Deceptive versus Informative Income Smoothing: Evidence from Audit Committee Attributes

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Abstract-

The paper examines which income smoothing perspective (deceptive or informative) is more prevalent by focusing at four audit committee attributes namely audit committee size, the number of audit committee meeting, the proportion of nonexecutive, and the proportion of independent audit committee members. Using a sample comprises 604 public listed firms in Malaysia during the year 2008 to 2014, this study finds that firms with strong audit committee, which have large audit committee, more frequent meeting and high proportion of independent directors are associated with low extent of income smoothing. The findings provide evidence supporting the proponent for deceptive perspective in which income smoothing is viewed as an unacceptable act when reporting earnings. The results are robust even when using an alternative mesure for income smoothing and including various control variables namely auditor size, firm size, leverage, profitability, growth and industry fixed effects.

Index Terms- Income smoothing, corporate governance, audit committee

I. INTRODUCTION

Income smoothing is an act to reduce the fluctuations of corporation's earnings over time (Beattie et al., 1994). Income smoothing is carried out by managers using variety of means, ranging from taking advantage of discretions given to managers within acceptable financial accounting practices to conducting fraudulent corporate reporting. For example, income smoothing can be accomplished by shifting the timing of the firm's events, by either postponing or advancing the recognition of the expenses or transactions. The rescheduling of recognition of such expenses will show smooth effects on reported income variation over time (Ronen and Sadan, 1975). The loopholes of certain accounting standards also leave the managers with choices and options to manage firm's earnings through manipulation of certain accounting numbers.

Evidence of income smoothing was found in many previous studies. A recent study in Asia by Rusmin, Scully and Tower (2013) find that corporate managers manipulate their reported income downward during the global financial crisis period so that firms' poor results became even worse during the fiscal year,

as to easily manage and boost future years' income. On the other hand, Strobl (2013) posits that managers are more likely to engage in opportunistic behavior during an economic boom as opposed to a recession period. Despite the evidence that managers did perform opportunistic behavior to manage earnings, the pattern and motives of income smoothing are still subject to debate.

Prior literature has viewed income smoothing from two different perspectives. The first view is that income smoothing is considered as a deceptive act. Based on this perspective, managers are more likely commit an income smoothing act not for the provision of information, but merely as a deceptive tool to manipulate accounting information to satisfy their own selfinterests such as maximizing bonuses and other incentives. It is contradictory to the principle of a good agency relationship explained by Eckel (1981), hence income smoothing can be considered as an unfavorable act to the shareholders. In this case, smoothing of income is regarded as unethical regardless of the reasons that motivate the managers to commit the act. The second perspective is known as informative smoothing, in which income smoothing is regarded as an acceptable act by some researchers due to its objectives of maximizing the benefits of the shareholders. Smoothed income stream reduces firm's overall tax liability and enhances the relationship between workers and managers (Hepworth, 1953). This is closely related to worker's motivation and morale through recognition of their contribution in the form of appreciation, maintaining or increase bonuses, increment, and other employees' benefits in kind as compensation will boost the motivation hence boosting the employee's productivity (Moses, 1987). Also, income smoothing could avoid debt covenant violation (Habib, 2005), reduce political cost (Godfrey & Jones, 1999), ensure higher earnings persistence (Silhan, 2014), and promote higher market valuation (Michelson et al., 2000).

The contradicting view of whether income smoothing is related to deceptive acts, or efforts to provide more information of company's financial performance are shown in empirical studies. Recent evidence, for example, Li and Richie (2016) find that firms with higher income smoothing rankings exhibit lower cost of debt, suggesting that the information signaling effect of income smoothing dominates the distorting effect. In addition, Gao and Zhang (2015)'s findings suggest that the market does

not reward smoothers, which is opposite to the finding of Hunt et al. (2000), as well as contrary to the anecdotal evidence, e.g., in Graham et al. (2005).

Thus, this paper seeks to verify whether income smoothing is related to deceptive or informative managerial acts, in an environment where corporate control is weak, which gave more opportunity for managers to conduct such act. This study concentrates on income smoothing in Malaysia. Using four corporate governance attributes namely audit committee size, the frequency of audit committee meeting, the proportion of nonexecutive director, and the proportion of independent director in audit committee, this study tests whether firms with strong audit committee attributes is linked to higher or lower propensity to smooth income. The positive association between audit committee attributes and income smoothing indicates support for informative perspective, while the negative association implies that firms with strong corporate governance perceive income smoothing as a deceptive tool. To achieve this objective, this study follows Tucker and Zarowin (2006) and Li and Richie (2016) in calculating income smoothing measure.

Our findings contribute to the existing literature in two main ways. First, we add new evidence to the scant literature pertaining to income smoothing, and second, to shed more light on emerging markets especially after serious corporate governance reforms.

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

In this study, we analyze how a firm with audit committee perceived income smoothing practices. If the informative perspective is dominant, the relationship between audit committee and income smoothing would be positive, and vice versa. In Malaysian context, Kamarudin, Wan Ismail, & Alwi (2014) find that audit committee play critical roles in preventing financial fraud.

From prior literature, we postulate that better corporate governance practices minimize excessive risk-taking activities which are determined by considering the tradeoff between risk and benefits. If the firm with strong corporate governance value income smoothing as beneficial to the shareholders, and subscribe to information perspectives school, the empirical result would document prevalent practices of income smoothing in strong corporate governance firm. If income smoothing is perceived as a deceptive tool to detriment the quality of financial reporting, which will lead to a greater risk to shareholders, the audit committee will object the practices. Hence the evidence of income smoothing would only appear in poorly governed firms. For example, Zagorchev and Gao (2015) find that better governance is negatively related to excessive risk-taking and positively related to the performance of the U.S. financial institutions. Specifically, sound overall and specific governance practices are associated with less total non-performing assets, less real estate on performing assets, and higher Tobin's Q. Second, Zagorchev and Gao (2015) show that better governance contributes to higher provisions and reserves for loan/asset losses of financial institutions, supporting the income smoothing hypothesis. The finding is consistent with Beaver, Eger, Ryan, and Wolfson (1989), Wahlen (1994), Tucker and Zarowin (2006) and Yang, Tan, and Ding (2012) and supports the value relevant information related to the income smoothing hypothesis for financial institutions.

Considering the above arguments, this study tests the following alternate hypothesis:

Ha: Ceteris paribus, firms with strong audit committees are associated with low extent of income smoothing.

We employed four proxies for strong audit committee namely audit committee size (ACSIZE), the frequency of audit committee meeting (ACMEET), the proportion of non-executive director in audit committee (NONEX), and the proportion of independent director in audit committee (ACIND).

Our first proxy is the audit committee size (ACSIZE). The Malaysian Code on Corporate Governance and the Listing Requirement of Bursa Malaysia require public listed firms to establish audit committee with at least three directors. The larger audit committee size would lead to more effective monitoring and better financial performance. For example, Dalton et al. (1999) found a positive relation between size and the monitoring function of the board that results in higher performance. More members of the audit committee will have more diverse skills and knowledge to be employed by the committee to enhance monitoring of the managers.

The second proxy is the frequency of audit committee meeting (ACMEET). The Malaysian Code on Corporate Governance (MCCG) requires that the audit committee holds at least four meetings a year. Based on Song and Windram, (2004), the more frequent the meetings held by the audit committee would lead to a more effective decision. Similarly, Abbott, Parker, and Peters (2004) suggest that by holding a meeting at least four times a year, the audit committee enhances a low extent of income smoothing practices. Farber (2005) found out that the firm that is involved in fraudulent has a low frequency of audit committee meetings, thus has a weak governance. Prior studies (e.g. Chen et al., 2006 and Xie et al., 2003) found that the high frequency of board meetings will reduce the possibility of managers in manipulating income. In the context of fraudulent financial statements, and the number of audit committee meetings has a negative relationship with fraud (Owens-Jackson, Robinson and Shelton, 2009).

The third proxy is the proportion of non-executive director in audit committee (NONEX). The executive director is considered as an employee of the firm, thus may induce the conflict of interest between the agent and the owner. Jensen and Meckling, (1976) defined an agency relationship as the contract in which the principal or the owner engage another person or the agent to perform some service on their behalf by means of delegating some authority to make the decision to the agent. The basic principle between principles and the agent is, the agent will be compensated or remunerated to act diligently to manage the company wealth to maximize the wealth of the principle. However, if both parties' relationship is based on the utility

maximizers (Jensen and Meckling, 1976), the agency cost theory suggests that there will be strong reason to believe that the agent will not always act in the best of interest of the principle or in another word the agent might be motivated to manipulate the earnings to suit their interest. To prevent or minimize the unethical practices of income smoothing, good corporate governance is very important for the principal to secure their interest. Thus, the recommendation by MCCG 2012 that requires the board composition to have a balance composition between executive directors, non-executive directors, and independent non-executives motivated this study to test whether the large or small proportion of non-executive director (NONEX) have any correlation with the extent of income smoothing among the listed companies in Bursa Malaysia.

The fourth proxy is the proportion of independence director in audit committee (ACIND). Independent directors are the directors who have no connection with the firm thus have no conflict of interest in the company as they are not remunerated or provided by the company with an incentive except director's fee (Hermalin and Weisbach, 1988). Beasley (1996) and Uzun et. al. (2004) found out that firms that committed fraud have fewer gray directors and independent directors in the board composition as compared with firms that non-fraudulent. Thus, the independent directors in are regarded as an effective tool in strengthening the corporate governance in the firms as suggested by Fama and Jensen (1983). We assume that a firm with a higher proportion of independence directors and the smaller the size of boards would attenuate the likelihood of the firms presenting misrepresented or manipulated financial information.

III. RESEARCH METHODOLOGY

A. Sampling and data collection

We draw the sample from all Malaysian publicly listed companies from the year 2008 to 2014 as the calculation for income smoothing score requires at least seven years financial data. The financial information was downloaded from OSIRIS database, while the corporate governance variables were manually extracted from corporate reports. Our final sample was determined after performing several procedures. First, we deleted firms with missing values for any of the dependent and independent variables included in the study. Second, we excluded all financial institutions (SIC code between 6000 and 6999), such as banks, life insurance firms, nonlife insurance firms, real estate investment and services, real estate investment trusts, suspended equities and financial services in general because of the atypical financial structure, similar with previous researches (e.g. Kamarudin, Wan Ismail, & Samsuddin, 2012). Third, we removed utility companies (Standard Industrial Classification [SIC] code between 4900 and 4999) because they are regulated and therefore are likely to differ from other companies with respect to operating decisions. Finally, to mitigate the influence of outliers, we drop observations that fell in the top and bottom 0.5% of the absolute value of discretionary accruals, and those with absolute value of studentized residuals greater than 3 (Wan Ismail, Kamarudin, & Sarman, 2015), leaving a final sample of 608 firm year observations.

B. Income Smoothing model

Gordon (1964) and Eckel (1981) are the earliest researchers that developed frameworks to clasify smoother or non-smoother firms. The method has further advanced by examining the extent of income smoothing based on the use of discretionary accruals, measured using Jones' (1991) model and modified by Kothari, Leone, and Wasley (2005).

In this research, we followed Tucker and Zarowin (2006) which introduced the calculation of the correlation between the change in discretionary accrual proxy (ΔDAP) and the change in prediscretionary income (ΔPDI). According to this measure, a more negative correlation between ΔDAP and ΔPDI indicates more income smoothing.

To calculate income smoothing measure, we first estimate discretionary accruals using the following model:

$$TACC_{it} = \beta_0 (1/ASSETS_{it-1}) + \beta_1 (\Delta REV_{it} - \Delta REC_{it}) / ASSETS_{it-1} + \beta_2 PPE_{it} / ASSETS_{it-1} + \mu_{it}$$
(1)

where: TACC_{it} is the total accruals; ASSETS_{it} is total assets; ΔREV_{it} is the change in revenue (ΔREV_{it}); ΔREC_{it} is the change in receivables; PPE_{it} is total net property plant and equipment; and ASSETS_{it-1} is the lagged of total assets.

The regression is performed for each year of observation to calculate the non-discretionary accrual (NDA) values for each firm from the year 2008 to 2014. Non-discretionary accruals proxy (NDAP) are the fitted values of regression (1) and the discretionary accruals proxy (DAP) for each firm are the difference between total accruals (TACC) and non-discretionary accruals proxy (NDAP). The pre-discretionary income (PDI) is calculated as net income (NI) minus discretionary accruals proxy (DAP).

We then calculate the extent of income smoothing, measured as the correlation between the change in discretionary accruals and the change in pre-discretionary income, CORR(Δ DAP, Δ PDI) using the current year (2014) and past six years' observations. Following Tucker and Zarowin (2006) and Li and Richie (2016), income smoothing measure (IS) is calculated by converting the correlations into reverse fractional rankings by industry groups. The highest income smoothers (most negative correlations) having high rankings and lowest income smoothers (less negative correlations) having low rankings. Firms with lowest correlations are firms with higher income smoothing, whereas firms with higher correlations are firms with lower income smoothing. For ease of interpretation, we multiplied the correlation value with negative one.

IV. REGRESSION MODEL

The following regression model tests the association between the extent of income smoothing practices and audit committee attributes namely audit committee size (ACSIZE), audit committee meeting (ACMEET), the proportion of non-executive (NONEX), and the proportion independent audit committee in

audit committee (ACIND). The regression model also incorporates several control variables, namely auditor size (BIG4), firm size (FSIZE), leverage (LEV), growth (GROWTH), profitability (PROFIT), and industry effect (Industry-effects) as control variables.

$$IS_{i} = \beta_{0} + \beta_{1}ACSIZE_{i} + \beta_{2}ACMEET_{i} + \beta_{3}NONEX_{i} + \beta_{4}ACIND_{i} + \beta_{5}BIG4_{i} + \beta_{6}FSIZE_{i} + \beta_{7}LEV_{i} + \beta_{8}GROWTH_{i} + \beta_{9}PROFIT_{i} + \beta_{10}Industry-effects + e_{i}$$
(2)

Where: IS is the correlation between the change in discretionary accruals and the change in pre-discretionary income $CORR(\Delta DAP, \Delta PDI)$ multiplied by negative one; ACSIZE is the total numbers of directors in the audit committee; ACMEET is the total numbers of audit committee meeting held during the financial year; NONEX is the proportion of non-executive directors in the audit commitee; ACIND is the proportion of independent directors to the total of audit committee size; BIG4 is a dummy variable that takes value 1 if the auditor is BIG 4 audit firm, 0 otherwise; SIZE is the natural log of total assets; LEV is the total debt divided by total assets: GROWTH is the change in sales deflated by prior year sales; PROFIT is the current earning per share (EPS) of firms; and Industry-effects are dummy variables for relevant industry, 0 otherwise.

V. FINDINGS AND DISCUSSIONS

A. Descriptive statistics

Table 1 presents the descriptive statistics for the independent and control variables. The extent of income smoothing practices (IS) has a minimum value of -1.000 and the maximum correlation is 1.000. The correlation's means is 0.837. The minimum number of the audit committee (ACSIZE) is two members while the maximum number of audit committee member in the sample is nine members. On average, the audit committee has three members. The minimum number of audit committee meeting is one time while the highest number of audit committee meeting is 15 times whereby the audit committee meets approxiametely five times a year in average. For the proportion of non-executive director (NONEX), the minimum value is 0.667 while the maximum number of non-executive directors in the samples is 1.000 which the average number of NONEX is 0.923. The proportion of independent directors in audit committee has an average value of 0.887 with a minimum value of 0.333 and maximum value of 1.000.

Table I: Descriptive Statistics

	Mean	Std.	Min	Max
		Dev		
IS	0.837	0.316	-1.000	1.000
ACSIZE	3.318	0.670	2.000	9.000
ACMEET	4.983	1.219	1.000	15.000
NONEX	0.923	0.182	0.667	1.000
ACIND	0.887	0.157	0.333	1.000
SIZE	8.676	0.638	6.869	11.044
LEV	0.209	0.319	0.000	6.592
GROWTH	0.134	1.305	-1.000	30.765
PROFIT	0.103	0.281	-3.963	2.347

For the control variables, the firm size (SIZE) has the average value of 8.676 with minimum value of 6.869 and maximum value of 11.044. The firm leverage (LEV) have a minimum value of 0.000 while the maximum is 6.592 and the leverage mean of 0.209. For growth (GROWTH), the lowest value of -1.000 and the highest value of 30.765. The minimum value for profitability (PROFIT) of the firms is -3.963 while the maximum value is 2.347 while the mean value is 0.103.

B. Empirical Results

Table 2 presents the main regression estimates for two models with and wihout industry effects. The results from both models show that the coefficient for the audit committee size (ACSIZE) are significantly negative suggesting that larger audit committee size is associated with lower extent of income smoothing. This is consistent with Dalton et al. (1999) who argued that the audit committee size is strongly linked to the monitoring function of the board hence resulting in higher firm performance. We also find that firms with active audit committee particularly with more frequent meetings were associated with less income smoothing practices, showed by the negative coefficients for audit committee meeting (ACMEET) in both models. Our finding support prior results where firms involved in manipulating income have a weak governance particularly low frequency of audit committees meetings (Farber, 2005) and board meeting (Chen et al., 2006; Xie et al., 2003). The findings also report that the coefficients of audit committee independence (ACIND) in both models are positive and highly significant (p<0.001), implying that firms with high proportion of independent director in the audit committee would have a lower income smoothing, consistent with Beasley (1996) and Uzun et. al. (2004). For the proportion of non-executive director in audit committee (NONEX), the coefficients are insignificant, showing lack of influence on income smoothing practices.

Table II: Regression Summary Statistics with industry effect

Model	Model 1	Model 2
Intercept	1.446***	1.664***
	(7.273)	(7.860)
ACSIZE	-0.041**	-0.044**
	(-1.969)	(-2.120)
ACMEET	-0.026**	-0.025**
	(-2.072)	(-2.030)
NONEX	0.021	0.011
	(0.260)	(0.130)
ACIND	-0.429***	-0.414***
	(-6.377)	(-6.130)
BIG4	-0.037	-0.024
	(-1.370)	(-0.860)
SIZE	0.006	-0.012
	(0.266)	(-0.520)
LEV	0.006	0.005
	(0.230)	(0.160)
GROWTH	0.007**	0.008**
	(2.215)	(2.560)
PROFIT	-0.144***	-0.144***

	(-2.721)	(-2.800)			
Industry-effects	No	Yes			
N	604	604			
F-stats	5.47	3.89			
$Adj. R^2$	0.0693	0.0693			

The reported t-statistics are in parentheses and adjusted for heteroscedasticity (White, 1980). Asterisks denote statistical significance at the 1% (***), 5% (**), or 10% (*) level, respectively.

The results for the control variables indicate that firm profitability (PROFIT) has significant negative coefficients (p<0.001) consistent with prior evidence that firms with high profit have lower propensity to smooth earnings (Tseng & Lai, 2007, and Wan Ismail, Kamarudin & Ibrahim, 2009). In addition, we find that high growth firms have higher extent of income smoothing, in which the coefficients for GROWTH are significantly positive for both models. However, we found no significant results for firm size (SIZE), leverage (LEV), and auditor (BIG4).

From the results in both models, we find that firms with strong audit committee have lower extent of income smoothing, hence supporting the deceptive view of income smoothing. This view perceived that managers manipulate earnings to satisfy their own benefits and self-interest at the expense of the shareholders probably to maximize bonuses, increment and other incentives. To accomplish the objectives managers may shift the timing of the firm's event's recognition, either postponing or recognized the expenses or transactions early where such recognition will shows smooth effects on reported income variation over time (Ronen and Sadan, 1975).

C. Sensitivity Analysis

For robustness test, we re-estimate income smoothing using the coefficient of variation method as introduced by Eckel (1981). The Eckel's method has been extensively used in incomesmoothing studies (Albrecht & Richardson, 1990; Michelson et al., 1995; Carlson & Bathala, 1997; Wan Ismail, Kamarudin, & Ibrahim, 2005) to distinguish between smoothing and non-smoothing firms. We determine smoothing firm when the coefficient of variation of sales is greater than the coefficient of variation of income. The firm is considered as an income smoother if the one period change in income is lower than the one period change in revenue. We use the logistic regression analysis and found that the results support our main results.

VI. CONCLUSION

The aim of this paper is to examine which income smoothing perspective is more prevalent that is by considering four audit committee attributes. If the informative perspective is dominant, the relationship between audit committee and income smoothing would be positive, and vice versa. The findings show support for deceptive perspectives, where this study finds evidence of low income smoothing in firms with strong audit committee attributes, i.e. a large number of audit committee members, a high frequency of audit committee, and a high proportion of independence directors in the committee. Firms with strong audit

committees have a low extent of income smoothing, hence supporting the view of income smoothing as least informative or deceptive. The results show that strong audit committees curb income smoothing practices by managers.

A limitation of this study is that there is a possibility of classification bias in determining firms as non-smoother as the model requires long period of data. Factors such as economic and business restructuring might influence the smoothing trend. Hence, we attempt to address this problem by incorporating alternative measures for income smoothing. Going forward, the present study can be extended by examining other dimensions such as managers' bonus compensation and firms' political costs, ownership structure, audit committee effectiveness, and function of an internal auditor.

REFERENCES

- Abbott, L.J., Parker, S., & Peters, G.F. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory*, 23(1), 69–87.
- [2] Albrecht, W.D. & Richardson, F.M. (1990). Income smoothing by economy sector. *Journal of Business Finance & Accounting*, 17(5), 713–730.
- [3] Beasley, M. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443–465.
- [4] Beaver, W., Eger, C., Ryan, S., & Wolfson, M. (1989). Financial reporting, supplemental disclosures, and bank share price. *Journal of Accounting Research*, 27(2), 157–178.
- [5] Beattie, V., Brown, S., Ewers, D., John, B., Manson, S., Thomas, D. & Turner, M. (1994). Extraordinary items and income smoothing: a positive accounting approach. *Journal of Business Finance & Accounting*, 21(6), 791-811.
- [6] Carlson, S.J. & Bathala, C.T. (1997). Ownership differences and firm income smoothing behavior. *Journal of Business Finance & Accounting*, 24(2), 181–195.
- [7] Chen, G., Firth, M., Gao, D.N., &.Rui, O.M. (2006). Ownership structure, corporate governance, and fraud: evidence from China. *Journal of Corporate Finance*, 12, 424–448.
- [8] Dalton, D.R., Daily, C.M, Johnson, J.L., & Ellstrand A.E. (1999). Number of directors and financial performance: A meta-analysis. *Academy of Management Journal*, 42(6), 674–686.
- [9] Eckel, N. (1981). The income smoothing hypothesis revisited. Abacus, 17(1), 28–40.
- [10] Fama, E.F. and Jensen, M.C. (1983). Separation of ownership and control. The Journal of Law and Economics, 26(2), 301–325
- [11] Farber, D.B. (2005). Restoring trust after fraud: Does corporate governance matter? *The Accounting Review*, 80(2), 539–561.
- [12] Gao, L. & Zhang, J.H. (2015). Firms' earnings smoothing, corporate social responsibility, and valuation. *Journal of Corporate Finance*, 32(3), 108– 127.
- [13] Godfrey, J.M. & Jones, K.L. (1999). Political cost influences on income smoothing via extraordinary item classification. *Accounting & Finance*, 39(3), 229–253
- [14] Gordon, M. (1964). Postulates, principles and research in accounting. The Accounting Review, 39(2), 251–263.
- [15] Graham, J.R., Harvey, C.R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting, *Journal of Accounting and Economics*, 40(1–3), 3–73.
- [16] Habib, A. (2005). Firm-specific determinants of income smoothing in Bangladesh: An empirical evaluation. Advances in International Accounting, 18, 53–71.
- [17] Hepworth, S.R. (1953). Smoothing periodic income. *The Accounting Review*, 28(1), 32–39.

- [18] Hermalin, B. E., & Weisbach, M. S. (1988). The Determinants of Board Composition. Source: The RAND Journal of Economics Journal of Economics, 19(4), 589–606.
- [19] Hunt, A., Moyer, S. & Shevlin, T. (2000). Earnings volatility, earnings management, and equity value. Working paper, University of Washington.
- [20] Jensen, & Meckling. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360.
- [21] Kamarudin, K.A., Wan Ismail, W.A., & Alwi, M. (2014) The effects of audit committee attributes on fraudulent financial reporting. *Journal of Modern Accounting and Auditing*, 10(5), 507-514.
- [22] Kamarudin, K.A., Wan Ismail, W.A., & Samsuddin, M.E. (2012). The influence of CEO duality on the relationship between audit committee independence and earnings quality. *Procedia - Social and Behavioral Sciences*, 65, 919-924
- [23] Kothari, S.P., Leone, A.J., & Wasley, C.E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163–197.
- [24] Li, S., & Richie, N. (2016). Income smoothing and the cost of debt. China *Journal of Accounting Research*, 9(3), 175–190.
- [25] Leuz, C., Nanda, D., & Wysocki, P.D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69(3), 505–527.
- [26] Michelson, S.E., Jordan-Wagner, J., & Wootton, C.W. (2000). The relationship between the smoothing of reported income and risk-adjusted returns. *Journal of Economics and Finance*, 24(2), 141–159.
- [27] Moses, O. D. (1987). Income smoothing and incentives: empirical tests using accounting changes. *The Accounting Review*, 62(2), 358–377.
- [28] Myers, J. N., Myers, L. A., & Skinner, D. J. (2007). Earnings momentum and earnings management. *Journal of Accounting, Auditing and Finance*, 22(2), 249–284.
- [29] Owens-Jackson, L.A., Robinson, D., & Shelton, S. W. (2009). The Association Between Audit Committee Characteristics, the Contracting Process and Fraudulent Financial Reporting. *American Journal of Business*, 24(1), 57–66.
- [30] Ronen, J., & Sadan, S. (1975). Classificatory smoothing: alternative income models. *Journal of Accounting Research*, 13(1), 133–149.
- [31] Rusmin, R., Scully, G., & Tower, G. (2013). Income smoothing behaviour by Asian transportation firms. *Managerial Auditing Journal*, 28(1), 23–44.
- [32] Silhan, P.A. (2014). Income smoothing from a Census X-12 perspective. *Advances in Accounting*, 30(1), 106–115.
- [33] Song, J. and Windram, B. (2004). Benchmarking Audit Committee Effectiveness in Financial Reporting. *International Journal of Auditing*, 8(3), p195-205
- [34] Strobl, G. (2013). Earnings manipulation and the cost of Capital. *Journal of Accounting Research*, 51(2), 449–473.
- [35] Tucker, J. W., & Zarowin, P.A. (2006). Does Income Smoothing Improves Earnings Informativeness? *The Accounting Review*, 81(1), 251–270.

- [36] Tseng, L.-J., & Lai, C.-W. (2007). The relationship between income smoothing and company profitability: An empirical study. *International Journal of Management*, 24(4), 727–733,823.
- [37] Uzun, H., Szewczyk, S. H., & Varma, R. (2004). Board composition and corporate fraud. *Financial Analysts Journal*, 60(3), 33–43.
- [38] Wan Ismail, W.A., Kamarudin, K.A., & Ibrahim, M.K. (2005). Income smoothing and market perception of accounting numbers: An empirical investigation of extraordinary items. *Journal of Financial Reporting & Accounting*, 3(1), 49-70.
- [39] Wan Ismail, W.A., Kamarudin, K.A., & Sarman, S.R. (2015). The quality of earnings in Shariah-compliant companies: evidence from Malaysia. *Journal of Islamic Accounting and Business Research*, 6(1), 19-41
- [40] Wahlen, J.M. (1994). The nature of information in commercial bank loan loss disclosures. *The Accounting Review*, 69(3), 455–478.
- [41] Xie, B., Davidson, W. N., & DaDalt, P.J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295–316(22).
- [42] Yang, C., Tan, B. L., & Ding, X. (2012). Corporate governance and income smoothing in China. *Journal of Financial Reporting and Accounting*, 10(2), 120–139
- [43] Zagorchev, A., & Gao, L. (2015). Corporate governance and performance of financial institutions. *Journal of Economics and Business*, 82, 17–41.

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