Universiti Teknologi MARA Cawangan Perlis
Jurnal Intelek

Volume 17 Issue 1 (February) 2022

Financial Statement Fraud: Evidence from Malaysian Public Listed Companies

Norziaton Ismail Khan[1*], Arfa Aqila Muhammad Hapiz[2]
[1,2]Faculty of Accountancy, Universiti Teknologi MARA Cawangan Selangor, Kampus Puncak Alam 42300 Puncak Alam, Selangor, Malaysia

Authors' Email Address: [1]norzi153@uitm.edu.my, [2]arfa.hapiz@gmail.com*

Received Date: 28 October 2021
Accepted Date: 18 November 2022
Published Date: 31 January 2022

*Corresponding Author

ABSTRACT

Financial statement fraud is seen as a rampant problem around the world. Early detection is one of the ways to curb financial statement fraud, and it has motivated this study to be conducted. The main objective of this study is to investigate the primary factors that influence the public listed companies in Malaysia to be involved in financial statement fraud. The sample used in this study comprised 40 financial statement fraud companies matched with another 40 non-financial statement fraud companies listed in Bursa Malaysia from 2003 to 2020. This study used the fraud triangle theory to form the research framework and develop the research hypotheses. Four hypotheses based on the elements of fraud, which are the financial target, external pressure, earnings management, and related-party transaction, have been developed and tested. Regression analysis was conducted to examine the relationship between the elements of fraud and financial statement fraud. The results indicated that there is a significant relationship between financial targets, earnings management, related-party transaction and financial statement fraud, thus the hypotheses are accepted. However, there is an insignificant relationship between external pressure and financial statement fraud, hence the hypothesis was rejected. Interestingly, it was found that the fraud companies had poorer earnings quality one year before they committed the financial statement fraud. Overall, this study would assist the auditors as it identifies early warning signals or red flags. Information obtained from this study could be used by Bursa Malaysia to develop strong regulations and encourage Malaysian public listed companies to enhance anti-fraud policies.

Keywords: *Financial Statement Fraud, Financial Target, External Pressure, Earnings Management, Related-Party Transaction*

INTRODUCTION

According to the Association of Certified Fraud Examiners (ACFE) (2016c), there are three types of occupational fraud: asset misappropriation, corruption, and financial statement fraud. Asset misappropriation involves the theft of cash or misuse of a company's assets for personal benefits. Corruption is when the fraudster misuses his influence in a business transaction to provide some benefit for himself or another person. Here, the fraudster's actions are contrary to their duties, employer, or the rights of another person. Lastly, financial statement fraud usually involves the falsification of a company's financial statements (ACFE, 2016c). Concerning the Ernst and Young (EY, 2020) report,

ISSN: 2231-7716 / E-ISSN 2682-9223
DOI: https://doi.org/10.24191/ji.v17i1.15937

financial statement fraud has increased compared to the other types of fraud. Anichebe et al. (2019) found that 77% of financial statement fraud is committed by individuals working in the company as top-level management or executives and accounting officers through sales and purchase activities, preparation of company accounts, and customer service. Other than that, the global ACFE's 2018 Report to the Nations on Occupational Fraud and Abuse mentioned that the least common but costliest form of fraud is financial statement fraud, which is 10% of cases, with the median loss of USD800,000 (ACFE, 2018).

A similar scenario was evidenced in Malaysia. Malaysia is among the highest country being investigated, after Indonesia and Singapore (ACFE, 2018). The ACFE's Report to The Nation for Asia Pacific Edition 2018 stated that 14 fraud cases had been reported and investigated. The Securities Commission of Malaysia's (SC) annual report 2019 disclosed that they had detected fraud involving RM11.4 million in corporate transgressions and non-compliance with approved accounting standards. Examples of the fraud investigated are making fake or misleading cash and bank balance records, false records for loss of inventories, and the subsidiary acting as the guarantor for a director's loan. Furthermore, they had acted against three listed companies and 13 management officers involved in non-compliance with approved accounting standards (Securities Commission Malaysia, 2019). In the same report released in 2018, they had detected one questionable transaction of RM7.4 million and investigated five issues involving corporate transgressions worth RM30.8 million (Securities Commission Malaysia, 2018). From the report, it can be said that the quantum of loss caused by financial statement fraud is at a worrying stage. Even if the number of cases is reduced, the number of losses caused by financial statement fraud is high and, consequently, affects the companies' reputation. Thus, identifying fraudulent financial statements is critical for capital market regulation (Shen et al., 2021). As reported by the SC, Malaysia had its fair share of high-profile corporate fraud scandals, whereby between 2012 and 2015, 18 public listed companies on the main board of Bursa Malaysia had misstated their financial statements after being testified by Bursa Malaysia (Kamal et al., 2016). Their main purpose of producing an incorrect financial statement was to show that the company was in a favourable position and able to maintain its operation in the future. However, in reality, the company was facing financial distress. A rapid increase in the number of financial statement cases could tarnish the country's image and lead to poor foreign investment. These events have led to massive losses for investors (Cheng et al., 2021).

Hence, this study aimed to investigate the relationship between four variables and the occurrence of financial statement fraud. The dependent variable of this study is financial statement fraud, while the independent variables include financial target, external pressure, earnings management, and related-party transaction. Several issues related to these variables were identified. First, the structure and institutional environment in Malaysia has a significant impact on financial statement fraud. Many cases reported by the companies were due to failure to detect financial statement fraud at the early stage. Normally, financial statement fraud cases are hidden from the public and the auditors (Hartanto et al., 2019). Consequently, observing the red flags is important to detect the symptoms. However, the symptoms of fraud or red flags do not necessarily indicate the existence of financial statement fraud (Albrecht et al., 2019). Secondly, the predetermined financial target based on last year's financial performance has become an issue (Darmawan & Saragih, 2017). This situation has put the management under pressure to work hard to achieve short-term targets (Akbar, 2017). Due to the pressure, the company would be likely to manipulate profits to be deemed capable of achieving the predetermined financial targets. Due to the above argument, this study needs to be conducted.

The remainder of this paper is structured as follows. The following section briefly explains the literature review and hypotheses development. The third section describes the research design. This study's results are reported in the fourth section, and its conclusions and implications are presented in the final section.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Financial statement fraud has become the main concern of many parties because it plays a significant role in analysing the company's performance. If the financial statement is manipulated, it will lead the user to choose the wrong investment decisions. The huge loss caused by financial statement fraud has brought professionals to further analyse the main motivation for the perpetrators to engage in such an act. Few theories explain the method of analysis used to detect the likelihood of financial statement fraud, one of the most famous theories is the Fraud Triangle Theory (Yendrawati et al., 2019). According to Cressey (1953), three elements must be present at the same time in committing fraud. The three elements in the fraud triangle are pressure, opportunity and rationalization. Many researchers examined the element of pressure, opportunity and rationalization that results in the situations that lead to financial statement fraud (Yendrawati et al., 2019; Rustiarini et al., 2019; Zaki, 2016; Oktaviani et al., 2014; Hasnan et al., 2014; Hasnan et al., 2013; Suyanto, 2009). Other than that, this theory has been recognized and used by professional practitioners as a theoretical model to explain the occurrence of most frauds (Gill, 2011). The fraud triangle theory is chosen as it relates to this study. The pressure that the companies face is the most important factor that will lead them to commit fraudulent activities. Perceived opportunity must also be present to commit fraud. Even with intense pressure, the companies who believe they will be caught and punished rarely commit fraud. However, companies who believe they have an opportunity often give in to perceived pressure. On the other hand, they also need some way to rationalize their actions as acceptable.

Most financial statement fraud cases are committed by individuals who can influence decision-making in the company (Anichebe et al., 2019). Perpetrating fraud is much easier when one or two individuals have primary decision-making power. In most fraud cases, management tends to manipulate profits. A company with low profitability tends to record excessive income by understating liabilities and expenses or overstating revenues or assets. Past studies have suggested that when the company's growth is below the industry's average, management will manipulate its financial statements to improve its prospect (Anichebe et al., 2019; Akbar, 2017; Hasnan et al., 2014). Yendrawati et al. (2019), Akbar (2017), and Prasmaulida (2016) found that the presence of the financial target may result in a significant positive relationship to financial statement fraud. On the other hand, high profit earning indicates good performance, hence the possibility to commit financial statement fraud is low (Syamsudin et al., 2017). Indarto and Ghozali (2016) revealed in their research that financial target has a significant positive impact on the likelihood of fraudulent financial reporting. The same study conducted by Oktaviani et al. (2014) and Manurung and Hadian (2013) found that profit earning is positively associated with the likelihood of financial statement fraud in a company. However, in her study, Nur Fajri (2018) found that financial target does not affect financial statement fraud. This argument is also consistent with Utama and Ramantha (2018). However, research conducted by Darmawan and Saragih (2017) found a negative relationship between financial targets and financial statement fraud. Similar results were also found by Listyawati (2016) and Finamaya and Syafruddin (2014). As a result, the following research hypothesis was developed:

H1: *There is a significant positive relationship between financial targets and financial statement fraud.*

Usually, fraudulent companies have a large amount of debt that would place tremendous pressure on the companies' executives to obtain high earnings to offset high-interest costs and meet the lender requirements or debt covenants. When external parties put excessive pressure on companies, the risk of financial statement fraud would increase (Umar et al., 2020). This statement is in line with the study conducted by Yulianti et al. (2019), where external pressure is excessive pressure felt by companies to meet the requirements and expectations of third parties. Usually, debt requirements have become a major source of pressure as this situation drives the companies to participate in financial statement fraud to gain access to cheaper costs for company capital. There is a greater possibility of a company facing bankruptcy if the percentage of external pressure is high. This statement is in line with the results found in a similar study where they indicated that when a company has high external pressure, it means that the company has great loan and credit risk (Islam et al., 2011). Yendrawati et al. (2019) stated that

external pressure has a positive influence on the likelihood of financial statement fraud. Other researchers also supported that external pressure has a significant positive effect on financial statement fraud (Nur Fajri, 2018; Rukmana, 2018). Akbar (2017) stated that external pressure influences financial statement fraud in companies listed on the Indonesian stock exchange. However, the study conducted by Hartanto et al. (2019) showed the opposite results, where external pressure has a negative effect on financial statement fraud. It indicates that if the external pressure increases, financial statement fraud would not necessarily occur. This finding is consistent with Manurung and Hadian (2013) that found a significant negative relationship between external pressure and financial statement fraud. Therefore, this study developed the following hypothesis:

H2: *There is a significant positive relationship between external pressure and financial statement fraud.*

Earnings management is motivated by the companies' desire to gain a good assessment from shareholders. The management would create artificial reserves, engage in creative acquisition practices, or manipulate generally accepted accounting principles (GAAP) to enhance company growth (Hasnan et al., 2014). As stated by Hasnan et al. (2014), the Malaysian public listed company is seen to involve in earnings management two to three years before the fraud year. Their finding is supported by Leuz et al. (2003) that most Malaysian companies are prevalent in earnings management when reporting their income. The firms would turn to fraudulent financial reporting when they have an opportunity to use more aggressive earnings management tactics. An enhanced company monitoring system is one of the methods that could be used to reduce the frequency of earnings management (Martins & Júnior, 2019). Most studies found a positive relationship between cash flow volatility and earnings management practice by a firm. This statement was highlighted by Yendrawati et al. (2019) that there is a positive relationship between earnings management and financial statement fraud. On the other hand, other researchers agreed that real earnings management has a positive relationship with the occurrence of financial statement fraud (Md Nasir et al., 2018). Another study tested earnings management and higher financial distress, where companies that commit financial statement fraud would usually have higher financial distress. When this happens, management tends to manipulate earnings management by inflating revenue and reducing liabilities (Kurniawan & Hermawan, 2018). Hasnan et al. (2014; 2013) found that, from 106 companies collected as a sample, 53 companies showed a positive result of involvement in earnings management. Thus, they concluded that there is a positive relationship between earnings management in the year before fraud and financial statement fraud. The other study conducted by Manurung and Hadian (2013) also found similar results where they stated that financial statement fraud has a strong relationship with earnings management within the company. Thus, the following research hypothesis was developed.

H3: *There is a significant positive relationship between earnings management and financial statement fraud.*

Related-party transactions (RPTs) would result in a potential conflict of interest as they can compromise management's responsibility and influence the contract term between the parties involved (Thomas, 2014). In Hong Kong, Thomas (2014) found that the sales of assets made between related parties were completed using unreasonable prices and not using the arm's length principle. In the US, Ariff and Hashim (2014) found that 18% of the companies listed on the New York stock exchange had misstated RPTs in their financial statements. In many listed companies, RPTs were involved when the companies purchased assets from related parties at a higher price and sold them at a lower price compared to similar arms' length transactions. In recent years, many high-profile financial statement frauds involved RPTs. These cases have created concern among regulators and other market participants about the best monitoring and auditing measures to control these transactions (Louwers, 2012). In contrast, some prior researchers stated that RPTs are not necessarily a fraud mechanism and that not all RPTs are linked to fraud cases (El-Helaly, 2018). RPTs provide benefits to firm performance, especially in an emerging economy with less developed intermediary institutions (Fang et al., 2018). On the other hand, some other researchers argued that RPTs are effectively meeting the underlying economic needs of the companies (Gordon, 2009). Overall, the majority of the researchers have concluded that RPTs are

positively associated with financial statement fraud. El-Helaly (2018) found out that RPTs have a significant positive influence on financial statement fraud. In their study, Hasnan et al. (2014) found that the existence of RPTs and the occurrence of financial statement fraud have a positive relationship. This statement is in line with the finding of Louwers (2012). Due to the above arguments, the following hypothesis was developed.

H4: *There is a significant positive relationship between related-party transactions and financial statement fraud.*

METHODOLOGY

Data Collection

This study was conducted using secondary data obtained by extracting the relevant results and findings from previous research studies and companies' annual reports. The sample was from fraud cases of companies listed between 2003 and 2020 in the Securities Commission Malaysia's (SCM) enforcement release (SCM, 2021) and Bursa Malaysia (BM, 2020). From the SCM (2020) enforcement release dated 3 September 2020, 43 companies were subjected to formal investigations for accounting irregularities. Out of the 43 companies, 23 companies have been charged under criminal prosecutions, while administrative actions were taken on another 20 companies. However, this study excluded three fraud companies due to incomplete data, thus giving a total of 40 financial statement fraud companies. The purposive sampling method was used by comparing companies one-to-one using a matching process. In this case, 40 financial statement fraud companies would be matched against 40 non-financial statement fraud companies. Thus, the final sample for this study consisted of 80 companies in total. This study replicates two variables from Nur Fajri (2018) and the other two variables from Hasnan et al. (2014) and some modification was made to both studies to suit the current study. The sample used by Nur Fajri (2018) was collected from property and real estate companies that were listed on Indonesia Stock Exchange between 2010 and 2012 and Hasnan et al. (2014) has conducted their study in Malaysia by using fraud companies data from 1996-2007. The difference between this study from Nur Fajri (2018) is due to the sample used. This study is conducted in Malaysia and use all sectors in Bursa Malaysia that involve in financial statement fraud as the sample. Other than that, this study is different from Hasnan et al. (2014) because it was conducted by using the latest information since the privilege from Securities Commission Malaysia (SC) to access the companies' names that were subject to SC investigation from the year 2003 to 2020 has been given.

Measurement for Financial Statement Fraud

The dependent variable in this study is financial statement fraud. When a company is involved in the late announcement of sales and purchase activity and fails to disclose significant transactions within the stipulated period, it indicates that the company has delayed disclosing the information. It also refers to the failure to disclose accounting information when the company is involved in fraudulent activities, such as concealment of their share acquisitions, disposal of shares, or any purchases and sales activities. This study used a dichotomous scale of '1' if the firm was involved in financial statement fraud and '0' otherwise (Hasnan et al., 2014). The non-financial statement fraud companies were used as control companies in this study. All these companies were selected based on similar criteria to the fraud companies in terms of period, industry types, and company size. The data were collected from the Bursa Malaysia website. It is important to have a similar comparison between financial statement fraud companies and non-financial statement fraud companies. They were matched based on the following criteria:

Industry: The non-financial statement fraud companies were selected based on the same industry as the financial statement fraud companies. This matching was because they would be subjected to similar accounting and reporting requirements (Dalnial et al., 2014).

Period: The year for non-financial statement fraud companies was determined by the financial statement fraud companies' year of fraud. A similar period was important to control the general macroeconomics and the possibility for the company to be involved in fraud (Dalnial et al., 2014).

Company Size: The non-financial statement fraud companies were selected based on their comparable size with financial statement fraud companies (Hasnan et al., 2013). This study used the companies' total assets to match them with the financial statement fraud companies.

Measurement for Financial Target

A financial target is a form of pressure faced by a firm to meet its targeted profit during that particular year. The management needs to do its best to convince the shareholders that the firm is performing well and provide favourable evidence. To measure the company's performance, a researcher needs to analyse whether the company is effective and efficient enough or not in utilizing its business's assets to earn corporate profits (Yendrawati et al., 2019). For this study, the financial target is proxied by one of the probability ratios, Return on Assets (ROA). Several previous researchers had used the ROA to determine the relationship between the financial target and financial statement fraud (Akbar, 2017; Prasmaulida, 2016; Manurung & Hadian, 2013). The following formula was used to calculate the ROA:

$$ROA = \frac{Earning\ after\ tax}{total\ assets}$$

Measurement for External Pressure

According to Skousen et al. (2009), the source of external pressure comes from the ability of the company to meet its debt obligations and pay all its debtors on time. Furthermore, these debt obligations put pressure on the management to obtain enough cash flow to support the company's debt requirements. Previous researchers stated that external pressure is calculated using the leverage ratio (LEV) (Akbar, 2017; Prasmaulida, 2016; Manurung & Hadian, 2013). The following formula was used to calculate LEV:

$$LEV = \frac{Total\ Liabilities}{Total\ Assets}$$

Measurement for Earnings Management

Earnings management has become a global concern for all stakeholders and regulators. Since people acknowledge that earnings management is not fraudulent, most accountants, analysts, and investors have participated in this activity as they believe that managers should manage the company's earnings to achieve good business practices (Dalnial et al., 2014). However, aggressive earnings management technique is harmful to the company as it opens the opportunity for fraud. By using earnings management, the company could manipulate the corporate earnings that eventually would provide benefits to the company (Manurung & Hadian, 2013). However, aggressive earnings

management can be prevented if the company has an effective audit committee on the board (Anichebe et al., 2019). According to Dechlow et al. (1995), the Jones and Modified-Jones models are the best methods for measuring discretionary accruals model (DACs). He is supported by Kothari et al. (2005), where these models helped measure earnings management by controlling the return on assets' effect on performance in measuring DACs. First, the total accrual (TACC) needs to be calculated by using the change in non-cash current assets minus the change in current liabilities, excluding the current portion of long-term debt, amortization, and depreciation. The lag total assets are used as a scale. Second, the Jones and Modified-Jones discretionary accruals model (DACs) consider all firm years and estimated cross-sectional data in each industrial sector.

TACC can be categorised into two distinct components, non-discretionary accruals (NDACs) and discretionary accruals (DACs). NDACs are linked to the operational and investment activities of a company, while DACs are part of the earnings that are considered to reflect the portion of earnings arising from the manager's discretionary accounting choice (Gurkan, 2013). If the changes in sales are adjusted for the change in receivables, then the original standard Jones model becomes a Modified-Jones model as suggested by Dechow et al. (1995). The Jones and Modified-Jones models are designed to minimise the discretionary accruals calculation error when discretion is applied over the sales value. Previous studies have shown that the Jones and Modified-Jones models provide the most powerful tests for earnings management. The Modified-Jones model is also able to generate effective tests for revenue, bad debt, and non-bad debt manipulation (Islam et al., 2011). The following formula was used to calculate the model:

$$TACCit / TAit = \alpha 0 + \alpha 1 (1/TAit\text{-}1) + \alpha 2 \Delta REVit\text{-}1 + \alpha 3PPEit / TAit + \alpha 4ROAit + \varepsilon it$$

where:
TACC = total accruals;
TA = total assets;
ΔREV = change in revenue;
PPE = gross property, plant, and equipment;
ROA = return on assets; and
εit = error term in year t.

The estimated value in the TACC equation above is the normal accrual in the sense that it is not motivated by sales or depreciation of assets. The purpose of the error used in this model is to reduce the forecasting errors in the study (Callao et al., 2014) and this error term (εit) represents the level of the discretionary accruals at the time t in the model (Gurkan, 2013). This study estimated the coefficient for α1, α2, α3, and α4 to estimate the performance-adjusted DAC as follows:

$$DACit = TACCit / Tait\text{-}1 - [\alpha 0 + \alpha 1 (1 / TAit\text{-}1) + \alpha 2\Delta REVit/TAit\text{-}1 + \alpha 3PPEit / TAit\text{-}1 + \alpha 4ROAit]$$

Measurement for Related-Party Transactions

Based on previous researchers' measurements, this study measured the related-party transaction (RPTs) by using the number of related-party transactions that were separately disclosed in the companies' annual reports for each observation year (Thomas, 2014; Hasnan et al., 2014; Louwers, 2012; Gordon, 2009). For example, a typical RPTs violation involves the failure to disclose sales or purchases from other companies that have similar directors.

Measurement for Control Variable

This study used firm size as a control variable. The total assets at the end of the financial year were used as a proxy for this constant variable (Dalnial et al., 2014). Firm size can be explained as the

natural logarithm (Ln) of the book value of the total assets at the end of the financial year (Dalnial et al., 2014). It is strongly believed that the bigger the firm size, the more information would be presented in the financial statements to attract the investors' attention. This study expected the assets to be negatively associated with the possibility of financial statement fraud, as firms with larger assets (firm size) tend to have stronger internal control than smaller firms (Suyanto, 2009)

RESULTS AND DISCUSSIONS

Profile of Financial Statement Fraud Companies

Table 1 shows the distribution of the financial statement fraud companies. From the total of 40 financial statement fraud companies, 52.5% (n=21) are from the consumer product and services industry, 32.5% (n=13) from industrial products and services, followed by 7.5% (n=3) from the technology industry, 5.0% (n=2) from the property industry, and only 2.5% (n=1) from the financial services industry.

Table 1: Distribution of Financial Statement Fraud Companies Among Industry

Industry	Frequency	Percentages (%)
Financial services	1	2.5
Consumer product and services	21	52.5
Industrial products and services	13	32.5
Property	2	5.0
Technology	3	7.5
Grand Total	40	100.0

Independent T-test Analysis

Table 2 illustrates the independent t-test for the continuous variables (financial target, external pressure, earnings management, and related-party transactions). An independent t-test was conducted to find the difference between the variables between financial statement fraud companies and non-financial statement fraud companies. Based on the results, the mean for the financial target is greater for the financial statement fraud companies compared to the non-financial statement fraud companies at a 0.1% significant level. Hence, it indicates that there is a difference in the financial target between financial statement fraud companies and non-financial statement fraud companies. Besides, there is also a difference in earnings management between financial statement fraud companies and non-financial statement fraud companies. The result suggests a greater mean of earnings management for financial statement fraud companies compared to non-financial statement fraud companies. Meanwhile, there is no difference in external pressure and firm size between financial statement fraud companies and non-financial statement fraud companies.

Table 2: Descriptive Statistics (Comparing Financial Statement Fraud Companies and Non-Financial Statement Fraud Companies)

Variables	Mean	Std. Dev.	Mean	Std. Dev.	T-test
	Financial Statement Fraud Companies (n=40)		Non-Financial Statement Fraud Companies (n=40)		
ROA	-0.1806	0.7769	0.0394	0.1019	1.775*
LEV	0.6318	0.8231	0.4536	0.2288	-1.319
EM	0.4949	1.7424	0.0956	0.9722	1.872*
RPTs	6.7385	1.5322	6.1347	1.1013	1.1823*
FS	19.55	1.648	19.40	1.878	0.705

*Significant at the 0.1 level

Note: ROA is the financial target, LEV is external pressure, EM is earnings management, RPTs is related-party transactions, and FS is firm Size.

An additional earnings management test was conducted in this study to investigate the number of years before the fraud year (FY) that the companies had engaged in earnings management activity. Table 3 presents the earnings management practices for financial statement fraud companies and non-financial statement fraud companies during the five years prior to the fraud year. It shows that the mean earnings management for financial statement fraud companies is slightly greater one year before the fraud year (t-1) compared to non-financial statement fraud companies. It means that the earnings management would be higher a year before a company commits financial statement fraud, whereas non-financial statement fraud companies' earnings management would be lower. These results were proven by the p-value <0.10 from the t-test results. Meanwhile, there is no difference in median earnings management during the five years before the fraud year for financial statement fraud companies and non-financial statement fraud companies.

Table 3: Earnings Management Practices For Financial Statement Fraud Companies and Non-Financial Statement Fraud Companies During The Five Years Before the Fraud Year

		Fraud Firms		No-Fraud Firms		Comparison (Fraud and no-fraud firms)
	n	Mean	Median	Mean	Median	t-test (p-value)
EM(FY)	40	0.0956	0.0910	-0.4949	-0.0073	0.065*
EM1(t-1)	40	0.1250	-0.0000	-0.0987	-0.0021	0.073*
EM2(t-2)	40	0.0377	0.0000	0.0845	0.0005	0.319
EM3(t-3)	40	0.0027	-0.0000	0.0534	-0.0005	0.209
EM4(t-4)	40	-0.0192	-0.0004	0.0181	0.0000	0.148
EM5(t-5)	40	0.0048	0.0000	-0.0241	-0.0003	0.472
*Significant at the 0.1 level						

Pearson Correlation Coefficient

Multicollinearity exists if two or more predictor variables are strongly correlated. According to Pallant (2020), when the predictor variables are strongly correlated or higher, it implies that the variables contain unnecessary information. This situation creates an error in the regression coefficient. According to Schober and Schwarte (2018), multicollinearity exists if the relationship is very strong, between 0.90 and 1.00 or -0.90 to -1.00. The results in Table 4 show a low positive significant correlation between financial targets and financial statement fraud (p-value = 0.298). Other than that, there is a low positive correlation between related-party transactions and financial statement fraud, where the p-value is equal to 0.234. Besides, earnings managements also have a low positive correlation with financial statement fraud (p-value = 0.176). Meanwhile, there is no significant correlation between external pressure towards financial statement fraud since the p-value is less than the significant level, 0.05. Based on the results, the p-value for all variables is less than 0.90. Hence, it indicates that multicollinearity does not exist for any variable in this study.

Table 4: Pearson's Correlation Between Independent And Dependent Variables

	FSF	ROA	LEV	EM	RPTs	FS
FSF	1					
ROA	0.298**	1				
LEV	0.014	-0.234*	1			
EM	0.176	0.048	-0.331**	1		
RPTs	0.234*	-0.054	0.100	0.036	1	
FS	0.030	0.274*	-0.160	-0.132	0.158	1
**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).						

Note: ROA is the financial target, LEV is external pressure, EM is earnings management and RPTs is related-party transactions, FS is firm Size and FSF is financial statement fraud.

Multiple Logistic Regression Analysis

Table 5 presents the multiple logistic regression analysis results, and the logistic regression model equation is as follows:

Log (p/1-p) = -5.154 - 9.250 financial target + 0.790 external pressure + 0.000 related-party transaction + 1.380 earnings management + 0.221 firm size.

The regression model is fit, X^2 (8) = 7.438, p> 0.05. The model explained that 33.1% (Cox & Snell R-square value) of the variation in the financial statement fraud companies is explained by the financial target, external pressure, earnings management, and the related-party transaction.

Table 5: Multiple Logistic Regression Analysis

Variables	Regression Coefficient (B)	Odds Ratio (95% CI)	Wald statistics	P-value
Constant	-5.154			
ROA	-9.250	0.000 (0.000,0.031)	9.895	0.002*
LEV	0.790	2.203 (0.636, 7.638)	1.552	0.213
EM	1.380	3.974 (1.211, 13.043)	5.176	0.023*
RPTs	0.000	1.000 (1.000,1.000)	3.849	0.050*
FS	0.221	1.248 (0.876,1.777)	1.507	0.220
Cox & Snell R Square: 0.331 Chi-square, df (8): 7.438 *Significant at the 0.05 level (2-tailed).				

Note: ROA is the financial target, LEV is external pressure, EM is earnings management RPTs is related-party transactions, and FS is firm size.

Based on the results in Table 5, the Wald statistics, and p-value columns of the financial target (p= 0.002) are significantly related to the prediction of financial statement fraud. Based on the odds ratio of 0.000, an increase in 1% financial target has 0.000 times the odds (or 0.1% less chance) for the companies to commit financial statement fraud (95% CI 0.000, 0.031, p<0.05). Hence, the first research hypothesis (H1) that predicts there is a significant positive relationship between the financial target and financial statement fraud is accepted. From this result, a high financial target is one of the factors that influence companies to be involved in financial statement fraud. According to the theory, the existence of pressure in form of the financial target has become the main motivation for the company to commit

fraud by overstating assets on the balance sheet and net income on the income statement (Albrecht, Albrecth, et al., 2019). This result is consistent with Yendrawati et al. (2019) and Akbar (2017), where these researchers found that the presence of the financial target may result in a significant positive relationship to financial statement fraud. Financial target has become the main motive for the management to perform financial statement fraud when they know they cannot achieve the targeted profit (Oktaviani et al., 2014). However, this result is contrary to Utama and Ramantha (2018), who found that financial target does not affect financial statement fraud. Next, earnings management ($p=0.023$) is significantly related to the prediction of financial statement fraud. A company with an increase in RM1 of earnings management has 3.974 times the odds to commit financial statement fraud. Thus, the hypothesis (H3) that predicts there is a significant positive relationship between earnings management and financial statement fraud is supported. From this result, earnings management is one of the factors that influence companies to be involved in financial statement fraud. This is agreed by Hasnan et al. (2014), where Malaysian public listed companies that were involved in financial statement fraud were also involved in earnings management activity. According to the fraud triangle theory, opportunity is usually associated with earnings management (Lau & Ooi, 2016). An opportunity has opened the chances to dishonest activity, without the opportunity the fraud will not occur.

Additionally, the related-party transaction is significantly related to the prediction of financial statement fraud since the p-value is equal to 0.050. With an increase in RM1 related-party transactions, the company has 1.000 times the odds to commit financial statement fraud (95% CI 1.000, 1.000, $p<0.05$). The results supported hypothesis (H4) that predicts there is a significant positive relationship between the related-party transaction and financial statement fraud. This finding is in line with El-Helaly (2018), where most financial statement cases use the related-party transaction as a tool to commit fraud because they could hide some transactions since all intercompany transactions will be eliminated when they prepare the consolidated financial statements. They managed to transfer profits from one company to another company within the same group. From this result, the related-party transaction is one of the factors that influence the public listed companies in Malaysia to be involved in financial statement fraud. The existence of the element of rationalization is reflected by both of the above statements. Rationalization can be shown when the company tries to justify their fraudulent activity in a way to make it acceptable or justifiable (Kassem & Higson, 2017). In contrast, external pressure is not significantly related to the prediction of financial statement fraud since the p-value is 0.213. Therefore, hypothesis H2 is rejected. From this result, external pressure is not one of the factors that influence companies to be involved in financial statement fraud. For the control variable, this study shows that firm size is negatively associated with financial statement fraud since the p-value is 0.220. This result shows that larger companies have a lower tendency to commit fraud, which is in line with Adedapo and Samuel (2019) and Anichebe et al. (2019). Companies with larger assets (larger firm size) tend to have stronger internal control than smaller firms (Suyanto, 2009).

CONCLUSION

The true and fair presentation of the financial statement is crucial for the development of Malaysia's economy. However, the financial statement produced by some Malaysian public listed companies is plagued with fraudulent practices which lead to a negative perception among the stakeholders and serious problems for the business community. Globalization and rapid expansion of international business have opened more activities that can lead to financial statement fraud. This research revealed impressive outcomes that focused on the statistically significant relationship between financial target, earnings management, related-party transaction, and financial statement fraud. In contrast, external pressure is not significant, and the related hypothesis is rejected. The findings of this study are also consistent with the fraud triangle theory. The theory suggests that when the element of pressure, opportunity, and rationalization exists, financial statement fraud is possible. In addition, it provides useful information to financial regulators such as SCM to observe the practices of the companies in detecting financial statement fraud activities. It also provides useful information to the stakeholders of the companies to strengthen the regulatory requirements and eliminate possible potential opportunities

that can lead to fraud activities. The research findings also aim to provide useful information to the academician to explore further the literature specifically in the area of financial statement fraud. In evaluating these results, several limitations should be taken into consideration, hence providing opportunities for further research. First, this study only focused on 40 financial statement fraud companies from 2003 until 2020 and these fraud companies are matched with another 40 non-financial statement fraud companies. The list of companies that are involved in financial statement fraud is primarily provided by the Securities Commission Malaysia (SC) enforcement release on their official website and from the Bursa Malaysia enforcement release. This list may not represent the actual cases that are currently being investigated by the Securities Commission Malaysia (SC) and Bursa Malaysia. Due to the sensitivity of the information, the name of the company that they had been published is only up to the list of the company that has been prosecuted. Additionally, not all industries in Malaysia are involved in financial statement fraud activities between 2003 and 2020. Furthermore, this study needed to exclude several samples from the observation years due to the difficulty in having access to the annual report. This has reduced the number of industries in the observation years. Hence, the results obtained may not truly portray the overall industries listed on Bursa Malaysia.

REFERENCES

ACFE. (2018). Report to the nation 2018 global study on occupational fraud and abuse. *Association of Certified Fraud Examiner*. Available at: https://www.acfe.com/report-to-the-nations/2018/default.aspx

Adedapo, K., & Samuel, L. (2019). Firm characteristics and financial reporting quality: Evidence from non-financial firms in Nigeria. *International Journal of Economics, Management and Accounting*, *27*(2), 445–472.

Akbar, T. (2017). The determination of fraudulent financial reporting causes by using pentagon theory on manufacturing companies in Indonesia. *International Journal of Business, Economics and Law*, *14*(5), 106–113.

Albrecht, W. S., Albrecht, C. O., & Zimbelman, M. F. (2019). *Fraud examination (6th Edition)*. Cengage Learning Asia Pte Ltd.

Anichebe, A. S., Agbomah, D. J., & Agbagbara, E. O. (2019). Determinants of financial statement fraud likelihood in listed firms. *Journal of Accounting and Financial Management*, *5*(2), 1–9.

Ariff, A. M., & Hashim, H. A. (2014). Accounting irregularities in related party transactions. *International Journal of Trade, Economics and Finance*, *5*(2), 180–183.

Bursa Malaysia (BM). (2020). Available at:
https://www.bursamalaysia.com/regulation/listing_requirements/main_market/listing_requirements

Callao, S., Jarne, J., & Wróblewski, D. (2014). The development of earnings management research is a review of literature from three different perspectives. *International Journal of Accounting*, *79*(135), 135–177.

Cheng, C. H., Kao, Y. F., & Lin, H. P. (2021). A financial statement fraud model based on synthesized attribute selection and a dataset with missing values and imbalanced classes. *Applied Soft Computing*, *108* (107487).

Dalnial, H., Kamaluddin, A., Sanusi, Z. M., & Khairuddin, K. S. (2014). Detecting fraudulent financial reporting through financial statement analysis. *Journal of Advanced Management Science*, *2*(1), 17–22.

Darmawan, A., & Saragih, S. O. (2017). The impact of auditor quality, financial stability, and financial target for a fraudulent financial statement. *Journal of Applied Accounting and Taxation*, *8*(1), 9–14.

Dechow, P. M., Sloan, R. G., & Amy, P. (1995). Detecting earnings management. *Contemporary Accounting Research*, *70*(2), 193–225.

El-Helaly, M. (2018). Related-party transactions: A review of the regulation, governance and auditing literature. *Managerial Auditing Journal*, *33*(8), 1–43.

Fang, J., Lobo, G. J., Zhang, Y., & Zhao, Y. (2018). Auditing related party transactions: Evidence from audit opinions and restatements. *Auditing A Journal of Practice & Theory*, *37*(2), 1–59.

Finamaya, F., & Syafruddin, M. (2014). Analisis faktor-faktor yang mempengaruhi kecurangan laporan keuangan (studi empiris pada perusahaan non keuangan yang terdaftar di bursa efek Indonesia tahun 2008-2011). *Diponegoro Journal of Accounting*, *3*(3), 1–11.

Gordon, E. A. (2009). Related party transactions : Associations with corporate governance and firm value. *The Bell Journal of Economics*, *10*(74), 1–58.

Gurkan, S. (2013). Comprehension of discretionary accruals models: Evidence of Turkey and EU. *A Multidisciplinary Journal of Global Macro Trends*, *5*(4), 98–107.

Hartanto, R., Lasmanah, L., Mustafa, M., & Purnamasari, P. (2019). Analysis of factors that influence financial statement fraud in the perspective fraud triangle: Empirical study on banking companies in Indonesia. *Journal of Corporate Finance*, *18*(7), 1–6.

Hasnan, S., Abdul Rahman, R., & Mahenthiran, S. (2013). Management motive, weak governance, earnings management and fraudulent financial reporting: Malaysian evidence. *Journal of International Accounting Research*, *12*(1), 1–27.

Hasnan, S., Rahman, R. A., & Mahenthiran, S. (2014). Determinants of fraudulent financial reporting: Evidence from Malaysia. *Jurnal Pengurusan*, *42*(2014), 103–117.

Indarto, S. L., & Ghozali, I. (2016). Fraud diamond: Detection analysis on fraudulent financial reporting. *Journal of Accounting, Auditing, and Finance*, *6*(4), 116–123.

Islam, M. A., Ali, R., & Ahmad, Z. (2011). Is the modified Jones model effective in detecting earnings management? Evidence from a developing economy. *International Journal of Economics and Finance*, *3*(2), 116–125.

Kamal, M. E. M., Salleh, M. F. M., & Ahmad, A. (2016). Detecting financial statement fraud by Malaysian public listed companies: The reliability of the Beneish M-score Model. *Jurnal Pengurusan*, *46*(5), 1–10.

Kothari, S. P., Leone, A., & Wasley, C. (2005). Performance matched accruals measures. *Journal of Accounting and Economics*, *13*(5), 163–197.

Kurniawan, A., & Hermawan, A. A. (2018). The effect of earnings management on the probability of fraud and financial distress. *Advances in Economics, Business and Management Research*, *55*(6), 1–6

Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, *69*(3), 505–527.

Listyawati, I. (2016). Analisis faktor yang mempengaruhi financial statement fraud. *Jurnal Simposium Nasional Akuntansi 9 Padang*, *16*(17), 659–665.

Louwers, T. (2012). The role of related party transactions in fraudulent financial reporting. *Journal of Forensic & Investigative Accounting*, *4*(1), 186–213.

Manurung, D. T., & Hadian, N. (2013). Detection fraud of financial statement with fraud triangle. *Proceedings of 23rd International Business Research Conference*, *36*(8), 1–18.

Martins, O. S., & Júnior, R. V. (2019). The influence of corporate governance on the mitigation of fraudulent financial reporting. *Revista Brasileira de Gestao de Negocios*, *22*(1), 65–84.

Md Nasir, N. A., M. J., Razzaque, R. M. R., & Ahmed, K. (2018). Real earnings management and financial statement fraud: Evidence from Malaysia. *International Journal of Accounting and Information Management*, *26*(4), 508–526.

Nur Fajri, S. (2018). The effect of financial stability, external pressure, personal financial need, financial targets, ineffective monitoring, and audit quality on detecting fraud financial statements in the perspective of the fraud triangle. *Journal of Business Economics*, *23*(2), 191–199.

Oktaviani, E., Karyawati, G., & Arsyad, N. (2014). Factors affecting financial statement fraud: Fraud triangle approach. *3rd Economics & Business Research Festival*, *1*(1), 1–17.

Prasmaulida, S. (2016). Financial statement fraud detection using the perspective of the fraud triangle adopted by SAS No. 99. *Asia Pacific Fraud Journal*, *1*(2), 317–335.

Rukmana, H. S. (2018). Pentagon fraud affects financial statement fraud and firm value evidence in Indonesia. *South-East Asia Journal of Contemporary Business, Economics and Law*, *16*(5), 118–122.

Securities Commission of Malaysia (SCM). (2020). Available at: *https://www.sc.com.my/regulation/guidance-notes-and-guiding-principles*

Shen, Y., Guo, C., Li, H., Chen, J., Guo, Y., & Qiu, X. (2021). Financial feature embedding with knowledge representation learning for financial statement fraud detection. *Procedia Computer Science*, *187*, 420-425.

Skousen, C. J., Smith, K. R., & Wright, C. J. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. *Advances in Financial Economics*, *13*(99), 53–81.

Suyanto. (2009). Fraudulent financial statement: Evidence from statement on auditing standard No. 99. *Gadjah Mada International Journal of Business*, *11*(1), 117–144.

Syamsudin, S., Imronudin, I., Utomo, S. T., & Praswati, A. N. (2017). Corporate governance in detecting lack of financial report. *Jurnal Dinamika Manajemen*, *8*(2), 167–176.

Thomas, S. (2014). Not all related party transactions (RPTs) are the same : Ex-ante vs. ex-post RPTs. *Journal of Research in Business and Management*, *5*(11), 1–52.

Umar, H., Partahi, D., & Purba, R. B. (2020). Fraud diamond analysis in detecting fraudulent financial reports. *International Journal of Scientific and Technology Research*, *9*(3), 6638–6646.

Utama, Ramantha, B. (2018). Analisis faktor-faktor dalam perspektif fraud triangle sebagai prediktor fraudulent financial reporting. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, *7*(1), 251–278.

Yendrawati, R., Aulia, H., & Prabowo, H. Y. (2019). Detecting the likelihood of fraudulent financial reporting : An analysis of fraud diamond. *Asia-Pacific Management Accounting Journal*, *14*(1), 44–68.

Yulianti, Y., Pratami, S. R., Widowati, Y. S., & Prapti, L. (2019). Influence of fraud pentagon toward fraudulent financial reporting in Indonesia an empirical study on the financial sector listed in the Indonesian stock exchange. *International Journal of Scientific and Technology Research*, *8*(8), 237–242.