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Audit Committee Chair's Legal Expertise and Real Activities Manipulation: Empirical Evidence from Malaysian Energy and Utilities Sectors

Belal Ali Abdulraheem Ghaleb[1,4], Shaker Dahan Al-Duais[2], Abdulwahid Ahmed Hashed[3,4]*

[1]Tunku Puteri Intan Safiaz School of Accountancy, Universiti Utara Malaysia, Sintok, Malaysia, [2]Department of Accounting, Faculty of Administrative Sciences, IBB University, Yemen, [3]Department of Accounting, Prince Sattam Bin Abdulaziz University, Saudi Arabia, [4]Department of Accounting, Hodeidah University, Hodeidah, Yemen. *Email: aa.abdullah@psau.edu.sa

ABSTRACT

Recent studies claim that improvements in regulations and corporate governance law in different countries are restricting accrual-based earnings management and encouraging managers to shift to real earnings management (REM). However, it is not yet clear whether audit committee (AC) directors with legal expertise are associated with higher or lower REM. Thus, this study aims to investigate the relationship between the AC chair's legal expertise and REM in the energy and utilities sectors in Malaysia. The study uses a sample of all energy and utilities companies listed on Bursa Malaysia between 2013 and 2018. Ordinary least squares (OLS) regression is applied to analyse the study data. The study finds that AC chairs with legal expertise are positively and significantly associated with REM, suggesting that they have not yet ceased REM practices. The findings add to the corporate governance and earnings management literature, and inform regulators and other readers of financial reports about the monitoring role of the AC chair.

Keywords: Real Earnings Management, Audit Committee Chair, Legal Expertise, Corporate Governance, Emerging Market
JEL Classifications: M21, G34, M41, M42

1. INTRODUCTION

Earnings management is a strategy used by managers to achieve their targets. Researchers classify earnings management practices into two types: Accrual earnings management (AEM) and real earnings management (REM) (Cohen et al., 2008; Cohen et al., 2019; Roychowdhury, 2006). Several studies report that companies, for various reasons, prefer to manage earnings through REM rather than through AEM (Cohen et al., 2008; Enomoto et al., 2015). This preference for REM is a result of mandatory adoption of the IFRS, tighter accounting standards, high-quality audit scrutiny, and passage of the Sarbanes-Oxley (SOX) Act that restricted managers in using AEM. Thus, managers might be expected to prefer earnings management through real business

activities, which is less detectable (Chi et al., 2011; Cohen et al., 2008; Ewert and Wagenhofer, 2005; Ho et al., 2015; Ipino and Parbonetti, 2017).

Previous studies extensively investigated the influence of audit committee characteristics in mitigating earnings management with the findings indicating disagreement on a single conclusion (Abdullah and Wan Hussin, 2015; Abernathy et al., 2013; Lin et al., 2006; Nelson and Devi, 2013; Saleh et al., 2007; Sun et al., 2014; Yusof, 2010). Although the role of audit committee (AC) chair is different from that of the other members, most of these audit committee studies fail to consider these differences (Khemakhem and Fontaine, 2019). In fact, the effectiveness of the AC depends greatly on the chair's skills and dedication (Bromilow and Keller,

2011). A chair with strong skills and expertise is important in maintaining an effective AC monitoring role. This is because the chair has the greatest responsibility for monitoring financial reporting, and is most accountable for financial reporting failures (Bromilow and Keller, 2011; Schmidt and Wilkins, 2013). The AC chair has the power to set the meeting agenda, manage meetings, build cordial relations between AC members, and develop a good relationship with management and auditors (Abernathy et al., 2014; Bedard and Gendron, 2010).

We argue that competent AC chairs can encourage AC members to effectively monitor financial reporting process. Despite previous studies which emphasise the importance of the chair's financial expertise in driving the effectiveness of the AC (Khemakhem and Fontaine, 2019), we believe that chairs with a different perspective and background would be better for the quality of AC. This is because expertise other than finance on the AC would better help in monitoring the company's complex transactions (Bromilow and Keller, 2011). Although several studies examine the role of AC chairs' characteristics or expertise on company performance (Chaudhry et al., 2020), audit report lag (Baatwah et al., 2019; Ghafran and Yasmin, 2018), financial reporting quality, proxied by discretionary accruals (Al-Absy et al., 2019; Tanyi and Smith, 2018), timeliness of companies' restatement disclosures (Schmidt and Wilkins, 2013), and real earnings management (Xiong, 2016), all are silent regarding the chair's legal expertise (Ali and Kamardin, 2018a).

Researchers argue that in countries that have a strong legal regime or well developed regulations and laws, company managers prefer to shift their earnings management practice from accruals-based to real business-based (Choi et al., 2018; Cohen et al., 2008), suggesting that regulation restricts AEM but not REM. Krishnan et al. (2011) report that the existence (and percentage) of members with legal experience on the audit committee is correlated with higher financial reporting quality (as measured by discretionary accruals and accruals quality). However, it is not yet clear whether an AC chair with legal expertise will encourage or reduce REM. To the best of the researchers' knowledge, no study has examined this relationship with REM, especially in developing countries such as Malaysia. Thus, the current study bridges the gap in the audit committee chairs literature.

Malaysia is a good context for conducting this study for several reasons. First, specific focus is given to the AC chair in Malaysia, as Bursa Malaysia's listing requirements and MCCG emphasise that the chair must be an independent director and suggest that he/she should be financially literate (Bursa Malaysia, 2018; SCM, 2017). The same suggestion has been made by the Institute of Internal Auditors Malaysia (IIAM) because an AC chair with professional accounting qualifications is able to lead discussion and deliberations relating to financial and accounting issues (IIAM, 2016). The MCCG also places emphasis on the AC chair's continuous engagement with other parties in the company, such as the chief executive officer, the head of internal audit, the finance director, and the external auditors, in order to be kept informed of any issues affecting the company (SCM, 2007). The AC chair should not be the chair of the board (SCM, 2018). Such frequent

development in AC chair regulations adds interesting motivation for conducting this study in Malaysia, as the Malaysian regulator stressed the need for financial expertise. However, diversity in AC expertise may play a vital role in improving monitoring; legal expertise, in particular, will encourage directors to oppose any abnormal activities. Second, earnings management (i.e. REM) is more pervasive in emerging markets (i.e. Malaysia) than in developed markets (Abdul Rahman et al., 2018; Enomoto et al., 2015; Zweig, 2019). Third, Bursa Malaysia has revised its sectoral classification for listed companies to ensure that the market sectors are consistent with the global equity market, introducing new sectors, including energy and utilities. The re-grouping is expected to be more transparent than the previous broad classification. Importantly, energy and utilities companies in Malaysia play a vital role in the national economic development. Energy companies have contributed about 20% of the total gross domestic product in recent years (KeTTHA, 2017). Thus, the current study investigates the effect of the AC chair's legal expertise on energy and utilities companies in the Malaysian market.

The study uses a sample of 229 company-year observations from the energy and utilities sector for the period 2013 to 2018. It finds a significant positive association between the AC chair's legal expertise and REM, suggesting that a chair with legal expertise is not effective in curbing real activities manipulation in these companies. The findings are in line with the claim that new regulations are restricting AEM but not REM (Choi et al., 2018; Cohen et al., 2008). The study contributes to the accounting literature by providing evidence that an AC chair with legal expertise has no power to mitigate REM. Regulators, company managers and shareholders may benefit from the outcome of this study, adding to their knowledge that legal expertise currently may not help in reducing REM. Thus, further investigation is needed.

The remainder of this paper is organised as follows. Section 2 is a literature review, leading to hypothesis development. Section 3 describes the study data and discusses the empirical model. Section 4 summarises the results and Section 5 concludes the study and admits its limitations.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Real Earnings Management

The earnings management literature reports several techniques used by company managers to affect reported earnings. These techniques are considered to be key indicators of earnings quality and consequently financial reporting quality (Ali and Kamardin, 2018b; Jeong and Choi, 2019). Earnings management is defined severally in the literature, but a comprehensive definition was introduced by Healy and Wahlen (1999): "Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers" (p. 368). Commonly, managers

exercise earnings management through accruals and/or real business activities (Hamza and Kortas, 2019; Li, 2019). AEM occurs when managers use the discretion allowed under generally accepted accounting principles (GAAP) to affect reported earnings (Healy and Wahlen, 1999). However, REM refers to managing earnings through normal activities manipulation to affect reported earnings by using techniques such as sales, overproduction, discretionary expenditure and gains from fixed asset sales (Brown et al., 2015; Graham et al., 2005; Roychowdhury, 2006; Zang, 2012).

Importantly, earnings management victims are investors, customers, unions, suppliers, bankers, regulators and competitors (Lo, 2008). Some authors suggest that REM can be considered as signalling worse financial performance in the future (Cohen and Zarowin, 2010; Gunny, 2005; Sellami, 2015; Tabassum et al., 2015). REM is more costly than AEM for its negative consequences on cash flow and company value in the long term (Chi et al., 2011; Cohen and Zarowin, 2010; Cohen et al., 2008; Ewert and Wagenhofer, 2005; Roychowdhury, 2006). Studies show that when AEM is costly, companies switch to REM (Cohen et al., 2008). Thus, REM has received considerable attention recently in the face of this evidence (Cohen et al., 2008; Ipino and Parbonetti, 2017). Researchers claim that REM can be costly to companies and ultimately to shareholders, as such practices have a negative impact on future cash flows as well as on long-term company value and performance (Roychowdhury, 2006). Perols and Lougee (2011) and Nasir et al. (2018) reported that companies that have experienced major fraud are found to have practised more earnings management in previous years. However, it is not a precondition that a company must begin with earnings management before being involved in fraudulent practices. Thus, this paper investigates the use of REM, particularly in the energy and utilities sectors in Malaysia.

2.2. Audit Committee Chair's Legal Expertise and Real Earnings Management

Earnings management researchers have extensively investigated the role of AC financial expertise related to financial reporting quality (Bedard et al., 2004; Bilal et al., 2017). This may be because of worldwide regulators' attention to this AC feature in recent years (e.g. Securities and Exchange Commission (SEC) in US and Securities Commission Malaysia (SCM) in Malaysia), which required companies to have financial experts on their AC. Although AC financial expertise plays a vital role in improving financial reporting quality, a chair with legal expertise tends to be more alert to legal risks and therefore more likely to feel the need to correct illegal behaviour before it has any serious consequences (Krishnan et al., 2011); thus, legal experts could prevent any abnormal activities or manipulation such as REM. Pfeffer and Salancik (2003) recommend that a board of directors with a legal expert has ready access to corporate information and helps to maintain the board's legitimacy. Chamberlain (1982) claims that directors with legal expertise understand legal liability and are more aware of the public effects of company selections. Krishnan et al. (2011) anticipate that a lawyer-director on the AC will provide stronger monitoring than a corporate lawyer working as an employee.

There are few empirical studies investigating the effect of directors' legal expertise on financial reporting quality. Krishnan et al. (2011) predict and find that the presence of directors with legal qualifications on the AC is associated with higher financial reporting quality as measured by discretionary accruals and accruals quality, suggesting that directors with legal expertise tend to be more effective in monitoring and boosting financial reporting quality. A study by Bozanic et al. (2019) reports that securities lawyers' involvement in SEC is associated with a high level of corporate disclosure transparency. However, recent trends in the composition of company boards indicate an increase in the appointment of directors with legal expertise. For example, a recent study by Omer and Al-Qadasi (2020) shows that about the half the listed companies in the Malaysian market have appointed at least one director with legal expertise. However, the relationship between directors with legal expertise and managers' real activities manipulation is not yet clear. This is because recent studies on earnings management show that new regulations and laws help to reduce the occurrence of AEM but not REM (Choi et al., 2018; Cohen et al., 2008), leading to a shift in earnings management practices from AEM to REM. In addition, REM is less detectable as it is a technique available to managers under their discretion and is very flexible in practice (Cohen et al., 2008; Graham et al., 2005; Roychowdhury, 2006).

As mention earlier, the effectiveness of the AC depends substantially on the chair's skills and commitment (Bromilow and Keller, 2011). We argue that an AC chair with legal knowledge and qualifications will lead the AC's monitoring role better, regarding earnings manipulation. This is because the greatest responsibility of the chair is monitoring financial reporting; the chair is also the most accountable for financial reporting failures (Bromilow and Keller, 2011; Schmidt and Wilkins, 2013). Although all AC members are expected to be concerned about the consequences of earnings management and its related litigation risk (Krishnan et al., 2011), we expect that an AC chair with legal expertise and knowledge of the consequences of managers' misbehaviour is likely to be more sensitive to litigation risks. Thus, the following hypothesis is established:

Hypothesis: Other things equal, an audit committee chair with legal expertise is significantly related to real earnings management in the energy and utilities sectors in Malaysia.

3. RESEARCH METHODOLOGY

3.1. Sample and Data Collection
The study sample consists of all energy and utilities companies listed in the main market of Bursa Malaysia. The final sample consists of 229 company-year observations from 2013 to 2018. Table 1 shows the final sample for both energy and utilities sectors, by year. Data for REM, companies' characteristics and discretionary accruals were collected from Thomson Reuters Datastream. All the data regarding the other corporate governance variables were collected manually from the annual reports of the respective companies.

3.2. Measurement of Research Variables

The main model used in the current study to estimate aggregate REM is the cross-sectional version of Roychowdhury's (2006) three REM proxies. Roychowdhury argues that companies usually manage real business activities through (1) abnormal production costs (APRC), (2) abnormal cash flow from operations (ACFO), and (3) abnormal discretionary expenses (ADIE) such as selling, general administrative (SG&A), research and development (R&D) expenses, and advertising. Although Roychowdhury (2006) measured REM by the three proxies separately, calculated by the difference between actual values of each item minus the normal value calculated by the residuals of equations (1)-(3), we follow recent research arguments and aggregate the residuals of ACFO, APRC and ADIE to indicate the level of overall REM (Chi et al., 2011; Eng et al., 2019). It is important to mention that low values of ACFO and ADIE indicate higher REM, whereas a high value of APRC indicates higher REM (Cohen et al., 2008; Roychowdhury, 2006). Thus, we follow previous studies and construct an aggregate measure of REM by multiplying standardised residuals from the level of cash flow from operations and discretionary expense by -1 and adding them to the standardised residuals of the PRC equation (Cohen et al., 2008; Eng et al., 2019). Hence, equation (4) is used for calculating REM. The independent variable is AC chair's legal expertise (ACCLE) measured as a dummy variable equalling "1" if the chair has a law qualification or expertise and "0" otherwise (Homroy and Slechten, 2019; Krishnan et al., 2011; Omer and Al-Qadasi, 2020). Other variables measurements are presented in Table 2.

$$\frac{CFO_t}{Assets_{t-1}} = \beta_1\left(\frac{1}{Assets_{t-1}}\right) + \beta_2\left(\frac{Sales_t}{Assets_{t-1}}\right) + \beta_3\left(\frac{\Delta Sales_t}{Assets_{t-1}}\right) + \varepsilon_t$$

(1)

Table 1: Sample companies by industry and years

Year/industry	Energy	Utilities	Total
2013	23	10	33
2014	26	10	36
2015	27	11	38
2016	29	11	40
2017	28	12	40
2018	30	12	42
Total	163	66	229

$$\frac{PRC_t}{Assets_{t-1}} = \beta_1\left(\frac{1}{Assets_{t-1}}\right) + \beta_2\left(\frac{Sales_{it}}{Assets_{t-1}}\right) +$$
$$\beta_3\left(\frac{\Delta Sales_t}{Assets_{t-1}}\right) + \beta_4\left(\frac{\Delta Sales_{t-1}}{Assets_{t-1}}\right) + \varepsilon_t$$

(2)

$$\frac{DIE_t}{Assets_{t-1}} = \beta_1\left(\frac{1}{Assets_{t-1}}\right) + \beta_2\left(\frac{Sales_{t-1}}{Assets_{t-1}}\right) + \varepsilon_t$$

(3)

$$REM = ACFO*-1 + APRC + ADIE*-1$$ (4)

Where,

CFO is cash flow from operations in period t, Assets is the lagged total assets, Sales is the annual sales of the company, $\Delta Sales_t$ is the change in sales calculated as the difference between sales in year t and sales in year t-1, $\Delta Sales_t$-1 is the change in sales of the last year calculated as the difference between sales in year t-1 and sales in year t-2, PRC is the sum of the cost of goods sold and changes in inventory during the year, DIE is the discretionary expenses during the period t which is the sum of advertising, R&D and SG&A, REM is the total of the three residuals resulting from equations (1)-(3).

3.3. Empirical Model

Regression model 1 below is used to examine the relationship between AC chair's legal expertise and REM in the energy and utilities companies. The OLS regression model is used for the analysis to examine the hypothesis. We employ OLS with robust standard errors clustered at the company level and year that correct the autocorrelation problem existing in the study (Petersen, 2009). In addition, we winsorise all variables that have extreme values at the top and bottom 1% to mitigate the influence of outliers. The dependent variable REM is an aggregate measure of the three proxies for REM: Abnormal discretionary expenses, abnormal cash flow from operations, and abnormal production costs (explained above in 3.2). The dependent variable is the AC chair's legal expertise (ACCLE) measured as a dummy variable equalling "1" for a law qualification and "0" otherwise (Homroy

Table 2: Variable measurements

Variable(s)		Definitions	Data source
REM	=	An aggregate measure of the standardised residual of the three REM proxies employed by Roychowdhury (2006)	DataStream
ACCLE	=	Dummy variable equalling "1" if the AC chair has law qualification or expertise and "0" otherwise	Annual Report
ACCAG	=	AC chair's age	Annual Report
ACSZ	=	Total number of audit committee members	Annual Report
ACIND	=	Proportion of audit committee independent directors	Annual Report
ACMEET	=	Frequency of audit committee meetings	
ACFE	=	Proportion of audit committee accounting experts	Annual Report
CSIZE	=	Natural logarithm of market capitalisation	DataStream
BIG4	=	Dummy variable equalling "1" if the company audited by BIG4 audit firm and "0" otherwise	Annual Report
LOSS	=	Dummy variable equalling "1" if the net income is loss and "0" otherwise	DataStream
ABDA	=	Absolute value of discretionary accruals (ABDA) as measured by modified Jones model (Kothari et al., 2005);	DataStream
LEVE	=	Ratio of total liabilities to total assets	DataStream
INUD	=	Dummy variable equalling "1" if the company is from energy sector and "0" otherwise	Bursa Malaysia Website
Years		Year dummies	

and Slechten, 2019; Krishnan et al., 2011; Omer and Al-Qadasi, 2020). We add several control variables to the regression model: AC chair age (ACCAG) in years (Al-Absy et al., 2019; Xiong, 2016), AC size (ACSZ) measured by the total number of audit committee members, AC independence (ACIND) measured by the proportion of audit committee independent directors, AC meetings (ACMEET) measured by the frequency of audit committee meetings during the year, and AC financial expertise (ACFE) measured by the proportion of audit committee accounting experts (Abdullah and Wan Hussin, 2015; Al-Rassas and Kamardin, 2016; Sun et al., 2014; Yusof, 2010).

$$REM_{it} = \beta_0 + \beta_1 ACCLE + \beta_2 ACCAG + \beta_3 ACSZ +$$
$$\beta_4\ ACIND + \beta_5\ ACMEET + \beta_6 ACFE +$$
$$\beta_7 CSIZE + \beta_8 BIG4 + \beta_9 LOSS +$$
$$\beta_{10} ABDA + \beta_{11} LEVE + \beta_{12} INDUS$$
$$+Years\ Dummies + \varepsilon_{it}$$

(Regression Model 1)

We also control for the effect of company characteristics: company size (CSIZE) measured by the natural logarithm of total assets (Abad et al., 2018; Ferentinou and Anagnostopoulou, 2016); company leverage (LEVE) measured by the ratio of total liabilities to total assets (Al-Jaifi et al., 2019; Nelson and Devi, 2013); and company losses (LOSS) measured as a dummy variable equalling "1" if the net income is loss and "0" otherwise (Al-Rassas and Kamardin, 2016). Audit quality (BIG4) is also controlled by including BIG4 in the regression model, measured as a dummy variable equalling "1" if the company is audited by a BIG4 audit firm and "0" otherwise (Ghaleb et al., 2020a; Prawitt et al., 2009). Furthermore, researchers reported that companies may practise both REM and AEM together. Thus, we control for the effect of AEM by including the absolute value of discretionary accruals (ABDA) as measured by the modified Jones model (Kothari et al., 2005). Industry and year dummies are also added to the model to control for the effect of industry and time (Cohen et al., 2008; Roychowdhury, 2006). The variable measurements are summarised in Table 2.

4. EMPIRICAL RESULTS

4.1. Descriptive Statistics
The descriptive statistics of the research variables are summarised in Table 3. REM is estimated by the three variables of Roychowdhury (2006) (ACFO, APRC, and ADIE), combined into a single measurement (Cohen et al., 2008; Eng et al., 2019; Ghaleb et al., 2020a). Table 3 shows the mean (median) values of the aggregate standardised value of REM as 0.000 (0.319). These values are similar to those reported by Abdul Rahman et al. (2018) and Ghaleb et al. (2020b) in the Malaysian context. The mean value of combined REM is almost zero; this is because EM is calculated for each industry and year with actual values (positive and negative). These results indicate that energy and utilities companies listed in the main market of Bursa Malaysia practise both upward and downward REM. For the purpose of descriptive statistics, we calculate the absolute values of the REM residuals

for each proxy and then sum them as an absolute value of overall REM. Figure 1 shows that the level of earnings management differs by year and sector. The energy sector has higher values of REM than the utilities sector, and the level of REM also differs from year to year.

Data in Table 3 show that about 7.4% of AC chairs in energy and utilities companies have legal expertise. The average age of chairs is approximately 63, ranging from 44 to 83, with 90% of the sample companies having AC chairs older than 50. Other descriptive statistics are presented in Table 3.

The correlation matrix of the variables is presented in Table 4. The results show a positive correlation between ACCLE and REM, whereas ACCAG is negatively correlated with REM. Table 4 also shows that the correlation coefficients among other research variables are significantly different from zero, most below 0.40, which indicates absence of any serious correlation problems. Further, the results of variance inflation factors (VIF) tests suggest that multicollinearity is not an issue in the current study.

4.2. Multivariate Analysis
Table 5 presents the OLS regression results for the research model that examine the effect of ACCLE on REM in the energy and utilities companies. The results show that ACCLE is positively and significantly associated with REM in both sectors. Unlike previous studies that reported a positive effect of director legal expertise on enhancing financial reporting quality (Krishnan et al., 2011), the current study finds that AC chair's legal expertise is associated

Table 3: Descriptive statistics

Variable	n	Mean	Median	SD	Min.	Max.
REM	229	0.000	0.319	2.188	−7.430	5.358
ACCLE	229	0.074	0.000	0.263	0.000	1.000
ACCAG	229	62.956	64.000	8.522	44.000	83.000
ACEXP	229	0.468	0.400	0.186	0.167	1.000
ACSIZE	229	3.533	3.000	0.840	3.000	7.000
ACMEET	229	5.939	5.000	1.957	3.000	15.000
ACIND	229	0.873	1.000	0.158	0.333	1.000
CSIZE	229	14.682	14.428	1.511	11.771	18.850
LOSS	229	0.332	0.000	0.472	0.000	1.000
ABDA	229	0.039	0.029	0.037	0.001	0.207
LEVE	229	0.502	0.505	0.197	0.064	1.460
BIG4	229	0.721	1.000	0.450	0.000	1.000

Figure 1: REM in energy and utilities sectors
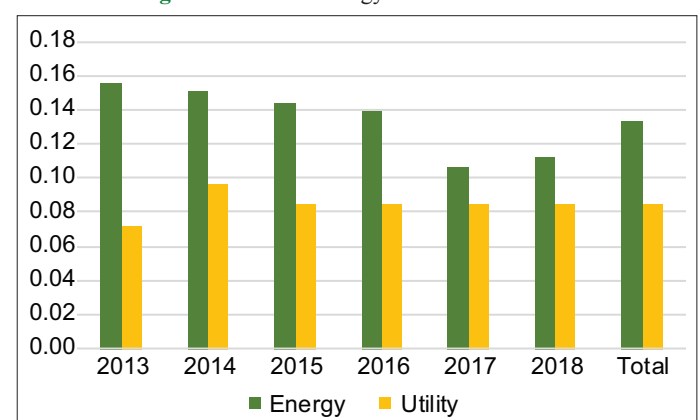
Table 4: Correlation matrix and VIF results

Variables	1	2	3	4	5	6	7	8	9	10	11	12	VIF
(1) REM	1.000												
(2) ACCLE	0.235***	1.000											1.19
(3) ACCAG	−0.123*	−0.128*	1.000										1.36
(4) ACEXP	−0.176***	−0.110*	−0.328***	1.000									1.30
(5) ACSIZE	−0.125*	−0.061	0.130**	−0.221***	1.000								1.19
(6) ACMEET	−0.132**	−0.051	0.040	−0.218***	0.260***	1.000							1.32
(7) ACIND	0.110*	0.010	0.043	−0.080	−0.144**	0.150**	1.000						1.27
(8) CSIZE	−0.004	−0.078	0.244***	−0.282***	0.176***	0.386***	0.069	1.000					1.69
(9) LOSS	0.180**	0.154**	−0.116*	0.042	0.028	−0.040	−0.078	−0.288	1.000				1.22
(10) ABDA	0.154**	0.047	−0.004	−0.032	−0.033	−0.170**	0.058	−0.272***	−0.002	1.000			1.15
(11) LEVE	0.161**	0.311***	−0.080	−0.137**	−0.023	0.128*	0.098	0.307**	0.145**	0.008	1.000		1.48
(12) BIG4	−0.030	0.065	−0.222***	−0.078	0.129*	0.115*	−0.307***	0.283***	0.067	−0.006	0.327	1.000	1.54

*, ** and ***indicate that the levels of significant are respectively <0.10. 0.05 and 0.01. Variables definitions presented in Table 2

Table 5: OLS regression results

REM	Coef.	SE	t-value	P>t
ACCLE	1.079**	0.420	2.57	0.011
ACCAG	−0.055**	0.021	−2.59	0.010
ACEXP	−2.942***	0.834	−3.53	0.001
ACSIZE	−0.265*	0.159	−1.66	0.098
ACMEET	−0.203***	0.055	−3.67	0.000
ACIND	0.843	1.045	0.81	0.420
CSIZE	0.250*	0.129	1.94	0.054
LOSS	1.115***	0.363	3.07	0.002
ABDA	10.302**	4.854	2.12	0.035
LEVE	0.597	0.914	0.65	0.515
BIG4	−0.639*	0.382	−1.67	0.096
_cons	2.920	2.240	1.30	0.194

*, ** and ***indicate the levels of significant at 0.10, 0.05 and 0.01, respectively.
Variables definitions are presented in Table 2. Number of Observations = 229,
R-squared = 0.226, and the Prob > F = 0.000***.

with higher REM practice. This may be because the nature of REM makes it less detectable, occurring when managers exercise discretion in the ways they structure transactions in financial reports (Bao and Lewellyn, 2017); this is not yet restricted by law or regulations. Another possible reason is that the AC chair may consider REM as normal business, used by companies to portray the reported earnings in the financial statements associated with improved future ROA and shares returns (Paredes and Wheatley, 2017).

Regarding the control variables, the results show that audit committee characterises (ACCAG, ACEXP, ACSIZE, and ACMEET) are negatively and significantly associated with REM, suggesting that the chair's age, a large AC with more financial experts, and more frequent meetings can mitigate managers' opportunistic behaviour. However, ACIND has no significant effect on REM. Company size is positively associated with REM, suggesting that large companies are more likely to practise REM; similarly, companies with losses are more likely to practise REM. However, there is an insignificant positive relationship between LEV and REM, suggesting that leverage has no effect on energy and utilities companies' REM practice. ABDA (absolute value of discretionary accruals) is positively and significantly associated with REM, suggesting that these companies engage in both earnings management types (REM and AEM). This is in line with the evidence that companies use both AEM and REM to manipulate earnings (Chen et al., 2013; Roychowdhury, 2006). Importantly, audit

quality (measured by BIG4) is negatively and significantly associated with REM, indicating that companies audited by one of the BIG4 firms (Deloitte, Ernst and Young, KPMG and PriceWaterhouseCoopers) are engaging less in REM.

5. CONCLUSIONS

Several studies have reported that managers prefer to manage earnings through real business activities. Some argue that stricter regulation (i.e. SOX) has led to moving from accruals-based to real activities-based methods of affecting reported earnings. However, researchers argue that directors with legal expertise are more likely to be associated with low earnings management through accruals, as they are more sensitive to the risks of litigation from AEM (Krishnan et al., 2011). However, the relationship between directors' legal expertise and REM had not yet been investigated. The current role of the AC is to boost governance monitoring across the organisation's insider activities, particularly the financial reporting process. AC chairs play a significant role in leading the committee to be more effective in curbing earnings management activities. Thus, the current study examined the relationship between AC chairs' legal expertise and REM in Malaysian energy and utilities companies between 2013 and 2018. Using a sample of 229 company-year observations, we find that AC chairs with legal expertise are significantly and positively associated with REM practices. Our results are inconsistent with those of Krishnan et al. (2011), who report a positive association with financial reporting quality. However, the surprising results of the current study reflect the fact REM is not yet considered as a criminal practice which should be stopped. This is especially true in the light of recent evidence that managers have been moving earnings management practices from AEM to REM since the introduction of stricter regulations (such as SOX in US).

The results of the current study have implications for regulators, shareholders, and researchers. Regulators may consider it necessary to strengthen regulations restricting REM, especially with the evidence that REM has a negative impact on financial reporting quality and companies' financial position and performance. Shareholders could gain a better understanding of REM practice and its effect on their companies' future performance, and should further examine the role of AC legal expertise in general and the

AC chair in particular in curbing or preventing REM. Researchers should pay attention to the role of law and regulation in mitigating earnings manipulation.

Like other studies, this one has some limitations. First, the sample is confined to energy and utilities companies listed in the Malaysian market and therefore cannot be generalised to other sectors. Secondly, REM is measured in the literature by different proxies; therefore, the validity of the evidence is subject to similarity with the measurement used in the current study. Further research may investigate the association between the legal expertise of board members or its subcommittees and REM.

Notes

1. This study uses the Jones model (1991) for measuring ABDA as residual from the following equation:

$$\frac{ACC_t}{TA_{t-1}} = \beta_1\left(\frac{1}{TA_{t-1}}\right) + \beta_2\left(\frac{\Delta REV_t - \Delta REC_t}{TA_{t-1}}\right) +$$

$$\beta_3\left(\frac{PPE_t}{TA_{t-1}}\right) + \beta_4\ ROA_{it} + \varepsilon_t$$

Where DA_t = company's total accruals at year t. TA_{t-1} = company's total assets in year t-1. ΔREV_t = company's change in sales in year t. ΔREC_t = change in accounts receivable. PPE_t = company's property, plant, and equipment at year t. ROA = rate of return on assets.

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