MANAGERIAL OWNERSHIP AND REAL EARNINGS MANAGEMENT: A STUDY ON INTERACTION EFFECT OF RELIGIOSITY

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ABSTRACT

This study investigates how managerial ownership affect real earnings management practices in Malaysia. This study uses discretionary expenses to capture real earnings manipulation. Using a sample of 1393 firm-year observations of listed firms, over the investigation period 2006 to 2015, the findings indicate that the degree of real earnings management is positively associated with ownership by management. However, the positive and significant relationship between managerial ownership and real earnings management is weak (strong) for Shariah (non-Shariah) firms. In particular, these relationships are stronger for listed firms that hold non Shariah status. This study contributes to the importance of managerial ownership and religiosity in influencing earnings manipulation among listed firms.

Keywords: Managerial Ownership, Religiosity, Real Earnings Management, Malaysia

INTRODUCTION

High-profile financial statement frauds signal tremendous impact of opportunistic earnings management practices. According to Healy & Wahlen (1999), earnings management is an alteration of the company financial performance by managers in order to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting number. Due to that, Lo (2008) argues that such practices reduce quality of earnings and accounting numbers which lead to increasing of financial statement frauds. Prior studies have highlighted the role of managerial ownership as one of the corporate governance mechanisms in mitigating unethical behaviour in business organisations including earnings management activities *via* discretionary accounting accrual. However, competing arguments exist regarding the impact of managerial ownership on accrual earnings management (Ahmad & Ahmad, 2021). On one hand, scholars of incentive-alignment suggest that managerial ownership is an effective mechanism to constrain the opportunistic behaviour of managers. It is because managers as insiders will become more involved in the company when they own greater shares of the firm and less incentive to manipulate reported earnings (Warfield, Wild & Wild, 1995). This consequently will reduce the agency conflict as well as the agency costs of the firm as the need for outside monitoring will be reduced. Indeed, Jensen & Meckling (1976) argue that shareholdings by management would reduce agency costs as high insider-ownership implies a greater alignment of interests between management and shareholders. This would reduce the opportunistic behaviour of managers which in turn limit earnings management practices.

On the other hand, excessive management shareholdings could lead to management entrenchment and appropriation of minority shareholder wealth. In line with this idea, Fama & Jensen (1983) postulate that firms that are controlled by management are more likely to manage earnings. Consistent with the conflicting arguments, empirical results on the relationship between managerial ownership and accrual earnings management are mixed. Thus, motivating

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by conflicting findings in the literature on whether ownership by management limit earnings management, this study aims to investigate how managerial ownership affects another type of earnings management practices; real earnings management in Malaysia (Din et al., 2021).

This study chooses Malaysia as a research setting as the country offers an interesting setting to explore this research due to its unique characteristics. First, owner managed firms is a common characteristic of Malaysian business landscape (Nor & Sulong, 2007). According to Rashid (2016), firm that has a concentration of ownership by management is more likely to has lower agency problems due to alignment of principal (shareholders)-agent (management) interests. Second, Malaysia government has introduced Islamic capital market which distinguishes listed firms into Shariah firms and non Shariah firms. Unlike non Shariah firms, Shariah firms are operated based on Islamic laws that promote justice and welfare in society by encouraging better ethical conduct. Using a sample of 1393 firm-year observations from 2006 to 2015, the findings indicate that managerial ownership has a positive and significant relationship with real earnings management proxy; discretionary expenses among Malaysian listed firms. This positive and significant relationship is weak (strong) for Shariah (non-Shariah) firms.

This study contributes to several streams of literature. First, this study extends the literature on managerial ownership influence on earnings management by examining the impact of such ownership on another types of earnings management activities; real earnings management. The results show that, in addition to the accrual earnings management, managerial ownership can play important role in influencing real earnings management *via* discretionary expenses. Second, this study adds to the literature that religion is yet another determinant of earnings management by providing ethical framework for regulating firms; Shariah firms help to improve their business practices including the financial reporting practices. The remainder of the paper is organized as follows: Section 2 reviews the relevant literature and develops the research hypotheses. Section 3 and 4 offers the discussion on research methodology and findings, respectively. Finally, the last section provides the conclusion and limitation of this study.

LITERATURE REVIEW

Earnings Management

Earnings management is one of the unethical corporate behaviours resulting from managerial opportunism. Fields, Lys & Vincent (2001) highlight that opportunistic earnings management is a purposeful intervention made by managers to influence reported earnings by managing accounting choices either *via* discretionary accounting accrual or real-based transactions. Discretionary accounting accrual manipulation, also known as accrual earning management has no direct cash flow implications. Example of accrual earnings management includes management decision on write down of firm's assets, recognize or defer revenues, capitalize or expense certain costs such as repair expenditures, and timing of adoption of new standards. Unlike accrual earnings management, earnings management *via* real activities affect firm's cash flows (Field et al., 200; Mulyani et al., 2021). Examples of real earnings management include reductions in discretionary spending such as Research and Development (R&D), advertising and maintenance expenditures, aggressive price discounts to increase sales volumes, overproduction to report lower Cost of Goods Sold (COGS) and repurchase common share. Nevertheless, Lo (2008) argues that regardless the methods used, opportunistic earnings management is one of the factors that contributes to the lower quality of reported earnings.

Managerial Ownership and Real Earnings Management

Prior studies stress that managerial ownership affects earnings management practices both *via* discretionary accounting accruals (Aygun & Sayim, 2014; Abubakar et al., 2021). However, a review of the literature on the relationship between managerial ownership and

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earnings management showed mixed empirical results. For example, consistent with the management entrenchment effect hypothesis, Aygun & Sayim (2014) find that managerial ownership has a significant positive relationship with the earnings management practices of Turkish firms listed on Istanbul Stock Exchange (ISE) for the period of 2009 to 2012. Further, using discretionary accrual to measure earnings management among 372 firms listed on the Karachi Stock Exchange over the period 2003 to 2010, Shah (2014) documents that the degree of earnings management increase monotonically with the ownership percentage of a firm's directors, their spouses, children, and other family members.

Some scholars however, have cast doubts on the entrenchment effect of managerial ownership on earnings management (Alves, 2012; Afreen, 2021). For example, Alves (2012) examines the impact of corporate ownership structure; managerial ownership, ownership concentration and institutional ownership on earnings management in Portugal. Using a sample of 34 non-financial listed Portuguese firms from 2002 to 2007, the results show that managerial ownership limit earnings management *via* discretionary accruals. Alzoubi (2016) examines the relationship between five types of corporate ownership namely managerial ownership, institutional ownership, external shareholders, family ownership and foreign ownership on earnings management practices of Jordanian listed firms. This study reveals that insider managerial ownership are more likely to mitigate earnings manipulation *via* discretionary accruals.

In the Malaysian context, Ali, Salleh & Hassan (2008) investigate the role of managerial ownership in mitigating discretionary accrual earnings management. The sample of the study comprises 1001 firm-year observations of Malaysian listed firms from 2002 to 2003. The results indicate that managerial ownership has negative and significant relationship with the degree of earnings management *via* discretionary accrual especially in small-sized listed firms. Recently, Shayan-Nia, Sinnadurai, Mohd-Sanusi & Hermawan (2017) investigate the impact of ownership structure; managerial ownership, institutional ownership and foreign ownership on the degree of upwards real earnings management among financially distressed listed firms in Malaysia. Using a sample of 1180 firm-year observations of financially distressed companies from 2001 to 2011, the findings fail to find significant relationship between managerial ownership and upwards real earnings management *via* discretionary expenditure. Graham, Harvey & Rajgopal (2005) however argue that managers prefer real activities manipulation to accrual earnings management to manage reported earnings. They reported that 80 percent of survey participants in their study took economic actions such as reducing discretionary expenses on Research and Development (R&D), advertising and maintenance in order to meet an earnings target. According to Roychowdhury (2006), although Real Earnings Management (REM) might reduce firm value, managers are more willing to manage earnings through real activities, as such practices are less likely to draw auditor or regulatory scrutiny. In the Malaysian context, Salleh (2009) provides similar findings. He found that a majority of survey participants who had experienced missing an earnings target preferred to make economic sacrifices rather than manipulate accounting figures. One of the participants in Salleh's study said: ―We sit down in our third quarter meeting, look into the figures then try to reduce expenses like advertising, travelling and R&D. These actions are within our control (p.166). Therefore, based on these arguments, this study proposed the following hypothesis:

H1: There is a significant and positive relationship between managerial ownership and real earnings management.

Religiosity as a Moderating Variable

Prior studies document that firms with more religious influences are less likely engaged in unethical corporate behaviours than firms with less religious influence (Dyreng, Mayew & Williams, 2012; Chantziaras, Dedoulis, Grougiou & Leventis, 2020; Baatwah, Al-Qadasi &

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Al-Ebel, 2020). It is because religion is one of the potential sources of ethical norms and behaviour in business organisations (Weaver & Agle, 2002; Conroy & Emerson, 2004; Longenecker et al., 2004). Indeed, Noreen (1988) stresses that religion is an enforcement mechanism for better ethical behaviour in business organizations. Empirical research supports this view. For example, Dyreng, et al., (2012) find that firms with more religious influence are less engaged in aggressive financial reporting than firms with less religious influence. More specifically, they find that religion-influenced firms have lower forecast errors, higher accrual quality, lower risk of fraudulent accounting, and lower restatements of financial statements. Grullon, et al., (2019) also show that religiosity deters unethical corporate behaviour. They found that firms headquartered in highly religious areas have lower earnings management. They also note that regulation and religion are substitute mechanisms for monitoring and control. Under this view, the positive effect of managerial ownership on real earnings management should be higher in non Shariah relative to Shariah firms because ethical business conduct is amplified in Shariah firms. In summary, prior research shows the potential of religiosity to moderate the role of managerial ownership in influencing unethical corporate behaviour. However, there is no study that has ever examined the religiosity factor as a moderating variable. Thus:

H2: The positive relationship between managerial ownership and real earnings management is weaker (stronger) in Shariah (non Shariah) firms.

RESEARCH DESIGN

Sample Selection

The sample of this study consist of Malaysian firms listed on Bursa Malaysia for the period 2006 to 2015. In addition, this study classifies listed firms into Shariah firms and non Shariah firms based on the list issued by Shariah Advisory Council, Securities Commission Committee which available at www.sc.com.my. The data required for computing real earnings management and firms' specific characteristics as control variables were collected from Thompson Reuters' Datastream. Meanwhile the data on managerial ownership and various governance variables were collected from the companies' annual reports. This procedure yielded 1393 firm-year observations.

Variable Operationalisation

Dependent Variable: Real Earnings Management

The dependent variable for this study is real earnings management. Following Roychowdhury (2006), this study measures real earnings management using abnormal Discretionary Expenses (RDE). The RDE is the residuals from the following model:

$$DISCEXPit/Ait\text{-}1=\beta 1\ [1/Ait\text{-}1]+\beta 2\ [Salesit\ \text{-}1/Ait\text{-}1\ ]+\varepsilon it$$

Where,

DISCEXPit=The sum of R&D expenses and SG&A of firm i in year t;
Ait-1=Total assets of firm i in year t-1;
Salesit-1= Sales of firm i in year t-1;
εit=A residual term to capture the level of abnormal discretionary expenses of firm i in year t.

Consistent with Warfield, et al., (1995), this study uses absolute value of earnings management to detect both income-increasing as well as income-decreasing management of

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earnings *via* discretionary expenses.

Independent Variable: Managerial Ownership

Managerial ownership (MAN). This variable is measured as the percentage of direct shares owned by the directors from total shares issued (McConnell & Servaes, 1990; Warfield et al., 1995).

Control Variables: Firm' Specific and Board Characteristics

Consistent with prior research, this study controls the variables that could influence the earnings management. In particular, this study controls four variables of firm characteristics; firm size, firm growth, firm leverage, Big4 auditors and three variables of board characteristics; board size, board independent directors and duality. First, this study controls for firm size as large firms often receive more media attention, have a higher analyst following and face regular political scrutiny (Ahmed & Duellman, 2007). Therefore, such firms are less likely to manage their reported earnings. Second, the study controlled for leverage. Firms with higher levels of debt have their earnings scrutinized by for debt providers or their agents, e.g., trustees, so they would not inflate earnings to benefit their shareholders or managers at the expense of the debt providers through dividends and earnings-based compensations (Ahmad, Billings, Morton & Stanford, 2002). Third, the study controlled for growth. The growth of firms is likely to produce higher accruals because of increased revenue-generating activities, such as credit sales. Fourth, the study controlled for audit quality. Prior studies used the size of audit firms as proxies for audit quality (DeAngelo, 1981). According to Wahab, Pitchay & Ali (2015), higher quality auditors are more likely to ensure greater transparency and eliminate mistakes in financial statements since they are more anxious to protect their reputation.

In addition, this study controlled for board characteristics. First, the study controls for board independence because the ability of the board to act as an effective monitoring mechanism depends on its independence from management (Fama & Jensen, 1983). Second, the study controls for board size. Jensen (1993); Garcia-Meca & Ballesta (2009) suggest that the number of directors is one of the important factors in the effectiveness of a board. There are two views on this issue. Proponents of agency theory believe that a larger board has more opportunity to control and monitor the actions of management as it has a greater number of people with more expertise (Dalton et al., 1999), and valuable experience (Xie et al., 2003) to prevent or limit managerial opportunistic behaviour. Finkelstein & D'Aveni (1994) noted that a larger board has more problem-solving capabilities, as the burden facing the directors is equally shared among them. Third, the study control for CEO duality. CEO duality or the dominant personality phenomenon occurs when the same person holds the two most dominant posts in the firm, namely those of CEO and chairman. Advocates of agency theory argue that CEO duality - which implies CEO dominance over the board—promotes CEO entrenchment and hence, can lead to opportunistic and inefficient behaviour that reduces shareholder wealth (Jensen & Meckling, 1976). A year dummy and an industry dummy were also included in the study to control for year and industry effects.

Multivariate Regression Models

To test the research aims, we run the following regression models:

$$RDEft=\square+\square 1MANOWN\,ft+\square 2MANOWN*SHARIAH\,ft+f\,(control\ variables)+\square \qquad (1)$$

Where,

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Dependent variables:
RDEft= Abnormal discretionary expenses of firm f in year t,
Independent variables:
MANOWNft= The proportion of direct shares owned by the directors from total shares issued,
MANOWN*SHARIAHft= Interaction effect between managerial ownership and Shariah,
Control variables:
SHARIAHft= 1 if listed firms hold Shariah status and 0 otherwise,
BODINDft= The proportion of independent directors on the board,
BODSIZEft= The number of directors on the board,
DUALITYft= 1 if CEO is board chair and 0 otherwise,
SIZEft= Natural log of total assets of firm f in year y,
LEVERAGEft= Total liabilities to total assets of firm f in year,
GROWTHft= Market to book ratio of firm f in year y,
BIG4ft= 1 if a firm is audited by Big-4 audit firms and 0 otherwise,
YEARft= Year,
INDft= Industry.

RESULTS AND DISCUSSION

Descriptive Analysis

Table 1 shows the mean value of the absolute real earnings management proxy; RDE using the model introduced by Roychowdhury (2006), which is 0.059. Regarding the ownership by management, Table 1 indicate that the mean value of managerial ownership in the sample firms is 10.50 per cent. Table 1 also indicates that MANOWN may not be normally distributed. Thus, scatter plots and Kolmogorov Smirnov tests have been performed on residual values of regression model to ensure normality results are meet.

Table 1
DESCRIPTIVE STATISTICS (CONTINUOUS VARIABLES)

Variables	Mean	Median	Std. Dev
RDE	0.059	0.031	0.113
MANOWN	10.50	6.04	14.328
BODIND	0.405	0.380	0.1097
BODSIZE	7.55	7.00	1.975
SIZE	5.613	5.356	1.392
LEVERAGE	2.764	3.149	1.426
GROWTH	0.022	0.084	0.788

Correlation Analysis

Correlation among the variables for real earnings management; RDE are presented in Table 2. The correlation between RDE and MANOWN is positive but insignificant. Most of the independent variables are correlated negatively with the dependant variable, RDE.

Table 2
CORRELATION ANALYSIS

	MANOWN	GROWTH	LEVERAGE	SIZE	BIG4	DUALITY	BODSIZE	BODIND	SHARIAH
RDE	0.026	.066**	0.018	-.127**	-.058*	-0.017	-.073**	-0.038	-.053*
MANOWN	1	-.185**	-0.032	-.294**	-.185**	-.079**	-.073**	-0.039	.100**
GROWTH	-.185**	1	-.102**	-0.016	.058*	0.027	0.049	-0.006	-0.032
LEVERAGE	-0.032	-.102**	1	.144**	-0.017	-0.032	-.089**	.072**	-.080**

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SIZE	-.294**	-0.016	.144**	1	.240**	.086**	.338**	-0.008	-.106**
BIG4	-.185**	.058*	-0.017	.240**	1	.107**	.099**	-0.022	-.064*
DUALITY	.079**	-0.027	0.032	-.086**	-.107**	1	-.180**	.079**	.055*
BODSIZE	-.073**	0.049	-.089**	.338**	.099**	.180**	1	-.319**	-.081**
BODIND	-0.039	-0.006	.072**	-0.008	-0.022	-.079**	-.319**	1	0.001
SHARIAH	.100**	-0.032	-.080**	-.106**	-.064*	-.055*	-.081**	0.001	1
Note: ***Statistical significance at the 1% level; ** Statistical significance at the 5% level; * Statistical significance at the 10% level.									

Multivariate Analysis

Table 3 reports the results of the regression estimation of managerial ownership on the real earnings management proxy; RDE. As expected in H1a, the results show that managerial ownership has a significant positive association with RDE. The findings suggest that firms owned by management are more likely to be engaged in real earnings management in manipulating reported earnings. Although the findings are conflicting with Ali, et al., (2008) that document the role of managerial ownership in limiting accrual earnings management activities in Malaysian context, yet it seems consistent with Graham, et al., (2005) who stress that managers prefer real activities manipulation to manage reported earnings. In addition, Table 3 presents the results of interaction variable (MANOWN*SHARIAH) in the regression equation. The results indicate that the negative and significant relationship between the interaction variable and RDE, weaken the significant positive relationship between managerial ownership and RDE. The results are consistent with the hypothesis that the positive and significant relationship between managerial ownership is weak (strong) for Shariah (non-Shariah) firms.

With regard to the control variables included in this study, Table 3 shows a significant negative association between RDE and SIZE. This implies that larger firms are less likely to use abnormal discretionary expenses in managing reported earnings. This result is consistent with previous research by Ahmed & Duellman (2007); Watts & Zimmerman (1978), who argue that large firms are less likely to manage their reported earnings as they often receive more media attention, have a higher analyst following and face regular political scrutiny. In addition, Table 3 reveals a significant positive relationship between GROWTH and RDE. The finding suggests that high-growth firms in Malaysia are more motivated to engage in earnings management using abnormal discretionary expenses. This result supports the argument by Chen, et al., (2015) that high-growth firms have relatively stronger incentives to manage earnings in order to meet earnings targets. The findings also reveal that LEVERAGE is significant and contributes to explaining real earnings practices within the country studied. The result is consistent with previous research showing that leverage encourages earnings management activities (Dichev & Skinner, 2002; Beatty & Weber, 2003) in order to avoid debt covenant violations. Further, the results suggest that BODIND limit RDE.

Table 3
REGRESSION MODEL SUMMARY

	Expected Sign	**Model**
Manown	-	0.304*** (3.772)
Growth	+	0.185*** (6.798)
Leverage	+	0.094** (3.457)
Size	-	-0.152*** (-4.418)
Big4	-	-0.090** (-3.147)
Duality	+	0.012 (0.435)
Bodsize	-	0.004 (0.124)
Bodind	-	-0.055** (-1.893)
Shariah	-	-0.025 (-0.747)

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Manown*shariah	-	-0.389*** (-4.722)
Industy		YES
Year		YES
Intercept		0.196*** (2.977)
Observations		1393
Durbin-watson		1.676
R-square		14.40
Adjusted r-square		13.52
Note: ***Statistical significance at the 1% level; ** Statistical significance at the 5% level; * Statistical significance at the 10% level.		

CONCLUSION

This study investigates the association between managerial ownership and real earnings management in Malaysia. This study also investigates whether firm religious-influenced moderate the association between the two. This study is motivated by conflicting views on whether managerial ownership affects earnings management. The findings indicate that firm that has a concentration ownership by management is more likely to manage reported earnings using discretionary expenses. Thus, the results suggest that managerial ownership is not an effective mechanism in limiting real manipulation using discretionary expenses. In addition, results of this study show that religiosity; Shariah status is a moderating variable where the positive and significant relationship between the level of management ownership and real earnings management is weakened by a negative and significant relationship between the interaction between Shariah status of the firm and managerial ownership and real earnings management. This indicates that although firm that has level of management ownership is more likely to engage in real earnings management activities, other factors such as firm religious-influenced may also affect the behaviour. Religiosity is found to be an effective monitoring mechanism in limiting real earnings management activities, particularly in firms that has a high degree of managerial ownership.

There are a few limitations of this study. First, this study measures managerial ownership as the total percentage of direct director shareholdings. In order to get a clear picture on the impact of managerial ownership on real earnings management practice, future research may explore the effect of direct and indirect managerial shareholdings hold by executive and non-executive directors of listed firm in Malaysia. Second, this study uses only one proxy of real earnings management; discretionary expenses. To provide more interesting and meaningful results, future studies could use other proxies for measuring real earnings management in order to test for the robustness of the results of this study.

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