

Review Article

**CORPORATE GOVERNANCE AND EARNINGS MANAGEMENT: EVIDENCE FROM LISTED MALAYSIAN FIRMS**

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**Abstract**

This paper combines the twin aspects of corporate governance and earnings management by providing deeper insights into the role played by the government as a major stakeholder of Government-Linked Companies (GLCs) in Malaysia. In 2004, the Malaysian government embarked on a transformation exercise for all GLCs in the country. The program was designed to strengthen and deepen the mechanisms of corporate governance and anchor best practices from within. The Malaysian government undertook this exercise as part of its efforts to enhance the effectiveness of Boards of state-owned enterprises. The aims and objectives of this paper therefore are to give detail insights into the corporate governance reforms and provide an in-depth understanding of the impact of corporate governance mechanisms deriving from these transformation programs. In order to provide detailed insights regarding this aspect, our study includes both pre and post transformation data and concludes whether these transformational policies and earnings management activities have contributed to any sort of lingering aftereffects. This study also provides suggestions for any further policy improvements if necessary. This study found that there was a reported increase in earnings management activities during the post transformation period. The study also found that post transformation there was little or no impact resulting from corporate governance measures to subdue earnings management activities, on the other hand, both the leadership structure and frequency of board meetings appeared to have a significant impact. The official get-togethers and separation of functions between the CEO and Chairperson in the organisation appeared to adversely influence and benefit the board respectively during the post-transformation period whereas the association does not appear to hold in the pre-transformation period. Even though our study demonstrated a positive uplift from enhanced corporate governance mechanisms in GLCs, further studies to identify the specific factors that contributed to this feel good factor would appear to be warranted.

**Keywords:** corporate governance, earnings management, board composition, audit committee, Malaysia.

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**INTRODUCTION**

This paper combines the topics of corporate governance and earnings management by providing detailed insights into the management of Malaysian Government Linked companies (GLCs) since the government is the major shareholder in these companies. Since 2004, the Malaysian government has undertaken the GLCs transformation program (Abadi, Hijazi, & Al-Rahahleh, 2016). The transformation program mainly underlines and deepens the mechanisms of corporate governance to enhance best practices from within the GLCs. Furthermore, this program was also carried out by the Malaysian government to enhance the effectiveness of boards of state-owned enterprises (Yusoff, Ahman, & Darus, 2019).

It is a commonly held notion that effective corporate governance boosts the economic health of listed corporations and enhances the goodwill of investors besides boosting confidence (Rahman & Mohammed, 2016; Basha, 2018). This thinking has influenced regulators and gained considerable attention from both practitioners and academicians. In addition, it has been found that enhanced corporate governance structures also contribute to strengthen the financial reporting process which in turn impacts the performance of corporations and organisations.

This is equally true for both privately-owned and government-owned corporations. However, due to the ever-present threat of opportunistic behaviours, the board is also burdened with the responsibility of keeping a keen eye out on the management. This is one of the main functions of corporate governance mechanisms (Yusoff et al., 2019; Elyasiani, Wen, & Zhang 2017). Furthermore, the fundamentals of the government transformation policy include national development along with a focus on enhanced performance besides ensuring good

governance in all government agencies (Chhabra, 2016). These principles are laid down in the report prepared by the Putrajaya Governance Committee (Rahman & Mohammed, 2016). The most pressing issue highlighted therein is the need to strengthen the viability of corporate administration (Junxiong, 2016). This can be achieved through improvements in some of the precise board mechanisms which have a direct impact on the performance of GLCs. Abadi et al., (2016) notes that the green book of transformation policy includes recommendations on numerous governance characteristics which have a progressively compelling role in meeting their board oversight obligations. These features include the dimensions of board structure, board meetings, and directorships.

During the post-transformation period, it was observed that GLC performance was much better than expected and is on track to achieve expected targets (Yusoff et al., 2019). Hence, the question that arises here is, if the GLC is performing better, could this be the result of earnings management activities carried out by the existing executive management (Calomiris & Carlson 2016). Since the green book has laid down several mechanisms to enhance corporate governance practices, can it now be inferred that improvements in the performance of GLCs are the result of lower-earnings management practices. This is how; the improved quality of reported earnings will be reflected along with the improved functioning of Boards. Thus, the main objective of this study is to give detailed insights on the effect of corporate governance mechanisms on earnings management in Malaysia. The next section will provides an in-depth analysis of the theoretical framework underlying the study, followed by a discussion of the research methodology, results and findings before finally concluding the paper.

## LITERATURE REVIEW

According to Abbadi et al., (2016), earnings management occurs when managers use subjective judgement opportunistically 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. There are multiple reasons for the occurrence of EM which includes, the influence of capital markets, lending contracts, compensation by the management, other government and political costs, effective tax rates and the issuance of equity (Rahman & Mohammed, 2016); (Uwuigbe et al., 2015).

### Earnings Management and Corporate Governance

The thing which is conventional for the organisation's value and has an impact on the financial reporting quality is understood to be earnings management. EM has a possibility of decreasing the shareholder's wealth as a result of asymmetry information between insiders and outsiders (Abbadi et al., 2016). Therefore, enhanced mechanisms of corporate governance will strengthen and reduce the divergence between shareholders and managers interests (Yusoff et al., 2019); (Uwuigbe et al., 2015). There is a great deal of academic literature studying this aspect, of contemplating the effect of the corporate governance variable in strengthening the board.

According to Rahman & Mohammed, (2016), when it comes to financial reporting, viability can be related to aspects revealing monetary quality such that a successful and dynamic board can limit the unethical conduct of deceitful chief executive officers, hence securing the renewed interests of investors. The Malaysian Organizations Act 1965 and MASB requirements focused renewed attention on the commitment and obligation of board members to ensure that the financial summaries are reported as per appropriate accounting standards (Rahman & Mohammed, 2016). In addition, the board of directors should carry out their oversight responsibilities with due diligence since consistency with accounting norms alone isn't enough to overcome any lack of controls in financial summaries (Calomiris & Carlson 2016). Hence, the importance of Corporate Governance mechanisms like structure and organization to ensure that Boards are carrying out their oversight responsibilities adequately. All these governance issues were highlighted in the transformation policy initiatives for GLCs (Yusoff et al., 2019).

### Board Composition

The highest governing body of an organization namely the Board has the job of keeping in check the senior management (Khan & Ibrahim, 2015). Nonetheless, to maintain their standing in the market, the board needs to appoint independent non-executive directors who can be relied upon to act independently of managers and contribute their wealth of experience to the firm by diligently carrying out their oversight functions. Anecdotal evidence has found that the propensity for earnings management was diminished by the existence of independent boards provided with the necessary empowerment. Most of the prior studies found negative relationships between board composition and earnings management activities hence the proposition that the more NEDs there are as board members, earning management activities will diminish. However, the evidence is that overall, the element of board composition when all is said and done, shows mixed results. For occurrences of such behaviour, Abbadi et al., (2016); Rahman & Mohammed, (2016); Calomiris & Carlson (2016) found that board autonomy does not affect earnings management activities. However, Khan & Ibrahim (2015), found a positive relationship. Along these lines, organization hypothesis accepted that the relationship of free administrators and non-official administrators' (NEDs) with earnings management is required to be negative, and more grounded a reported change arrangement as CG practices are logically underscored after the change technique (Khan & Ibrahim, 2015).

### Audit Committee

One of the basic functions of the audit committee is to supervise the financial reporting process, by overseeing the internal controls of the company to ensure its compliance with the laws and regulations (Rahman & Mohammed, 2016). The tasks of the audit committee include meeting with the external auditors personally to discuss audit related matters and to also propose and handle the coordination of the audit work with the audit staff (Jakpar, 2019). The audit committee, has for a long time, been viewed as indispensable in the organization in helping with the oversight of executive management by administering the oversight responsibilities in respect of accounting, finance and internal audit functions. One of the primary reasons for the setting up of audit committees is to further improve the earnings and financial reporting quality (Calomiris & Carlson, 2016). According to Abbadi, Hijazi, Al-Rahahleh, (2016); Calomiris & Carlson (2016) notes that there is a negative relationship between misleading information and gaining the trust of executives. Whereas, Mohamad et al., (2012), found a strong relationship between the audit committee and accruals quality. However, there was no evidence found by Lin et al, about the relationship between mastery of money related matters and the individuals making up the review board of trustees.

Shittu et al., (2016); Suryanto & Grima, (2018) found from their research that one very important aspect for the audit committee is that they should have authority over their own budgets as well as over the appointment of external auditors. This way they will be protected, and this will also enhance the trust of investors who rely on the financial reports released by companies (Bataineh et al., 2018).

Jamaludin et al., (2015), found that boards tend to look for individuals who bring on board a variety of perspectives and opinions based on their own background and experience, and are largely individuals proficient and familiar with the language of finance and accounting (Teh et al., 2017). This requirement is particularly critical for the review advisory group (Mohamad et al., 2012). The functions played by the audit committee make them one of the most important players in corporate governance and therefore their role should be acknowledged.

### Hypothesis Development

Based on the above prior studies, the following hypotheses are formulated as follows:

Hypothesis 1(a): In the post transformational policy period, there is a negative association between the earning management and the board which have independent directors.

Hypothesis 1(b): In the post transformational period, there is a strong negative association between non-executive directors and earning management.

Hypothesis 2: In the post transformational policy period, there is a positive and strong association between the size of the board and earning management.

Hypothesis 3: The negative association is expected to rise between the non-duality occupation and benefit the officials is higher in the post-change approach period than previously.

Hypothesis 4: the negative connection between executive gatherings and profit the executives is higher in the post-change strategy period than previously.

Hypothesis 5: Fewer board directorships lead to cut down earning management practices in the post-change game plan period than beforehand.

Hypothesis 6: The negative connection between review board of trustees' autonomy, money related aptitude and recurrence of the executive meeting and earning management are higher in the post-change approach than already.

### METHODOLOGY

All GLCs listed in Malaysia were chosen as the sample for this study. The data is collected for two periods; the first is for 2003 while the second is for 2006. The first period is the pre-transformation policy period, whereas the second period is the

post-transformation policy period during which the Malaysian Government reconstituted the companies under its control (Wan et al., 2016); (Calomiris & Carlson 2016; Jamaludin et al., 2015). This programme was launched by the Malaysian government to restructure and enhance the productivity of GLCs. According to the annual reports of 2006, there were 53 GLCs listed on Bursa Malaysia (Kao & Chen 2014; Akter, 2019). However, when counting their numbers those GLCs, the financial sector were not included (Mohamad et al., 2012; Thol et al., 2015; Shahzad et al., 2017). This is because these industries are highly regulated and have different patterns of earnings when compared to other sectors. Hence, they require advanced methods to calculate the discretionary accruals which cannot be calculated by the Modified Jones Model (Kolsi & Grassa, 2017; Teh et al., 2017; Feng, et.al 2015). As a result, only 43 observations were available after excluding the financial sector. Out of 43 observational variables, 8 companies had no data to enable an estimation of discretionary accruals as a result only 35 firms were considered.

### Measuring Earnings Management

The modified version of Jones is utilised in the study however many other different models can be used to estimate the element of discretionary accruals. The study includes five different methods to calculate EM, but the modern version of the Jones model has the most powerful and effective results. According to Wan et al., (2016); Adhikari et al., (2015), there are several advantages of using the cross-sectional model over the counterpart time series model. While the time series Jones model expect that coefficient gauges on changes in incomes and plant, property and gear are stationary over time, the cross-sectional model accepts that the progressions can't be stationary after some time. To avoid survivorship, the cross-sectional model will help (Bataneh et al., 2018). In the form of serially correlated calculation and the impact of various model of DA, there might be specific problems introduced by self-reversing property accruals. Nonetheless, the modified version of Jones models performs exceptionally well when compared to other time series models and creates a greater sample than that of time series data (Chi et al., 2015); (Ratnawat et al., 2016).

### Collected Data and Model of Research on Corporate Governance.

According to DHU & HBP (2019), the main source of data on corporate governance variables is the proxy statement. In the annual reports, all government listed companies are advised to reveal all the information which is somehow linked with CG (Fadzilah, 2017); (Patrick et al., 2015). There are two more variables used in the study other than CG. They are the size of the firm and leverage as stated by (Mohammad et al., 2016); (Ibrahim et al., 2016); Moore et al., 2015. Furthermore, all these variables have a direct influence on the accounting choices. To reduce the political sensitivity of regulators, the firm size is expected to explain the level of DA to some extent. However, influence in earnings management is expected with the financial leverage (Rahman et al., 2018); (Patrick et al., 2015); (Rauf et al., 2012). A linear regression model was used to test the explanatory variables. Also, the model was utilised to measure the strength of the relationship between DA and EXP. VAR. (Bataneh et al., 2018); (Chi et al., 2015). The dependent variables measure the discretionary accruals however, the measuring of the corporate governance board and control variables lies under the independent variables (Rauf et al., 2012). This model is used to test the relationship and link between both the dependent and independent variables which also includes the data from the pre and post transformation policy period (Mohamad et al., 2012).

$$DA = \alpha + \beta_1 IND + \beta_2 NED_5 + \beta_6 Dual + \beta_3 Bsize + \beta_4 Bmeet + \beta_5 Dship + \beta_7 Comind + \beta_8 ComMeet + \beta_9 EXP + \beta_{10} Fsize + \beta_{11} LEV + \epsilon$$

For the complete understanding of the charts, DA is classified as discrete accruals, which is determined from cross-sectional Jones Model. Whereas IND stands for Independent directors, NED is the term which is used for Non-Executive Directors, B Size is the board size, B meet stands for board meetings, the symbol for Directorship is Dship, Dual is understood as the duality role, COMIND is the audit committee independence. Furthermore, ComMeet is comprehended as the audit committee meetings, EXP is the financial expertise LEV is used for leverage and lastly, Fzie is the firm size.

Table 1: Variable Operational Definitions

Var.	Def.	Oper...
IND	Proxy of board of independence	Independent directors to total number of directors
NED	Proxy of board of independence	Non-executive total number of directors
Bmeet	Board meeting number	No. of meetings / No. of directors
Bsize	Board of directors	total numbers of directors
Dual	CEO- Chairman duality	Dummy variable
Comind	Proxy of board of independence	% of ind. Directors on audit committee
ComMeet	Audit committee meetings	No of meetings / No. of audit committee members
EXP	Financial expertise	Dummy variable
Dship	Number of seats	total No. of directors /by No. of directors
Fsize	Firm size	exact number of assets
LEV	Leverage	Exact debt to the exacttotal assets

### RESULT AND FINDINGS

The primary focus of the study is the impact of transformational policy program and the model that is described above can be helpful to examine and study both the above periods (Ibrahim et al., 2016). In the Table, a correlation matrix of both the explanatory and dependent variables for the year till 2003 and prior to the introduction of transformational policy program is listed. Another section of the same table shows the data post the transformational policy period that is from 2006 onwards

(Swastika, 2013). As the correlation of the dependent and explanatory variables are relatively low, the table presents no multicollinearity problem (Wan et al., 2016). The analysis revealed no problem in homoscedasticity. According to the rule of thumb, the two variances are entirely different in the Levene test ( $p < 0.05$ ). If not, the variances are different, they should remain equal. The problem with the normality assumption was found as the result of Skewness and kurtosis, and Kolmogorov-Smirnov Z.

Table 2: Panel A Pearson Correlation Matrix for 2003

		1	2	3	4	5	6	7	8	9	10	11	12
1	DA	1											
2	IND	0.054	1										
3	NEDs	0.124	0.179	1									
4	Dual	-0.005	0.188	-0.26	1								
5	Bsize	-0.018	-0.180	0.010	-0.254	1							
6	Bmeet	-0.249	-0.170	0.115	-0.1600	0.480	1						
7	Dship	-0.014	0.289	0.297	0.170	-0.116	0.021	1					
8	Comind	0.075	0.335	.47**	0.070	-0.008	-0.161	0.650	1				
9	ComMeet	0.08	-0.250	0.273	-0.045	0.020	0.251	0.030	-0.078	1			
10	EXP	-0.022	0.217	0.213	0.300	0.158	0.093	0.050	0.042	0.030	1		
11	Fsize	-0.060	0.100	0.050	-0.030	0.130	.40**	-0.03	-0.300	-0.003	0.060	1	
12	LEV	0.114	.620*	0.030	-0.015	-0.060	-0.004	0.510	0.330	-0.015	0.040	0.23	1

Table 3: Panel B Pearson Correlation Matrix for 2006

		1	2	3	4	5	6	7	8	9	10	11	12
1	DA	1											
2	IND	-0.060	1										
3	NEDs	-0.010	0.183	1									
4	Dual	-0.200	0.030	-0.240	1								
5	Bsize	-0.010	-0.06	-0.120	-0.130	1							
6	Bmeet	-.52*	-0.001	0.120	-0.200	0.150	1						
7	Dship	-.35**	0.164	0.120	-0.260	-0.140	0.008	1					
8	Comind	-0.120	0.521	0.070	0.020	0.060	.20*	0.150	1				
9	ComMeet	-.54*	0.521	0.170	-0.070	0.050	.55*	0.070	-0.029	1			
10	EXP	0.270	0.210	0.150	0.030	0.110	-0.150	0.110	0.090	-0.010	1		
11	Fsize	-0.160	0.231	0.020	0.002	0.120	0.55	0.010	0.180	.40*	0.05	1	
12	LEV	-0.220	0.268	0.100	-0.020	0.020	-0.09	0.190	0.070	0.190	0.09	0.230	1

The load up during the year 2003 by and large meets multiple times. The base number of gatherings held in year 2003 was about around four gatherings, while the most extreme was around 15 gatherings. The recorded organisations in the year 2003, shows that every board of directors had all the things to consider related to the CG and EM (Wan et al., 2016) (Stolwijk

et al., 2016). Also, in the year 2006, every board of directors were given three seats with the limitation of 5 directorships. This shows the chiefs met the prerequisite made by the PGC on the greatest top of directorships on different sheets, which are five directorships on recorded firms (Gunst, 2018).

Table 4: Descriptive Stats and Continuous Variables

Variables	Mean		Std deviation		Maximum		Minimum	
	2003	2006	2003	2006	2003	2006	2003	2006
DA	6.86	8.14	5.4	6.2	24	27	0.002	0.004
IND	40	41	0.091	0.075	75	63	29	33
NEDs	85.00	87.510	11.221	11.01	100.01	100.01	50.0123	50.321
Bsize	8.7	8.7	1.847	1.44	14.25	12.1	6.01	5.001
Bmeet	6.98	8.54	3.52	3.90	14.93	17.65	3.552	3.35
Dship	3.014	2.88	1.40	1.58	7.55	5.12	0.23	0.85
Comind	69.25	75.10	0.158	0.12	100	100	33	60
ComMeet	5.25	5.22	2.11	2.11	13.85	17.5	2	3.14
Fsize	6821	7939	1456	16.66	7.479	8.01	84.701	94.9
LEV	303	370	685	541	385.01	2.34	-856	105

Table 5: Regression Results

Variables	DA 2003				DA 2006			
	$\beta$	t-value	t-sig	VIF	B	t-value	t-sig	VIF
Dual	.040	-.264	.794	1.009	-3.787	-3.787	.001*	1.060
IND	0.161	0.980	0.335	1.209	-.138	-1.286	.209	1.066
NEDs	.034	.221	.826	1.002	.106	.956	.347	1.127
Bsize	-.020	-.130	.897	1.033	.122	1.089	.285	1.158
Bmeet	-.229	-1.516	.140	1.071	-.321	-2.919	.007*	1.102
Dship	0.19	.122	.904	1.108	-.152	-1.402	.172	1.102
Comind	.013	.082	.96	1.22	-.0195	-.846	.396	1.185
ComMeet	.192	1.55	.278	1.258	.086	.566	.541	1.660
EXP	.021	.1231	.856	1.019	2.76	2.76	.0110**	1.037
CONTROL VAR.								
Fsize	.520	3.457	.012	1.041	6.62	6.62	.000**	1.059
LEV	-.366	-2.2386	.044	1.0341	-.1121	-1.15	.262	1.060
Adjusted R <sup>2</sup>	.29				.638			
F value	7.51				15.524			
F significant	.002				.000			

To achieve a better understanding of the changes in the results in 2003 compared to 2006, the regression based on the changes in DA and related explanatory variables is ran. The results of the regression model are shown in Table 5 revealing that Adjusted R<sup>2</sup> is 10.3 % and F value is 4.78 at the level of 5 % significance. All variables of corporate governance were reported to have a non significant relationship with EM except for duality. Duality has negative significant (10%) impact on EM. Separation of the role of the CEO and chairperson leads to curbing EM activities due to reducing the power of the CEO. Leverage as a control variable was revealed to have an insignificant association with DA. Firm size is a significant (5%) variable and the relationship is positive with DA. This implies that the larger the firm size, the higher the activity of EM.

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To accomplish a superior comprehension of the adjustments in the outcomes in 2003 contrasted with 2006, the relapse dependent on the adjustments in DA and related logical factors is run (Jamaludin, et.al, 2015) (Ishak et.al, 2017). The above table and the data represent that Adjusted R<sup>2</sup> is 10.34 percent and F value is 4.78. All factors of corporate administration were accounted for to have an insignificant association with earnings management aside from duality. Duality has negative noteworthy ten percent sway on earnings management Partition of the job of the Chief Executive Operations and administrator prompts controlling earning management exercises because of diminishing the intensity of the Chief Executive Operations (Jamaludin, et.al, 2015) (Abdullah & Ismail, 2016). Influence as a control var. was uncovered to have an unimportant relationship with discrete accruals. Fsize is a huge five percent variable and the relationship is sure with discrete accruals. This suggests the bigger the fsize, the higher

the movement of earning management (Darlington& Hayes, 2016).

#### CONCLUSIONS

Finally, the aim of the study is to test the relationship between the characteristics of CG and EM in Malaysian Government linked companies. The biggest concerns as highlighted by the PGC recommendation is the effectiveness of the board of directors as the main mechanism in corporate governance. As the result of this concern it is observed that earning management activities will be reduced if best practices of corporate governance are followed. Numerous examinations in the field of corporate administration practices have demonstrated outcomes that repudiated the suspicion behind the corporate administration the same number of studies demonstrated that following accepted procedures didn't give a total affirmation for lesser earnings management. Likewise, the same is applicable for GLCs; that means; the transformational program provides an assurance to enhance the company's performance and lessen earnings management. This is the reason why the objective of this study shifted towards the impact of corporate governance and earnings management which include current practices and is reflected in the transformational policy program the study found that there is no relationship between the corporate governance variables and EM. Whereas, it is observed that there is a negative association of duality role with earnings management. This clearly shows that if the role of CEO and chairman is separated it will lead to curtailing the earnings management activities. Furthermore, the earnings management activities have been negatively affected by the frequency of board meetings during the post transformational policy period. From this, it can be easily inferred that as the frequency of these board meetings increases, the earnings management activities will be reduced and vice versa. This is for the small companies only. This is the reason why we conclude that the expectation to enhance corporate governance by introducing new policies in GLCs is vital since it will have a direct impact on earnings management behavior seems unlikely. There were some limitations in this study. The main limitation is that the data which was used for this study is only sourced from publicly available annual reports and other databases. In order to gain more insights on the topic, the use of data from other available sources would be more helpful. The study will be very useful for future research studying the impact of corporate governance on earnings management which can be tested using numerous variables,

like director's competence, tenure of the CEO, qualifications of the directors as well as the link between the corporate governance variables. The results of this study are timely and can be easily followed up by the government. Furthermore, the results can serve as the foundation and support the development and advancement of new regulations for taking corrective measures towards enhancing the effectiveness of the GLCs transformation policy.

## REFERENCES

- Abbad, S. S., Hijazi, Q. F., & Al-Rahahleh, A. S. (2016). Corporate governance quality and earnings management: Evidence from Jordan. *Australasian Accounting, Business and Finance Journal*, 10(2), 54-75.
- Abdul Rahman, R., & Haneem Mohamed Ali, F. (2016). Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21(7), 783-804.
- Abdullah, S. N., & Ismail, K. N. I. K. (2016). Women directors, family ownership and earnings management in Malaysia. *Asian Review of Accounting*, 24(4), 525-550.
- Adhikari, A., Derashid, C., & Zhang, H. (2015). Earnings management to influence tax policy: Evidence from large Malaysian firms. *Journal of international financial management & accounting*, 16(2), 142-163.
- Akter, M. (2019). Effect of Audit Quality and Credit Rating on Earning management.
- Basha, M. (2018). Investigate Accrual Earning Management Practicing in Non-Financial Listed Firms in Jordan 2006-2007
- Bataineh, H., Abuaddous, M., & Alabood, E. (2018). The Effect of Family Ownership and Board Characteristics on Earnings Management: Evidence from Jordan. *Academy of Accounting and Financial Studies Journal*.
- Calomiris, C. W., & Carlson, M. (2016). Corporate governance and risk management at unprotected banks: National banks in the 1890s. *Journal of Financial Economics*, 119(3), 512-532.
- Chhabra, S. (2016). Earning management: A Study. *Splint International Journal of Professionals*, 3(11), 40.
- Chi, C. W., Hung, K., Cheng, H. W., & Lieu, P. T. (2015). Family firms and earnings management in Taiwan: Influence of corporate governance. *International Review of Economics & Finance*, 36, 88-98.
- Darlington, R. B., & Hayes, A. F. (2016). *Regression analysis and linear models: Concepts, applications, and implementation*. Guilford Publications.
- DHU, H., & HBP, C. (2019). Corporate Governance and Earnings Management
- Elyasiani, E., Wen, Y., & Zhang, R. (2017). Institutional ownership and earning management by bank holding companies. *Journal of Financial Research*, 40(2), 147-178.
- Fadzilah, N. S. B. M. (2017). Board of directors' characteristics and earnings management of family owned companies. *International Journal Of Accounting & Business Management*, 5(2), 68-83.
- Feng, C., Schultz, A. J., Chaudhary, V., & Kofke, D. A. (2015). Eighth to sixteenth virial coefficients of the Lennard-Jones model. *The Journal of chemical physics*, 143(4), 044504.
- Gunst, R. F. (2018). *Regression analysis and its application: a data-oriented approach*. Routledge.
- Ibrahim, M. Y., Che-Ahmad, A., Johl, S. K., & Rahman, H. U. (2016). The impact of corporate governance regulations on board independence and quality of financial information reporting: A proposed study. *The European Proceedings of Social and Behavioral Sciences EpSBS*, 761-768.
- Ishak, R., Amran, N. A., & Manaf, K. B. A. (2017). Leadership structure, gender diversity and audit quality influence on earnings management in Malaysian listed companies. *International Review of Management and Marketing*, 6(8S), 342-345.
- Jakpar, S., Tinggi, M., Johari, A., & Myint, K. T. (2019). Analysis of Corporate Governance and Firm Performance: Evidence from Malaysian Listed Companies. *International Journal of Business and Social Science*, 10(1).
- Jamaludin, N. D., Sanusi, Z. M., & Kamaluddin, A. (2015). Board structure and earnings management in Malaysian government linked companies. *Procedia Economics and Finance*, 28, 235-242.
- Junxiong, F. (2016). The Impact of Split-share Structure Reform on the Earning Management Between Pre-IPO and Post-IPO. *Securities Market Herald*, (2),
- Kao, L., & Chen, A. (2014). The effects of board characteristics on earnings management. *Corporate Ownership & Control*, 1(3), 96-107.
- Khan, M. A., & Ibrahim, M. Y. (2015, August). Corporate governance mechanism constraining Earning Management in Malaysian listed companies. In *2015 International Symposium on Technology Management and Emerging Technologies (ISTMET)* (pp. 340-344). IEEE.
- Kolsi, M. C., & Grassa, R. (2017). Did corporate governance mechanisms affect earnings management? Further evidence from GCC Islamic banks. *International Journal of Islamic and Middle Eastern Finance and Management*, 10(1), 2-23.
- Mohamad, M. H. S., Rashid, H. M. A., & Shawtari, F. A. M. (2012). Corporate governance and earnings management in Malaysian government linked companies: the impact of GLCs' transformation policy. *Asian review of Accounting*, 20(3), 241-258.
- Mohamad, Muslim Har Sani & Rashid, Hafiz & Shawtari, Fekri. (2012). Corporate governance and earnings management in Malaysian government linked companies: The impact of GLCs' transformation policy. *Asian Review of Accounting*. 20. 241-258. 10.1108/13217341211263283.
- Moore, S. A., McKay, H. A., Macdonald, H., Nettlefold, L., Baxter-Jones, A. D., Cameron, N., & Brasher, P. M. (2015). Enhancing a somatic maturity prediction model. *Med Sci Sports Exerc*, 47(8), 1755-64.
- Muda, I., Maulana, W., Sakti Siregar, H., & Indra, N. (2018). The Analysis of Effects of Good Corporate Governance on Earnings Management in Indonesia with Panel Data Approach. *Iranian Economic Review*, 22(2), 599-625.
- Muda, I., Maulana, W., Sakti Siregar, H., & Indra, N. (2018). The Analysis of Effects of Good Corporate Governance on Earnings Management in Indonesia with Panel Data Approach. *Iranian Economic Review*, 22(2), 599-625.
- Nugroho, B. Y., & Eko, P. U. (2012). Board characteristics and earning management. *Bisnis & Birokrasi Journal*, 18(1).
- Patrick, E. A., Paulinus, E. C., & Nympha, A. N. (2015). The influence of corporate governance on earnings management practices: A study of some selected quoted companies in Nigeria. *American Journal of Economics, Finance and Management*, 1(5), 482-493.
- Ratnawati, V., Abdul-Hamid, M. A., & Popoola, O. M. J. (2016). The influence of agency conflict types I and II on earnings management. *International Journal of Economics and Financial Issues*, 6(4), 126-132.
- Rauf, F. H. A., Johari, N. H., Buniamin, S., & Rahman, N. R. A. (2012). The impact of company and board characteristics on earnings management: evidence from Malaysia. *Global review of Accounting and Finance*, 3(2), 114-127.
- Shahzad, F., Rauf, S. A., Saeed, A., & Al Barghouthi, S. (2017). Earning management strategies of leveraged family and non-family controlled firms: an empirical evidence. *Internationa Journal of Business & Society*, 18.
- Shittu, I., Ahmad, A. C., & Ishak, Z. (2016). Board characteristics and earnings per share of Malaysian Islamic banks. *International Journal of Economics and Financial Issues*, 6(6S), 135-137.
- Stolwijk, C., van Onna, M., Boonen, A., & van Tubergen, A. (2016). Global prevalence of spondyloarthritis: a systematic review and meta-regression analysis. *Arthritis care & research*, 68(9), 1320-1331.
- Suryanto, T., & Grima, S. (2018). The Corporate Decision in Indonesia: A Result of Corporate Governance Requirements, Earning Management and Audit Reports. In *Governance and Regulations' Contemporary Issues* (pp. 183-206). Emerald Publishing Limited.

38. Swastika, D. L. T. (2013). Corporate governance, firm size, and earning management: Evidence in Indonesia stock exchange.
39. Teh, B. H., San Ong, T., & Ying, L. Y. (2017). Earnings Management in Malaysian Public Listed Family Firms. *Jurnal Pengurusan (UKM Journal of Management)*, 51.
40. Thol, M., Rutkai, G., Span, R., Vrabec, J., & Lustig, R. (2015). Equation of state for the Lennard-Jones truncated and shifted model fluid. *International Journal of Thermophysics*, 36(1), 25-43.
41. Ur Rahman, H., Rehman, S., Zahid, M., & Rehman, A. (2018). Corporate Governance and Quality of Financial Information Reporting: Empirical Evidence from Emerging Market. *Journal of Managerial Sciences*, 12(2).
42. Uwuigbe, U., Uwuigbe, O. R., & Okorie, B. (2015). Assessment of the effects of firms' characteristics on earnings management of listed firms in nigeria. *Asian economic and financial review*, 5(2), 218-228.
43. Wan Mohammad, W. M., Wasiuzzaman, S., & Nik Salleh, N. M. Z. (2016). Board and audit committee effectiveness, ethnic diversification and earnings management: a study of the Malaysian manufacturing sector. *Corporate Governance*, 16(4), 726-746.
44. Yusoff, H., Ahman, Z., & Darus, F. (2019). The Influence of Corporate Governance on Corporate Social Responsibility Disclosure: A Focus on Accountability. *Academy of Accounting and Financial Studies Journal*, 23, 1-16.