhi et al (2011) indicates that there are positive association between female director and earning quality. Srindhi, Gul and Tsui (2011) also mention that high number of female directors can lead to higher earning quality of the firms. Peni and Vahama (2010) mention that there are positive association between earning quality and female executives. Female executive can lead towards less earning manipulation (Peni and Vahama, 2010). The findings are consistent

with agency theory that has been stated. Based on agency theory, board diversity can give various style of control mechanisms and monitoring the earning quality so that the quality can be improve from time to time and at the same time the firm can gain high quality of earning (Arthur, 1991). Furthermore, board diversity is useful when developing effective controlling and monitoring mechanisms (Hoang et al., 2017).

For the last variable of this study which is Chief Executive Officer (CEO) tenure and the earning quality of the firms, Ordinary Least Squared (OLS) found that the relationship between Chief Executive Officer (CEO) tenure and earning quality are negative since the coefficient value is -6.0100000. The p-value of the variables shows 0.6992. The p-value of the variables are higher than the significance level which is 0.05 or 5%. Hence, hypothesis four of this study is accepted. The results of this study have constant finding with (Beasley, 1996). Beasley (1996) states that Chief Executive Officer tenure does not give any impact with the earning quality of the firms. Besides that, another study by Subrahmanyam et al (2020) indicates that Chief Executive Officer (CEO) tenure does not give any impact towards the firm performance. Study by Natarajan (1999) by using Pearson correlation with modified Jones model and Healy model shows that the relationship between earning quality and Chief Executive Officer (CEO) tenure is statistically not significance where there is no relationship between the two variables. In addition, study by Ali and Zhang (2015) display consistent findings with this study where Chief Executive Officer (CEO) tenure and earning management have negative relationship. Ali and Zhang (2015) states that negative relationship between the variables is due less pronounced in firms with increased monitoring. Overall, the findings are consistent which indicates that the longer the tenure for the Chief Executive Officer (CEO), the lower the level of agency problem (Hermalin and Weisback, 1991). Therefore, the findings for both variables which is earning quality and Chief Executive Officer (CEO) tenure are not supported by the agency theory since Chief Executive Officer (CEO) tenure do give impact towards the earning quality.

Conclusion and Contribution

This study examines the relationship between earnings quality and board leadership structure in Malaysian banking sectors listed in Bursa Malaysia. This study confirms that the board size and earning quality have a positive and insignificant relationship. The findings of this study showed that larger board size can lead to high earning quality since a larger size board can help to monitor the financial reporting of the firm. Regression results for board independent non-executive director and Chief Executive Officer (CEO) tenure displayed insignificant and negative relationship with earning quality. Another important finding indicates that board diversity has a positive impact on the earning quality. Hence, in conclusion board leadership structure give impact towards earning quality of the firms.

This study contributed to the body of knowledge by applying the Agency Theory in analysing the relationship between board leadership structure and earning quality of banking sectors in Malaysia. Generally, the Agency Theory evaluates the efficiency of the boards of director based on the supposition on the conflict of goal between the agent and the principal. The results from this study significantly proves that Agency Theory supported the research findings as board size leads to better earning quality. Therefore, board of directors in the played an important role in enhancing finer earning quality.

Limitation and Recommendation

Limitation

The data and finding of this study are mainly focusing on Banking Sectors in Malaysia only. Hence, the results and conclusions of this study cannot be generalized to the whole Malaysian economy. Apart from that, the finding of this study can only be helpful and applied to the banking sector in Malaysia and not to other sectors.

Recommendation

Given the importance of this study results, this line of study should be pursued further. Future study can find the relationship of board member age, financial knowledge or education level of board member and the earning quality of the firms. Besides that, researchers are encouraged to examine and find the relationship between board leadership structure and earning quality in different sectors in Malaysia. For instance, construction, energy, consumer product and service, property and technology sector. Apart from that, researchers are also encouraged to explore more theories that are more suitable. Researchers also can apply different type of model other than The Modified Jones Model by Dechow, Sloan, and Sweeney (1995) since there are various model can be used such as Healry Model, Dunmore Model, Jones Model and Dechow and Dichev Model. This study can also be conducted in other Southeast Asian countries such as Indonesia, Vietnam and Thailand for a more conclusive as well as in depth outcome.

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