

Determinants of Fraudulent Financial Reporting: Evidence from Malaysia (Faktor-Faktor Laporan Penipuan Kewangan: Bukti dari Malaysia)

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ABSTRACT

This study examines two issues relating to fraudulent financial reporting in Malaysia. The first issue examines factors involved with fraudulent financial reporting practices; i.e. predisposition (i.e. related party transactions, history of prior violations, founders on board), motive (i.e. economic factor; ownership factor; political factor) and opportunity (i.e. poor corporate governance). Then, the second issue looks into the relationship between earnings management and the occurrences of fraudulent financial reporting. The study uses a matched sample of 53 firms that were convicted of issuing fraudulent financial statements during the period from 1996 to 2007. Our results show that firms with fewer related party transactions, higher number of prior violations, and higher proportion of founders on board are more likely to “tip” over the edge into fraudulent financial reporting. We also find that the corporate environment most likely to lead to fraudulent financial reporting is characterised by accounting practices that are already “pushing the envelope” on earnings management. Furthermore, we find that firms are embroiled in fraudulent financial reporting when non-family and non-foreigners own the company, and when the level of financial distress is high. As expected, our results also show that firms involved in fraudulent financial reporting have significantly poor corporate governance structures whereby the audit quality is lower and outside directors seem overcommitted. However, we find no evidence that firm’s political connection factor or the level of board independence play a significant role in the potential for fraudulent financial reporting.

Keywords: Fraudulent financial reporting; earnings management; corporate governance

ABSTRAK

Kajian ini mengkaji dua isu yang berkaitan dengan penipuan laporan kewangan di Malaysia. Isu pertama mengkaji faktor-faktor yang terlibat dengan amalan penipuan laporan kewangan; iaitu kecenderungan pengurusan (urus niaga pihak berkaitan, sejarah pelanggaran undang-undang terdahulu, kewujudan pengasas di dalam organisasi), motif (faktor ekonomi, faktor saham pemilikan, faktor politik) dan peluang (kelemahan tadbir urus korporat). Kemudian, isu kedua melibatkan hubungan antara pengurusan perolehan (“earnings management”) dan kejadian penipuan laporan kewangan. Kajian ini menggunakan sampel yang dipadankan daripada 53 syarikat yang telah disabitkan dengan penipuan penyata kewangan dalam tempoh dari tahun 1996 hingga 2007. Keputusan kajian menunjukkan bahawa firma-firma yang mempunyai kurang urus niaga pihak berkaitan, lebih tinggi sejarah pelanggaran undang-undang terdahulu, dan lebih tinggi bahagian (“proportion”) pengasas di dalam organisasi adalah lebih cenderung untuk terlibat di dalam penipuan laporan kewangan. Kami juga mendapati bahawa persekitaran korporat yang berkemungkinan membawa kepada penipuan laporan kewangan dicirikan oleh amalan pengurusan pendapatan yang kurang beretika. Tambahan pula, kajian juga mendapati bahawa firma-firma terbabit dalam penipuan laporan kewangan apabila individu bukan keluarga dan individu bukan warga asing yang memiliki saham firma terbabit dan apabila prestasi kewangan berada dalam tahap yang sangat lemah. Seperti yang dijangka, hasil kajian juga menunjukkan bahawa firma yang terlibat dalam penipuan pelaporan kewangan mempunyai struktur tadbir urus korporat yang lemah di mana kualiti audit adalah rendah dan pengarah mempunyai terlalu banyak komitmen dengan firma luar yang lain. Walau bagaimanapun, kami mendapati tiada bukti bahawa faktor berkaitan politik atau kehadiran pengarah bebas memainkan peranan penting dalam penglibatan dalam penipuan laporan kewangan.

Kata kunci: Laporan penipuan kewangan; pengurusan perolehan; tadbir urus korporat

INTRODUCTION

In the United States (US), corporate fraud cost is about \$US600 billion annually (Frieswick 2003). Kaminski, Wetzel and Guan (2004) described fraudulent financial

reporting (FFR) as “a matter of grave social and economic concern.” According to the Treadway Commission (1987), FFR is “intentional or reckless misconduct, whether act or omission, that results in materially misleading financial statements. It may entail gross and deliberate distortion

of corporate records and the misapplication of accounting principles.” The Association of Certified Fraud Examiners (ACFE) notes that FFR occurs with management’s knowledge and consent (ACFE 1993, sec 1.201).

FFR is different from earnings management (EM) with respect to the acceptability of accounting treatment (GAAP), while EM is still within GAAP, but pushing its limits. Bhattacharya, Daouk and Welker (2003) revealed that Malaysia is among the top ten countries under the category of most earnings aggressive group. Leuz, Nanda and Wysocki (2003) discovered that Malaysia, Hong Kong and Singapore have by far the worst EM ratings. According to Landsittel (2000), FFR starts out small as EM, and grows to become full-blown ‘cooking the books.’ Howe (1999) suggests that firms turn to FFR when they have limited opportunities to change to more aggressive EM methods.

Malaysia has substantial implications for corporate governance and FFR. In addition, poor investor protection and weak law enforcement create conditions for FFR. From 2006-2010, the Securities Commission (SC) initiated criminal prosecutions against Transmile, Megan Media, Nasioncom, Wimems, Welli Multi and MEMS Technology. Given the association between FFR and corporate governance, this study explains the factors associated with FFR in Malaysia, and examines whether firms that commit FFR differ from comparable firms in the fraud and pre-fraud year, via three questions: (1) Is there any significant difference on the firm’s predisposition, motives and opportunity factors between fraudulent and non-fraudulent financial reporting companies in Malaysia? (2) What are the factors that lead to the occurrences of FFR in Malaysia? (3) Do fraud firms engage in EM in the years prior to fraud year?

We collected a sample of 53 firms where a formal investigation by the SC for accounting irregularities between 1996 and 2007 led to an enforcement action against them. We examined variables measuring multiple aspects (related party transactions, history of prior violations, founders on board), motives (economic, ownership and political factors) and opportunities (poor corporate governance). We tested for differences in the variables between firms that commit fraud and an industry-matched counterpart. In addition to the univariate analysis, we performed logistic regressions on the combined sample to predict the likelihood of FFR.

INSTITUTIONAL BACKGROUND

FRAUDULENT FINANCIAL REPORTING IN MALAYSIA

FFR and related issues are now taking center stage. Regulators are seeking to ensure that accounting processes are reasonably “fail-safe” to maintain confidence in companies’ financial reporting and markets. Compared to the US, the situation in Malaysia is weak because: (1) in the US, corporate law enforcement has more bite, lower standards of criminal proof and extensive prosecutorial

resources; (2) failures come under intense media and public debate; and (3) investors and shareholders are more willing and able to file shareholder suits against directors, professionals and other parties.

Malaysian records from 2006 onwards show that there has been substantial progress in the capacity and effectiveness of market disciplinary mechanisms in highlighting corporate misconduct and fraud. The SC has shown that for 2009 and 2010, there were 18 and 26 enforcement actions, respectively. There have been more enforcement actions and whistleblower cases since the SC became a disclosure-based regulatory in 2003.¹ Table 1 presents summary of criminal prosecution for financial statement fraud initiated by SC.

TABLE 1. Criminal prosecution initiated (1998-2007)

Year	Number of Cases
1998	3
1999	5
2000	3
2001	4
2002	8
2003	9
2004	9
2005	11
2006	10
2007	14
2008	12
2009	18
2010	26

Cheng et al. (2010) found that in the US, institutional owners use class-action lawsuits to discipline managers for not following regulations. In Malaysia, punishment for corporate crime is lacking. The longest sentence for an offender under the 1983 Securities Industries Act was a one year prison term, on Chin Keem Feung and Shukri Sheikh Abdul Tawab, the former Independent Non-Executive Directors (NEDS) of Transmile Group Berhad (SC Malaysia 2012), compared to the 25-year jail sentence that WorldCom chief executive, Bernie Ebbers received. In June 2005, the Singaporean authorities arrested the CEO for his role in the China Aviation Oil Corp Ltd’s US\$554 million losses from derivatives trading and sentenced him to over four years in prison (Leen 2007). It is hence timely for a review so that all investors feel assured that governance is truly high.

HYPOTHESES DEVELOPMENT

Firms would avoid FFR if they knew they would get caught. Gereish (2003) posited that as long as there is uncertainty whether or not the deception will be detected, the firm may comply with GAAP requirements. This paper argues that the decision to engage in FFR requires that the firm must first

be predisposed towards adopting FFR, and be motivated to prepare FFR because of economic, ownership and political pressures. Poor corporate governance structures also make it possible to release false financial statements to the public. The prime focus of our study is to examine if predisposition, motives and opportunity have an impact on FFR; and the relationship between EM and FFR.

PREDISPOSITION FOR FRAUDULENT FINANCIAL REPORTING

Predisposition indicates a 'tendency' to select certain illegal activities because of socialisation or organisational processes. According to Dunn (1999), the history of prior violation and an unusually high number of related party transactions (RPTs) can lead to deviant corporate culture that predisposes a firm to issue FFR. The continuing influence of the founders on the firm's Board of Directors (BoDs) is an additional characteristic that helps to perpetuate this culture (Gereish 2003).

HISTORY OF PRIOR VIOLATIONS

Researchers have found that firms convicted of illegal actions have a history of prior violations (Baucus 1994; Davidson et al. 1994). Pfeffer (2002) posits that as policies and procedures become institutionalised through repeated use, they become acceptable social behaviors. Gereish (2003) examined organisational culture and FFR, and found that companies with a history of corporate illegal activities are more likely to issue FFR.

RELATED PARTY TRANSACTIONS

Many high profile financial statement frauds in recent years have involved RPTs² in some way. Theory suggests two alternative views of RPTs: (1) they represent a conflict of interest and this is consistent with agency issues (Berle & Means 1932; Jensen & Meckling 1976); and (2) they rationally fulfill other economic demands of a company, and are mechanisms that bond the party to the company.

Khanna and Palepu (2000b) provide evidence in India that RPTs are especially beneficial if the company is an affiliate of a diversified business group in an emerging market. Whether RPTs create or destroy value, especially in emerging markets is an open empirical question.

FOUNDERS ON THE FIRM'S BOARD

Evidence suggests that continuing presence of founders may make organisational culture more homogeneous (Davidson et al. 1994). Founders may have a very strong emotional commitment to the firm, such that they will do anything to ensure its survival, including engaging in illegal activities. Gereish (2003) found that their influence is even more pronounced when they constitute a large percentage of the Board. Hence, the first hypothesis is:

H₁ There is a significant relationship between predisposition (history of prior violations, existence

of RPTs and founders on Board) and occurrences of FFR

MOTIVATION FOR FRAUDULENT FINANCIAL REPORTING

Being predisposed to FFR alone is insufficient; there must be a strong motivation for the firm to adopt an aggressive accounting policy. Hence, it is hypothesised that a firm is motivated to commit FFR when it has a strong economic need to report results more favorably than it would if it followed GAAP requirements (Rosner 2003); and when the ownership arrangements encourage a short-term orientation to financial performance (Shleifer & Vishny 1997).

FINANCIALLY DISTRESSED FIRMS

Poor financial conditions may indicate a weak control environment, allowing the perpetration of fraud (AICPA 1997). Managers of firms with weak financial condition are more likely to window dress to disguise temporary difficulties (Rosner 2003). Hence, under severe financial distress, a firm might fraudulently report more favorable results.

OWNERSHIP FACTORS

A firm has a stronger motivation to commit FFR when it is non-family-managed (Shleifer & Vishny 1997), with lower foreign ownership interest (Khanna & Palepu 2000a).

Family Ownership Family ownership could affect the demand and supply of quality financial reporting, i.e., the entrenchment and alignment effects. The presence of family members holding important positions may result in inferior corporate governance. Another source of entrenchment is potentially greater information asymmetry between families and other shareholders, resulting in family members having both the incentive and the opportunity to manipulate accounting earnings for private rents.

A competing view is the alignment effect, that firms with high family ownership have incentives to report earnings in good faith, and thus, financial reporting is of higher quality. Family firms are less likely to engage in opportunistic behavior in reporting accounting earnings because it potentially could damage the family's reputation, wealth and long-term firm performance.

Foreign Ownership According to Khanna and Palepu (2000a), foreign-investors are likely to insist on higher standards of governance and protection of minority rights. Hence, we expect that firms' with foreign investors will be less likely to engage in FFR.

POLITICAL CONNECTION FACTOR

Politically connected firms are those owned and controlled by major shareholders and top management that are linked to politicians. These firms typically derive gains from their

connections³ over and above the payments that they make.⁴ Hence, such firms have more tendencies to misreport and overstate earnings. We therefore hypothesise that politically connected firms are more likely to engage in FFR, given the benefit of committing fraud is higher than the expected cost and penalty for fraud detection as follows:

H₂ There is a significant relationship between motives (economic, ownership and political connections factors) and occurrences of FFR.

OPPORTUNITY FOR FRAUDULENT FINANCIAL REPORTING

Empirical evidence suggests that opportunity to commit FFR increases when the firm has poor corporate governance structures, with few outsiders on the board, multiple directorships of board members and lower audit quality (Beasley 1996; Sharma 2004; Woodland & Reynolds 2003).

LACK OF INDEPENDENT BOARD OF DIRECTORS

The Malaysian Code of Corporate Governance (MCCG) recommends that listed firms adopt good governance practice by having a balanced board composed of at least one-third NEDs. Abdul Rahman and Mohamed Ali (2006) revealed that NED dominated boards do not affect company performance, implying that the said MCCG recommendation may not work in Malaysia, because most NEDs are selected not for their expertise and experience but for their networking contacts and contracts.

MULTIPLE DIRECTORSHIPS OF BOARD MEMBERS

“Multiple directorships” is where directors sit on more than one board. Holding too many directorships may make the directors so busy, resulting in less managerial oversight (Morck et al. 1988), and more possibility of FFR. Directors who serve on multiple boards would promote empire building amongst multiple firms they serve by engaging in inter-corporate collusion and inter-organisational elite co-optation and cooperation (Pfeffer & Salancik 1978; Useem 1984).

AUDIT QUALITY

The positive association between audit fees and earnings manipulation is relatively well established. It is argued that fraud firms would have higher audit fees than no-fraud firms since: (1) fraud firms present greater audit risk and auditors are likely to extend the scope and rigor of their

audits; and (2) from a risk-based perspective, auditors may increase audit effort and therefore, audit fees for firms with poor governance. We therefore predict a positive association between audit fees and the occurrences of FFR as follows:

H₃ There is a significant relationship between opportunity (poor corporate governance) and occurrences of FFR.

RELATIONSHIP BETWEEN EARNINGS MANAGEMENT AND FRAUDULENT FINANCIAL REPORTING

Ball, Robin and Wu (2003); Bhattacharya, Daouk and Welker (2003); and Leuz, Nanda and Wysocki (2003) have reported that EM practices are prevalent in Malaysian listed firms. Dechow et al. (2011) suggested that firms would turn to FFR when they have limited opportunities to change to more aggressive earnings management tactics. Companies then engage in FFR by creating artificial reserves, understating reserve liabilities, using creative acquisition accounting practices or manipulating GAAP to perpetuate myths involving company “growth.” Argenti (1976) noted that managers may resort to fraud and overstate earnings when the firm’s troubles no longer seem temporary and EM cannot sufficiently disguise them. Therefore, the final hypothesis is:

H₄ There is a significant positive relationship between earnings management and the occurrences of FFR.

RESEARCH DESIGN

SAMPLE

For the 1996-2007 period, 76 fraudulent companies were taken as the sample. However, 10 private companies were excluded because they are not subjected to the same governance and disclosure requirements as listed firms. A fraud firm is included if the appropriate annual report data and corporate governance information (from corporate annual reports, companies’ handbooks, Malaysia Stock Exchange and SC online search database) is available. Due to the unavailability of this information, another 13 companies were excluded leaving 53 firms.⁵

Diagram 1 shows the fraud year in each firm’s SC enforcement releases, which is the earliest set of financial statements for which the firm was convicted of fraud; and the date where the firms were first publicly alleged to have manipulated earnings.

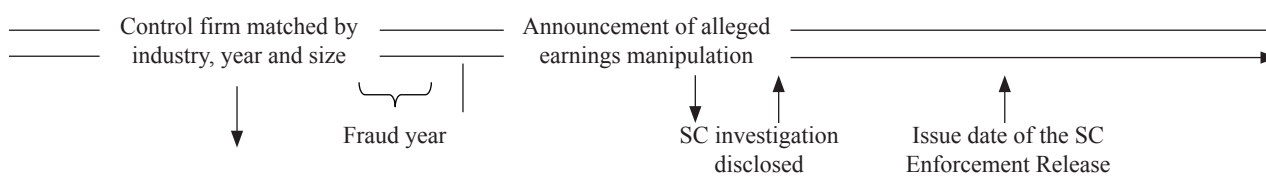


DIAGRAM 1. Chronology of events for a typical firm subject to SC enforcement for violating GAAP

We also identified a control firm with companies similar in industry and size (total assets) but where FFR was undetected. The major newspapers and both the Bursa Malaysia and SC Enforcement Releases were searched to ensure that the matched firm was not itself a fraud firm. The final sample for this study consists of 53 fraud firms and 53 matched non-fraud firms as in Table 2 (Panels A and B).

TABLE 2. Panel A – Corporate scandal frequency

Year	Number
1996	1
1997	0
1998	1
1999	3
2000	5
2001	10
2002	10
2003	4
2004	8
2005	5
2006	3
2007	3
Total	53

Note: The first year involved in an accounting scandal for 53 firms where a formal investigation by the SC of Malaysia for accounting irregularities leads to an enforcement action against the firm between 1996 and 2007.

TABLE 2. Panel B – Distribution of Fraud among Industry Sectors

Number of Fraud Firms	Percentage (%)	Industry
25	47.1%	Industrial Product
8	15.1%	Trading & Services
3	5.7%	Technology
5	9.4%	Plantation
10	18.9%	Consumer Product
1	1.9%	Mining
1	1.9%	Property
Total: 53	100%	-

Data for EM starts from year 5 prior to fraud year until year before the first year of accounting fraud. Since the actual occurrences of EM are unknown, the formula of performance-adjusted Modified Jones model (Kothari, Leone & Wasley 2005) was carried out yearly for those five year periods to identify EM, obtained from DataStream, annual reports and *Bursa Malaysia On Disc* CD-ROM.

MODELS AND VARIABLES

The following cross-sectional logistic regression models analyse the relationship between various determinants of fraud and FFR.⁶

Model 1:

$$FFR = \beta_0 + \beta_1PRIORS + \beta_2RPTs + \beta_3FOUND\% + \beta_4DISTRESS + \beta_5FAMOWN + \beta_6FOREIGNOWN + \beta_5POLITICS + \beta_6BODIND + \beta_5CROSSDIR + \beta_6AUDQ + \epsilon \quad (1)$$

Model 2:

$$FFR = \beta_0 + \beta_1PRIORS + \beta_2RPTs + \beta_3FOUND\% + \beta_4DISTRESS + \beta_5FAMOWN + \beta_6FOREIGNOWN + \beta_5POLITICS + \beta_6BODIND + \beta_5CROSSDIR + \beta_6AUDQ + EM + \epsilon \quad (2)$$

Model 1 examines a variety of previously suggested determinants of FFR. The dependent variable, FFR is measured dichotomously (Beasley 1996). The independent variables comprise ten (10) factors that could lead to FFR (history of prior violations (PRIORS), number of related party transactions (RPTs), percentage of firm’s founders on board (FOUND), the level of financial distress (DISTRESS), percentage of family ownership (FAMOWN), percentage of foreign ownership (FOREIGNOWN), political factor (POLITICS), percentage of board independence (BODIND), percentage of directors having cross-directorship (CROSSDIR) and audit quality (AUDQ). Specifically, fraud firms are predisposed to FFR (history of PRIORS, RPTs and FOUND); are more strongly motivated to engage in FFR (economic, ownership and political connections factors); and have a better opportunity to issue FFR due to poor corporate governance.

Predisposition (History of PRIORS, RPTs, and FOUND) PRIORS is measured by the number of times each sample firm has been investigated and convicted for violations related to financial misrepresentation by Federal government agencies, Bursa Malaysia and SC in the 5-year period prior to the fraud year (Baucus & Near 1991); RPTs by the number of separate RPTs disclosed in the annual report (Gereish 2003); and FOUND by the number of founders of the firm who are on the Board, divided by the total number of directors on the Board (Dunn 1999).

Motives (DISTRESS, FAMOWN, FOREIGNOWN, POLITICS) FFR can be due to either economic, ownership or political connection factors (see Rosner 2003; Beasley, Carcello & Hermanson 1999); and DISTRESS is measured by the Altman Z-score, as follows:

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5 \quad (3)$$

Where:

- X₁ = working capital to total assets.
- X₂ = retained earnings to total assets

X_3 = earnings before interest and taxes to total assets
 X_4 = market value of equity to total liabilities, and
 X_5 = net sales to total assets

A dummy variable is coded 1 for low Altman Z-Score (< 2.073) and 0 otherwise (Altman 1993; Gul 2006). Altman (1993) assumes that firms with Z-score of less than 2.073 have a stronger economic motive to issue FFR.

In this study, FAMOWN is measured by percentage of FAMOWN in the top ten largest shareholders; and FOREIGNOWN by the percentage of shares held by foreign shareholders in top ten largest shareholders.

POLITICS is coded "1" for firms owned and controlled by individuals, next of kin, relatives, or associates linked

to political parties and "0" otherwise (Johnson & Mitton 2003).

Opportunity (Poor corporate governance) BODIND is measured as the proportion of independent NEDs (Sharma 2004); CROSSDIR as the proportion of directors on board having at least one additional directorship in another company to total number of directors on board (Haniffa & Hudaib 2006); and AUDQ by the ratio of audit fees to total assets (Che Haat 2006).

Table 3 is a summary of the operationalisation of the variables. Model 2 adds the predictive variable, earnings management (EM) to the same independent variables in Model 1. We expect to find greater evidence of EM among fraud firms in the period before the scandal years and in the fraud year itself.

TABLE 3. Operationalisation of the research variables

Variables	Acronym	Operationalisation
Dependent variable		
Occurrences of fraudulent financial reporting	FFR	A dummy variable coded 1 if the firm issued FFR; and 0 otherwise.
Independent variables		
History of prior violations	PRIORS	The number of times each of the sample firms had been investigated and convicted by the Federal government agencies; Bursa Malaysia and Securities Commission of Malaysia in the 5-year period prior to the fraud year.
Related party transactions	RPTs	The number of RPTs the firm has
Founders on board (%)	FOUND	The percentage of FOUND on BoDs
Financial distress	DISTRESS	A dummy variable coded 1 for low Altman Z-Score (< 2.073); and 0 otherwise.
Family ownership (%)	FAMOWN	The percentage of FAMOWN in top ten largest shareholders.
Foreign ownership (%)	FOREIGNOWN	The percentage of FOREIGNOWN in top ten largest shareholders.
Political connection	POLITICS	A dummy variable coded 1 if the firms owned and controlled by individuals, next of kin, relatives or associates linked to the top government officials of the political parties in Malaysia; and "0" otherwise.
Lack of independent board (%)	BODIND	The percentage of outside directors on the board of directors.
Multiple directorships (%)	CROSSDIR	The proportion of directors on board having at least one additional directorship in another company to total number of directors on board.
Audit quality	AUDQ	Ratio of audit fees to total assets.
Earnings management	EM	Measured by performance matched discretionary accruals (DAC) based on Kothari, Leone and Wasley's (2005) model.

MEASUREMENT OF EARNINGS MANAGEMENT

This study uses Kothari et al.'s (2005) model to measure EM. First, total accruals is calculated as the change in non-cash current assets minus change in current liabilities excluding the current portion of long-term debt, depreciation and amortisation, scaled by lagged

total assets. Second, the Jones model DAC is estimated cross-sectionally using all-firm year observations for each industrial sector.

$$TACC_{it}/TA_{it-1} = \alpha_0 + \alpha_1(1/TA_{it-1}) + \alpha_2 + \frac{REV_{it}/TA_{it-1} + \alpha_3 PPE_{it}/TA_{it-1} + \alpha_4 ROA_{it} + \epsilon_{it}}{\alpha_4 ROA_{it} + \epsilon_{it}} \quad (4)$$

Where:

- TACC = total accruals
- TA = total assets
- +REV = change in revenue
- PPE = gross property, plant and equipment
- ROA = return on assets

The estimated values of TACC in the above model are normal accruals given the sales and firms' assets. The estimates for coefficients $\alpha_1, \alpha_2, \alpha_3$ and α_4 are obtained by sector classification from the regressions and then used to estimate performance-adjusted DAC as follows:

$$DAC_{it} = TACC_{it}/TA_{it-1} - [\alpha_0 + \alpha_1(1/TA_{it-1}) + \alpha_2 + REV_{it}/TA_{it-1} + \alpha_3 PPE_{it}/TA_{it-1} + \alpha_4 ROA_{it}] \quad (5)$$

EMPIRICAL RESULTS

DESCRIPTIVE STATISTICS

Univariate Analysis Table 4 shows the results of univariate analysis of these predispositions, motives and opportunity variables during fraud year. Since the descriptive statistics are for both continuous and

dichotomous variables, T-stats and Chi-square tests were used to test for differences where appropriate. They show that there are statistical differences in financial reporting characteristics between fraud firms and no-fraud firms with respect to all the predispositions variables. Predisposition is captured through the number of RPTs, PRIORS and FOUND, which are significantly different between fraud and no-fraud firms. Both PRIORS and FOUND produce significant results consistent with our expectation. However, RPTs result is opposite to the predicted direction.

In Table 4, the results for FFR motive indicate that firms have a significantly different profile of ownership structures (i.e., FAMOWN) and DISTRESS during the fraud year, which is significantly higher for fraud firms. The results also show that family and foreign investors of fraud firms hold a lower percentage of the firm's equity than the no-fraud firms, with no statistical difference in FOREIGNOWN between fraud and no-fraud firms during the fraud year. For DISTRESS, the results demonstrate that fraud firms are significantly more financially distressed than no-fraud firms, with no statistical difference between fraud and no-fraud firms with regards to POLITICS.

TABLE 4. Comparing profiles of fraud and no-fraud firms

	Mean	Std. Dev	Mean	Std. Dev	T-Test	Chi-Square Test	
	Fraud (n = 53)		No Fraud (n = 53)			Fraud (n = 53)	No Fraud (n = 53)
RPTs	4.06	5.439	7.57	7.626	-2.569**		
PRIORS	1.51	2.484	0.06	0.323	3.960***		
FOUND	0.14	0.187	0.06	0.105	2.297**		
DISTRESS						62.8 (%)	37.2 (%)
FAMOWN	5.97	13.041	22.23	22.73	-4.254***		
FOREIGNOWN	4.84	11.496	5.42	13.287	-0.228		
POLITICS						51.1 (%)	48.9 (%)
BODIND	0.44	0.164	0.39	0.127	1.813*		
CROSSDIR	0.64	0.235	0.53	0.244	2.107**		
AUDQ	0.00082	0.00120	0.00073	0.00089	0.447		

Contrary to expectations, the fraud firms have a significantly higher percentage of BODIND than the no-fraud firms, significant at the 0.07 level. Also, directors of fraud firms, on average, held more directorships in unaffiliated companies than their no-fraud counterparts. However, there is no statistical difference between these two samples of firms with respect to audit fees.

Table 5 reports the Pearson correlations among the explanatory variables during the fraud year. The strongest correlations are -0.372 between FAMOWN and DISTRESS, and -0.322 between FAMOWN and PRIORS, indicating that family firms have significantly lower level of DISTRESS and less PRIORS, confirming prior research (e.g., Anderson & Reeb 2003; Khanna & Palepu 2000a). In addition,

DISTRESS and PRIORS are significantly correlated with each other (0.229), suggesting that firms experiencing DISTRESS are also more likely to have PRIORS.

Interestingly, we find a positive relationship between FAMOWN and RPTs, marginally significant (0.194) at 10% level, suggesting that family firms engage in high number of RPTs within the group.

In addition, there exists a strong positive correlation between BODIND and DISTRESS (0.270), which suggests that companies with independent board members seem to have more financial difficulties. Thus, the recommendation by the MCCG to have at least one third of the board comprising NEDs may not be beneficial for Malaysian listed firms. Overall, the Pearson correlations between the factors are

TABLE 5. Correlations between test variables

	RPTs	PRIORS	FOUND	DISTRESS	FAMOWN	FOREIGNOWN	POLITICS	CROSSDIR	BODIND	AUDQ	EM
RPTs	1										
PRIORS	-.118	1									
FOUND	.031	.019	1								
DISTRESS	-.055	.229(**)	.092	1							
FAMOWN	.194(*)	-.322(***)	.218(**)	-.372(***)	1						
FOREIGNOWN	.099	.042	-.126	-.044	-.225(**)	1					
POLITICS	-.009	-.095	-.217(*)	.251(*)	-.160	.103	1				
CROSSDIR	-.047	.071	.201(*)	.013	.040	-.107	.076	1			
BODIND	-.228(**)	.080	.017	.283(***)	-.071	-.114	-.007	-.050	1		
AUDQ	.030	-.068	.145	-.276(***)	-.044	-.104	-.117	.015	.015	1	
EM	.165	.036	-.101	-.118	.021	.214(**)	-.174	.006	-.190	.006	1

Notes: Pearson correlations during fraud year are reported in the table. *, **, *** denotes significance at 10%, 5% and 1% level respectively.
N = 106

low, indicating that multicollinearity is not likely to pose a problem in our regression analyses.

LOGISTIC REGRESSION RESULTS

H_1 - H_3 predicts that there are significant relationships between predisposition, motives and opportunity, and FFR. In the fraud year, the results of Model 1 are presented in Table 6. For the predicted fraud firms, the model has R^2 value of 59% and correctly predicts 89.8% of the firms as no-fraud firms (92.2%) and fraud firms (87.2%). Table 6 reveals RPTs, FAMOWN and audit fees are negatively related to the likelihood of FFR. On average, PRIORS, FOUND, DISTRESS and CROSSDIR are positively related to the occurrences of fraud. The coefficients of each variable are in the predicted direction. However, the coefficient for RPTs (0.027) and audit fees (0.033) variables produced inconsistent results. The negative sign of RPTs indicates that fraud firms have less RPTs than no-fraud firms. Upon reviewing the characteristic of the fraud and no-fraud firms during fraud year, we observe that 91% of the fraud firms are unaffiliated focused firms, while 89% of the no-fraud firms are affiliated with diversified business groups. With regards to audit fees, lower audit fees for fraud firms signify less audit effort, implying that in the fraud year, auditors failed to properly assess their audit risks.

TABLE 6. Logistic regressions for fraud year (Model 1)

	Model 1
Intercept	3.106 (2.602)
RPTs	-0.169** (4.889)
PRIORS	2.929*** (9.253)
FOUND	11.413*** (6.954)
DISTRESS	3.012*** (8.258)
FAMOWN	-0.070** (4.221)
FOREIGNOWN	-0.031 (0.885)
POLITICS	-0.690 (0.724)
CROSSDIR	4.310** (4.740)
BODIND	-0.516 (0.041)
AUDQ	-1.476** (4.537)
Cox & Snell R^2	0.590
N	106

Note: Logistic regressions for fraud year are reported in the table. The dependent variable is 1 for fraud firms. *, **, *** denotes significance at 10%, 5% and 1% level respectively. Wald statistics are reported in parenthesis.

Looking at the relationship between FAMOWN and the occurrences of FFR, we observe a significant negative relationship that runs from this variable to the probability of occurrences of fraud. More importantly, this study documents evidence challenging the traditional view of the 'entrenchment effect' that family firms have both the incentive and opportunity to manipulate accounting earnings for gaining private rents.

The coefficient for PRIORS variable is positive and significant, consistent with our prediction that firms with a history of illegal activities are more likely to issue FFR. We also found evidence that FOUND is positively associated with the occurrences of FFR, which is shown by the significant positive coefficient. The result lends support to Gereish (2003) that regardless of their ownership interest, founders may have a very strong emotional commitment to the firm than anyone else, thus engaging in illegal activities to ensure the survival of their firms.⁷

One notable point is the different coefficient sign for both FAMOWN and FOUND when we tested their relationship with the incidence of FFR. To obtain further evidence on FAMOWN and FOUND, we reviewed the characteristics of fraud and no-fraud firms during fraud year. A satisfactory explanation for this finding is that 12 out of 53 fraud firms with high percentage of FAMOWN (ranging from 45% to 80%) have no founders on Board, and this could be the leading cause for FAMOWN and FOUND to have negative and positive signs, respectively. Thus, we believe that in Malaysia, FAMOWN and FOUND are not perfect complements, and conclude that these two constructs measure different concepts.

DISTRESS is positively and significantly associated with FFR, with a significant positive association between CROSSDIR, and the incidence of FFR, suggesting that multiple directorships may have negative effects on the effective monitoring function of the board, and eventually on the company's performance. Nonetheless, we find no evidence that FOREIGNOWN, POLITICS and BODIND are significantly related to fraud.

We also examined fraudulent and non-fraudulent reporting companies in the year before the first year of accounting fraud. The year prior to the initial year of fraud was used to better represent the actual perpetration of the fraud. Our second regression model tests the association between predisposition, motives and opportunity; and the incidence of fraud with variables in the year before the fraud year, as in Model 1 of Table 7.

This model is well specified ($p = 0.000$) and has R^2 value of 66.9%, correctly predicting 97% of the firms as no-fraud (98%) and fraud (96%). These results are generally similar to those of Model 1 in the year of the fraud, which indicate that the coefficients on PRIORS, FOUND, DISTRESS and CROSSDIR remain significantly positive for one year prior to the fraud year. Results in the year prior to the fraud year also indicate a negative association between FAMOWN, FOREIGNOWN and audit fees. The result is insignificant for RPTs even though this variable has similar negative sign as

TABLE 7. Logistic Regressions for One Year Prior to Fraud Year (Model 1)

	Model 1 – One Year Prior to the Fraud Year	
Intercept	-17.362**	(4.101)
RPTs	-0.193	(1.926)
PRIORS	4.545**	(5.442)
FOUND	35.623**	(4.779)
DISTRESS	10.660**	(5.319)
FAMOWN	-0.188**	(4.572)
FOREIGNOWN	-0.168**	(3.934)
POLITICS	-2.056	(1.780)
CROSSDIR	13.837**	(4.111)
BODIND	7.513	(1.226)
AUDQ	-2.570**	(5.426)
Cox & Snell R ²	0.669	
N	106	

Note: Logistic regressions for one year prior to fraud year are reported in the table. The dependent variable is 1 for fraud firms. *, **, *** denotes significance at 10%, 5% and 1% level respectively. Wald statistics are reported in parenthesis.

in the fraud year. Additionally, in the year prior to the fraud year, FOREIGNOWN has a negative sign and is statistically significant, which suggest that foreign owners are more astute in lowering their ownership sooner than the rest.

The results in the year prior to the fraud year provides additional support for the hypotheses H₁, H₂, and H₃ that predisposition, motives and opportunity have an impact on a firm's propensity to commit fraud. This suggests that a corporate environment that is ripe for fraud did exist even before the scandal year, indicating that pre-fraud financial statement factors have explanatory power in assessing the likelihood of fraud prior to its occurrence.

H₄ states that there is a significant positive relationship between EM and the occurrences of FFR. To test this hypothesis, we included EM variable measured using DAC as an indicator of the propensity to commit fraud. Table 8 reports the results for Model 2 for the fraud year and one year prior to fraud year. In general, our findings remain the same, i.e., similar to those of Model 1 for both fraud year and in year prior to fraud year. However, the addition of EM variable (DAC) increased the R² to 60.3% from 57.7% and to 69.2% from 66.9%, respectively for fraud year and one year prior to fraud year, where the differences are significant at the 5% level. The DAC are found to have a significant and positive relationship with the incidence of fraud during fraud year and one year prior to fraud year at 0.045 and 0.049 levels, respectively. Hence, we conclude that our results provide support for H₄.

TABLE 8. Logistic regressions with addition of earnings management variable during fraud year and one year prior to fraud year (Model 2)

	Model 2 (Fraud Year)		Model 2 (One Year Prior to Fraud Year)	
Intercept	-3.903*	(3.034)	-15.976**	(3.924)
RPTs	-0.203**	(4.816)	-2.740*	2.718
PRIORS	3.336***	(8.154)	6.292**	(4.658)
FOUND	15.512**	(6.533)	40.826**	(4.531)
DISTRESS	3.617***	(9.321)	13.499**	(4.802)
FAMOWN	-0.083**	(4.565)	-0.281**	(4.751)
FOREIGNOWN	-0.063	(0.876)	-0.277*	(3.491)
POLITICS	-0.723	(0.694)	-0.954	(1.084)
CROSSDIR	5.205**	(5.348)	16.022**	(4.282)
BODIND	0.209	(0.006)	1.338	(0.047)
AUDQ	-1.827**	(4.569)	-3.798**	(5.160)
EM	7.535**	(4.034)	1.530**	(3.889)
Cox & Snell R ²	0.603		0.692	
N	106		106	

Note: Logistic regressions with addition of earnings management variable measured using DAC for fraud year and one year prior to fraud year are reported in the table. The dependent variable is 1 for fraud firms. *, **, *** denotes significance at 10%, 5% and 1% level respectively. Wald statistics are reported in parenthesis.

DISCUSSION OF EARNINGS MANAGEMENT AND
INCIDENCE OF FRAUD

To investigate whether fraud firms are more likely to regularly engage in EM than no-fraud firms, in the years

prior to fraud year, we calculated DAC for one year to five years prior to the fraud year. The univariate analysis for both T-test and Wilcoxon Signed Rank Test was conducted to compare the mean and median of DAC during this five year period, as in Table 9.

TABLE 9. Comparing earning management practices for fraud and no-fraud firms during five (5) years period prior to fraud year

	Fraud Firms			No Fraud Firms		Paired Differences (Fraud Firms - No Fraud Firms)	
	N	Mean	Median	Mean	Median	Mean (T-Test)	Median (Wilcoxon Signed Rank Test)
EM(FY)	106	0.45	0.146	0.07	0.051	2.218**	-4.630***
EM1	106	0.31	0.101	0.08	0.053	1.669*	-2.482**
EM2	106	0.18	0.085	0.09	0.068	2.236**	-1.778*
EM3	106	0.15	0.090	0.09	0.059	1.772*	-1.196
EM4	106	0.14	0.071	0.11	0.044	0.887	-1.114
EM5	106	0.21	0.107	0.14	0.064	0.905	-0.984
EMgrowth [EM(FY)_EM3]	102	0.30	0.020	-0.02	-0.010	1.877*	-2.939***
EMgrowth [EM(FY)_EM4]	102	0.32	0.025	-0.03	-0.005	1.989*	-1.945*
EMgrowth [EM(FY)_EM5]	102	0.25	-0.010	-0.07	-0.025	1.622	-2.139**

Note: EM is discretionary accruals measured using performance-adjusted Modified Jones model (Kothari et al., 2005). EM(FY) is discretionary accruals calculated for fraud year. EM1 is discretionary accruals calculated for one year prior to fraud year. EM2 is discretionary accruals calculated for two years prior to fraud year. EM3 is discretionary accruals calculated for three years prior to fraud year. EM4 is discretionary accruals calculated for four years prior to fraud year. EM5 is discretionary accruals calculated for five years prior to fraud year. EMgrowth [EM(FY)_EM3] is defined as the growth of DAC during 3 years period prior to fraud year, and is calculated as [(DAC fraud year - DAC3 years prior to fraud year)/DAC3 years prior to fraud year]. EMgrowth [EM(FY)_EM4] is defined as the growth of DAC during 4 years period prior to fraud year, and is calculated as [(DAC fraud year - DAC4 years prior to fraud year)/DAC4 years prior to fraud year]. EMgrowth [EM(FY)_EM5] is defined as the growth of DAC during 5 years period prior to fraud year, and is calculated as [(DAC fraud year - DAC5 years prior to fraud year)/DAC5 years prior to fraud year]. *, **, *** denotes significance at 10%, 5% and 1% level respectively.

Table 9 reveals that: both mean and median DAC are greater for fraud firms for two years and one year prior to fraud year; the mean of DAC is greater for three years prior to fraud year; and both mean and median of DAC are not significantly different between groups for four and five years prior to fraud year, implying that the practice of EM becomes more aggressive in the years immediately before the fraud year. Additionally, when we examined the growth of DAC over three and four year periods, both mean and median for the growth in DAC over these time periods are greater for the scandal firms than the no-scandal firms, suggesting that there is a significant decline in the accounting quality of the fraud firms. We hence conclude that the fraud firms have been consistently aggressive in their reporting practices for several years prior the accounting fraud. Finally, to make sure our results are not driven by our control sample of no-fraud firms, we performed regression analyses (not shown) with dummy variables for industries and log of assets (proxy for matching by size) in our regression models, which were not significant.

In essence, we conclude that when a firm's economic troubles are no longer temporary, and EM cannot sufficiently disguise the firm's failing condition, the managers may resort to fraud, that is mitigated if they can depend on RPTs, when non-founders own the company and cross directorship is lower.

ADDITIONAL ANALYSES

Several additional tests were carried out to determine the sensitivity of the results and the robustness of the findings, by repeating the regression model, allowing for a different proxy to measure FOUND; and further re-examining it using a different proxy to measure RPTs. Finally, to test the robustness of the regression analysis performed earlier, audit fees was replaced by the auditor change as another proxy for AUDQ.

Alternative Measurement for Founders on Board The argument in support of Hypothesis 1 is that founders have a significant influence over the BoDs, regardless of their ownership interest in the firm. This hypothesis is strongly supported in the multivariate analysis of the data (Tables 6 and 7). A secondary test is to determine if the FOUND is important, or merely whether a single founder on the BoDs can cause this effect.

In the earlier analysis during the fraud year, FOUND was treated as a ratio variable. Perhaps, the results on FOUND may have been better if the variable was treated as a continuous variable, FOUNDERNO, which is the number of founders on the BoDs. Table 10 shows a significant association between this variable and the incidence of FFR. The direction of coefficient and the level of significance is almost identical with the earlier findings, meaning that it is not only the percentage control of the BoDs, but

FOUNDERNO could also influence the strategic accounting choice decision.

Alternative Measurement for Related Party Transactions In the earlier analysis during fraud year, the RPTNO variable has a negative relationship with the occurrences of FFR, differing from other studies' prediction of a positive relationship. This was tested using the value of related party transactions (RPTAMT) that indicates a deviant organisational culture, as presented in Table 11, where the overall results with variable RPTAMT do not change significantly from the basic model, suggesting consistent results concerning the direction of RPTAMT variable. However, it can be seen that the level of significance for RPTAMT experienced a modest decrease compared to the one in the earlier model since it is now statistically significant at the 10 percent level compared to the five percent level previously. This study indicates that RPTs are not necessarily a mechanism for fraud, and their presence need not indicate FFR.

Alternative Measurement for Audit Quality In the basic model during the fraud year, AUDQ is treated as a continuous variable measured by the ratio of audit fees to TA. This study found a significant negative association between AUDQ and the incidence of FFR, indicating less audit effort in assessing the audit risks during fraud year. To test the robustness of the regression analysis earlier, this study also investigated the effect of AUDQ using auditor change (AUDCHANGE).

The available empirical evidence posits that short tenures of the auditor-client relationship are associated with reduced AUDQ, due to lack of client-specific knowledge. Similar to Summer and Sweeney (1998), AUDCHANGE is operationalised as a dichotomous variable representing a new client (if the auditor has been with the client for two years or less) (1), or an established client (0). A dummy variable, AUDCHANGE is incorporated in the regression model (see Table 12).

TABLE 10. Logistic regressions for fraud year (Number of founders on board)

	Model 1	
	Coefficient (β)	Wald
Intercept	-3.682*	3.348
RPTs	-0.186**	5.348
PRIORS	3.002***	9.039
FOUNDNO	1.763***	7.285
DISTRESS	3.276***	9.324
FAMOWN	-0.081**	4.645
FOREIGNOWN	-0.033	0.964
POLITICS	-0.833	1.028
CROSSDIR	4.881**	5.926
BODIND	-0.096	0.001
AUDQ	-1.370**	5.129
Cox & Snell R ²	0.579	
N	106	

Note: Logistic regressions for fraud year are reported in the table. The dependent variable is 1 for fraud firms. *, **, *** denotes the significance at the 10%, 5% and 1% levels, respectively.

TABLE 11. Logistic regressions for fraud year (Amount of related party transactions)

	Model 1	
	Coefficient (β)	Wald
Intercept	-2.385	1.674
RPT_AMT	-0.007*	2.883
PRIORS	2.118***	7.620
FOUND	11.558***	6.249
DISTRESS	2.958***	9.252
FAMOWN	-0.081**	5.600
FOREIGNOWN	-0.011	0.178
POLITICS	-0.770	0.972
CROSSDIR	3.279*	3.396
BODIND	-0.683	0.071
AUDQ	-1.950**	5.729
Cox & Snell R ²	0.565	
N	106	

Notes: Logistic regressions for fraud year are reported in the table. The dependent variable is 1 for fraud firms. RPT_AMT is the total amount of related party transactions the firm has. *, **, *** denotes the significance at the 10%, 5% and 1% levels, respectively.

TABLE 12. Logistic regressions for fraud year (auditor change)

	Model 1	
	Coefficient (β)	Wald
Intercept	-4.258**	3.933
RPTs	-0.222***	7.079
PRIORS	3.108***	8.537
FOUND	13.338***	9.046
DISTRESS	3.618***	8.739
FAMOWN	-0.055*	2.587
FOREIGNOWN	0.011	0.045
POLITICS	0.243	0.076
CROSSDIR	3.299*	3.096
BODIND	-3.019	1.203
AUDCHANGE	3.367***	6.763
Cox & Snell R ²	0.586	
N	106	

Note: Logistic regressions for fraud year are reported in the table. The dependent variable is 1 for fraud firms. AUDCHANGE is operationalized as a dichotomous variable representing a new client (1), or an established client (0). *, **, *** denotes the significance at the 10%, 5% and 1% levels, respectively.

Consistent with the expectation and arguments that AUDQ (as proxied by AUDCHANGE) is lower in the early years of the auditor-client relationship, the study finds a significant positive relationship between recent AUDCHANGE and FFR, indicating that low AUDQ is associated with the incidence of fraud. In the previous regression model, low AUDQ, as proxied by low audit fees, seems to influence the incidence of fraud, whereas the result in Table 12 indicates that it contributes to fraud. Hence, it can be concluded that the incidence of FFR implies that the audits performed were of low quality. Hence, to the extent that a new auditor may be less familiar with the client's industry, FFR may be more likely.

CONCLUSION

Accounting fraud is characterised by fewer RPTs, higher PRIORS, higher proportion of FOUND, higher DISTRESS, higher CROSSDIR and lower AUDQ. We also find that firms with family and foreign investors are less likely to have enforcement actions against them.

There is no evidence that POLITICS and BODIND play a role in FFR, possibly because the investigations by SC may itself be subjected to political agendas (Gunasegaram 2007), as the SC itself is not a fully independent agency.⁸ The insignificant positive relationship between BODIND and accounting fraud raises questions of whether independent directors in Malaysia are truly independent or just fulfilling Code requirements.

Our findings suggest that in emerging economies, the institutional and external audit environment, and the flexibility in financial reporting, have significant implications for FFR. External auditors seem to be unable

to screen their clients for EM that can eventually lead to FFR. Also, RPTs, prior violations of securities laws and the ownership structure are better predictors of FFR than BODIND.

To the best of our knowledge, this study is the first to test whether EM practice may escalate to the level of accounting fraud, by providing evidence that EM has a positive and significant relationship with FFR, which confirms that EM practices, in addition to other governance variables, affect the probability of FFR. In addition, the findings reveal that fraud firms have been consistently aggressive in their reporting practices for several years prior the accounting fraud. Finally, it should be pointed out that for investors who are looking for a quick fix to the accounting fraud, governance changes alone are insufficient. The culture where founders and managers "live or die" based on whether they meet earnings targets could also be blamed. Thus, given the substantial costs associated with accounting fraud, the value of analysis of financial statement information to detect accrual management should be emphasised to help identify aggressive earnings management. A limitation of this study is the dichotomous measure of the materiality of fraud, which treats all frauds equally. Future studies should capture a more robust measure of FFR. To help develop "red flags," we also encourage similar studies be conducted in other emerging economies in order to verify whether the same fraud factors used in our study can be used in other developing countries.

The study suggests that regulators need to strengthen the legal regime and the firms' level of transparency to an acceptable level. All related parties must be jointly responsible, and be willing to handle this issue. The political will must also be there to let all corporate wrongdoings come to light.

ENDNOTES

- ¹ An overview of the transition is available at Malaysian Securities Commission's website: see <http://www.sc.com.my>.
- ² We use the term related party transaction as defined in Financial Reporting Standard 124, MASB Regulation: A transfer of resources, services or obligations between related parties, regardless of whether a price is charged. A party is related to an entity if (a) directly or indirectly through one or more intermediaries, the party controls, is controlled by or is under common control with, the entity (this includes parents, subsidiaries and fellow subsidiaries); has an interest in the entity that gives it significant influence over the entity; or has joint control over the entity; (b) the party is an associate of the entity; (c) the party is joint venture in which the entity is a venturer; (d) the party is a member of the key management personnel of the entity or its parents; (e) the party is a close member of the family; (f) the party is a post employment benefit plan for the benefit of employees of the entity.
- ³ See Cull and Xu (2005) and Johnson and Mitton (2003) for evidence of preferential access to credit; Dinc (2005) and Backman (1999) for evidence of preferential treatment by government owned banks; Agrawal and Knoeber (2001) for preferential treatment in the award of government contracts and Faccio, Masulis and McConnell (2007) for bailouts.
- ⁴ See Cull and Xu (2005) and Svensson (2003) for discussion of bribes and Fan and Wong (2007) for vote-buying behaviour.
- ⁵ In terms of representation of the population of listed firms, our fraud sample represents approximately 4.7 percent of listed firms in Malaysia (47 firms divided by an average of 1,000 listed firms). This compares favorably to the fraud sample proportions of approximately 0.75 percent (75 fraud firms divided by 10,000) in Beasley (1996) and 0.78 percent (78 fraud firms divided by 10,000) in Abbott, Park and Parker (2000).
- ⁶ We have no intention to analyse the consequences of fraud as we could not obtain the data required. We learned that a majority of the fraud firms did not survive whereby 28% of fraud firms went out of business (mostly due to financial reasons) and 26% of the firms were acquired by other companies.
- ⁷ To test the assertion that founders engage in illegal activities to ensure the survival of the firm, we performed our analyses with additional interaction FOUND_DISTRESS variable for the fraud year. We found a moderately significant (0.089) and positive coefficient for FOUND_DISTRESS. This result was in line with expectations and supported our view that founders have strong motivation for fraudulent financial reporting to camouflage weak financial performance in an attempt to minimise the negative impact of financial distress.
- ⁸ The SC of Malaysia is a self-funding statutory body with investigative and enforcement powers. It reports to the Minister of Finance and its accounts are tabled in Parliament annually.

REFERENCES

Abdul Rahman, Rashidah & Fairuzana Haneem Mohamed Ali. 2006. Board, audit committee, culture and earnings

- management: Malaysian evidence. *Managerial Auditing Journal* 21(7): 783-803.
- Abbott, L.J., Park, Y. & Parker, S. 2000. The effects of audit committee activity and independence on corporate fraud. *Managerial Finance* (26): 55-67.
- Association of Certified Fraud Examiners (ACFE). 1993. Fraud Examiners Manual: Volume 1. Austin, Tex.: ACFE.
- Agrawal, A. & Knoeber, C.R. 2001. Do some outside directors play a political role? *Journal of Law and Economics* 44: 179-198.
- AICPA. 1997. Consideration of Fraud in a Financial Statement Audit, Statement on Auditing Standards No. 82. New York: American Institute of Certified Public Accountants.
- Altman, E.I. 1993. *Corporate Financial Distress and Bankruptcy*. 2nd edition. New York: John Wiley & Sons.
- Anderson, R.C. & Reeb, D.M. 2003. Founding-family ownership and firm performance: Evidence from the S&P 500. *The Journal of Finance* 58: 1301-1328.
- Argenti, J. 1976. *Corporate Collapse: The Causes and Symptoms*. New York: John Wiley and Sons.
- Backman, Micheal. 1999. *Asian Eclipse: Exposing the Dark Side of Business in Asia*. Singapore: Wiley.
- Ball, R., Robin, A. & Wu, J. 2003. Incentives versus standards: Properties of accounting income in four East Asian countries. *Journal of Accounting and Economics* 36: 235-270.
- Baucus, M. & Near, J. 1991. Can illegal corporate behavior be predicted? An event history analysis. *Management Journal Academy* 20(4): 699-721.
- Baucus, M. 1994. Pressures, opportunity and predisposition: A multivariate model of corporate illegality. *Journal of Management* 20(4): 699-721.
- Beasley, M.S. 1996. An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review* 71(4): 443-465.
- Beasley, M.S., Carcello, J.V. & Hermanson, D.R. 1999. *Fraudulent Financial Reporting: 1987-1997-An Analysis of U.S. Public Companies*. New York: The committee of sponsoring organizations of the Treadway Commission.
- Berle, A.A. & Means, G.C. 1932. *The Modern Corporation and Private Property*. New Brunswick: Transaction Publisher.
- Bhattacharya, U., Daouk, H. & Welker, M. 2003. The world price of earnings opacity. *The Accounting Review* 78(3): 641-678.
- Che Haat, M.H. 2006. *The effect of corporate governance on transparency and performance of Malaysian companies*. Unpublished PhD Dissertation, Universiti Teknologi MARA, Malaysia.
- Cheng, A., Huang, H., Li, Y. & Lobo, G. 2010. Institutional monitoring through shareholder litigation. *Journal of Financial Economics* 95(3): 356-383
- Cull, R. & Xu, L.C. 2005. Institutions, ownership, and finance: The determinants of profit reinvestment among Chinese firms. *Journal of Financial Economics* 77: 117-146.
- Davidson, W., Worrell, D. & Lee, C. 1994. Stock market reactions to announced corporate illegalities. *Journal of Business Ethics* 13: 583-613.
- Dechow, W.Ge, Larson, C.R. & Sloan, R.G. 2011. Predicting material accounting misstatements. *Contemporary Accounting Research* 28: 17-82.
- Dinc, I. Serdar. 2005. Politicians and banks: Political influences on government-owned banks in emerging countries. *Journal of Financial Economics* 77: 453-479.

- Dunn, P. 1999. Fraudulent financial reporting: Perception based on predisposition, motives and opportunity. *Managerial Auditing Journal* 16(1): 93-120.
- Faccio, M., Masulis, R.W. & McConnell, J.J. 2007. Political connections and corporate bailouts. *Journal of Finance* 61(6): 2597-2635.
- Fan, J. & Wong, T.J. 2007. Politically-connected CEOs, corporate governance and post-IPO performance of China's partially privatized firms. *Journal of Financial Economics* 84(2): 330-357.
- Frieswick, K. 2003. How audits must change: Auditors face more pressure to find fraud. *CFO: Magazine for Senior Financial Executives*.
- Gereish, L.H. 2003. Organizational culture and fraudulent financial reporting. *The CPA Journal* 73(3): 28-32.
- Gul, F.A. 2006. Auditors' response to political connections and cronyism in Malaysia. *Journal of Accounting Research* 44(5): 931-963.
- Gunasegaram, P. 2007. Question Time: High-profile cases still waiting to be resolved. *The Edge*.
- Haniffa, R. & Hudaib, M. 2006. Corporate governance structure and performance of Malaysian Listed Companies. *Journal of Business Finance and Accounting* 33(7&8): 1034-1062.
- Hay, D., Knechel, W.R. & Wong, N. 2004. Audit Fees: A meta-analysis of the effect of supply and demand attributes. Working Paper, University of Auckland, New Zealand.
- Howe, M.A. 1999. *Management fraud and earnings management: Fraud versus GAAP as a means to increase reported income*. Published PhD Dissertation, University of Connecticut, U.S.A.
- Jensen & Meckling, W.H. 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3: 305-360.
- Johnson, S. & Mitton, T. 2003. Cronyism and capital controls: Evidence from Malaysia. *Journal of Financial Economics* 67: 351-382.
- Kaminski, K.A., Wetzel, T.S. & Guan, L. 2004. Can financial ratios detect fraudulent financial reporting? *Managerial Auditing Journal* 19(1): 15-28.
- Khanna, T. & Palepu, K. 2000a. Emerging market business groups, foreign investors and corporate governance. NBER Working paper 6955.
- Khanna, T. & Palepu, K. 2000b. Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *The Journal of Finance* 55(2): 867-891.
- Kothari, S.P., Leone, A.J. & Wasley, C.E. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39: 163-197.
- Landsittel, D.L. 2000. *Auditing: Some current challenges*. Paper presented at the Plenary session of the AAA Auditing Section Mid-year Conference.
- Leen, L.A. 2007. Beefing up enforcement. *The Edge*.
- Leuz, C., Nanda, D. & Wysocki, P.D. 2003. Earnings management and investor protection: An international comparison. *Journal of Financial Economics* 69: 505-527.
- Morck, R., Shleifer, A. & Vishny, R.W. 1988. Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics* 20: 293-315.
- Pfeffer, J. 2002. *Organizations and Organizational Theory*. Boston: Pitman.
- Pfeffer, J. & Salancik, G.R. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper and Row.
- Rosner, R.L. 2003. Earnings manipulation in failing firms. *Contemporary Accounting Research* 20(2): 361-408.
- Securities Commission (SC) Malaysia. 2012. Enforcement Actions. Available at <http://www.sc.com.my>
- Sharma, V.D. 2004. Board of director characteristics, institutional ownership and fraud: Evidence from Australia. *Auditing: A Journal of Practice and Theory* 23(2): 105-117.
- Shleifer, A. & Vishny R.W. 1997. A survey of corporate governance. *Journal of Finance* 52 (June): 737-783.
- Summers, S.L. & Sweeney, J.T. 1998. Fraudulent misstated financial statements and insider trading: An empirical analysis. *The Accounting Review* 73(1): 131-146.
- Svensson, J. 2003. Who must pay bribes and how much? Evidence from a cross-section of firms. *Quarterly Journal of Economics* 118: 207-230.
- Tat, H.K. 2007. Enforcement the key. *The Edge*.
- Treadway Commission. 1987. *Report of the National Commission on Fraudulent Financial Reporting*. New York: AICPA.
- Useem, M. 1984. The social organization of the American Business Elite and participation of corporation directors in the government of American Institutions. *American Sociological Review* 44: 553-571.
- Uzun, H., Szewczyk, S.H. & Varma, R. 2004. Board composition and corporate fraud. *Financial Analysts Journal* 60(3): 33-43.
- Woodland, A.M. & Reynolds, J.K. 2003. Restatements and audit quality. Working paper. University of Nebraska, Lincoln.
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