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**INDONESIA'S BANKING EXCELLENCE IN THE EYES OF CROWE'S
FRAUD PENTAGON**

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Abstract. *Complex factors trigger fraud. The basic theory is the fraud triangle theory. Crowe (2011) developed the idea into a pentagon theory and found two other factors: arrogance and competence. This study aims to analyze each element of Crowe's Fraud pentagon theory to detect fraudulent financial statements. Various proxies were used: pressure (financial targets and stability; external pressure; institutional ownership), opportunity (number of audit committees and nature of the industry), rationalization (change in auditors and auditor opinion), competence (change in directors and ineffective monitoring), arrogance (picture of the number of CEOs). Seventy-six banking companies listed on the IDX from 2013 to 2017 became sample. A multiple regression model is used as technique analysis. The results showed that pressure, rationalization, and competence affected financial statement fraud (FSF). This influence is in a good tone. This research contributes to the development of the Crowe's Fraud pentagon and Indonesian banking governance..*

Keywords: *Fraud Triangle, Fraud Pentagon, Financial Statement Fraud.*

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Introduction

Public companies periodically report management activities in their financial statements (Kaawaase et al., 2021). The purpose is to communicate to internal and external parties (Jaswadi et al., 2022). Internal parties use financial statements to make decisions (IFRS, 2020). Meanwhile, external parties use it to get information about the company's condition over a certain period (Xu et al., 2020).

Financial statement information should beneficially present reasonably and fraud-free to internal and external parties (Kaawaase et al., 2021). Practically, not all companies present financial statements that are fraud-free (Jaswadi et al., 2022). ACFE (2022) reported that 9% of financial statement fraud (FSF) schemes were out of 2110 fraud cases worldwide, with a median loss of \$593,000. Based on the median loss, companies should implement fraud detection and prevention to minimize fraud (Saluja et al., 2021).

A complex of factors triggers fraud. The fraud triangle was the first theory that addressed this factor (Cressey, 1953). Those factors are pressure, opportunity, and rationalization. Wolfe & Hermanson (2004) developed a previous theory and found that capability was also a trigger factor for fraud. Hence, it is known as the fraud diamond theory. Furthermore, Crowe (2011) developed the fraud triangle into the pentagon theory and revealed two other factors: arrogance and competence.

Arrogance is a superior attitude toward the ability to feel they are the best, and internal control does not affect them (Sarikhani & Ebrahimi, 2021). Meanwhile, competence is employees' skill in ignoring internal control, developing concealment strategies, and observing social conditions for personal purposes (Crowe, 2011; Devi et al., 2021). These two factors proved that FSF occurs due to the motives of the internal perpetrators (Vousinas, 2019). Responding to the development of the factors that cause fraud, we use Crowe's Fraud pentagon theory as a framework for analyzing its influence on FSF.

This study provides empirical evidence that Crowe's pentagon theory affects FSF. The Financial Services Authority carries out strict supervision of the Indonesian banking sector. However, the ACFE (2022) (Indonesia chapter) shows that banking is one of the sectors with the highest percentage of fraud. Therefore, this sector is interesting to conduct a study. FSF is measured by the modified Jones model's value of discretionary accruals (Dechow et al., 1995). In contrast to Antawirya et al. (2019) and (Avortri & Agbanyo, 2020), we use more proxies for fraud pentagon theory:

- pressure (financial targets and stability, external pressure, and institutional ownership)
- opportunity (the number of the audit committee and the nature industry)
- rationalization (the change of auditor and auditor's opinion)
- competence (the change of directors and ineffective monitoring)
- arrogance (the number of CEOs' pictures).

The research findings that influence the FSF in Indonesian banking are pressure (financial target), rationalization (auditor's opinion), and competence (the change of director). Surprisingly, these findings make Indonesian banks look excellent. The existence of pressure and rational reasons for earnings management motivates directors to optimally maximize the interests of shareholders and ultimately minimize FSF. This effect will be practical if the authority of banking directors is restricted as fraud prevention.

Our research contributes in two ways. First is a review of Crowe (2011). The findings show that three factors in Crowe (2011) affect FSF. It proves that Crowe (2011) fraud pentagon theory can detect FSF. These findings are the basis for developing models to enhance understanding fraud's causes. Second, improving banking governance. Indonesian banking management minimizes the opportunity for FSF by establishing fraud detection and prevention for the five factors in Crowe's fraud pentagon theory.

The following section discusses the theoretical basis and hypotheses. The third section discusses data sources, measurement of variables, and data analysis techniques used. The test results and discussion are stated in section four. The last section includes conclusions, limitations, and suggestions for the development of further research.

Literature Review

Theoretical Background

ACFE (2022) defines fraud as an act of wrongdoing by individuals or groups who know that such behavior harms individuals and other parties. Perpetrators commit fraud for a reason (Cheliatsidou et al., 2021). Cressey (1953) showed that the three causes: pressure, opportunity, and rationalization. Pressure defines motive that drives a person to commit fraud (Vousinas, 2019). SAS No. 99 indicates several conditions that pressure individuals: financial stability, pressure from outside and financial targets. Opportunity exists because inadequate supervision allows perpetrators to commit fraud (Latan et al., 2021). Meanwhile, rationalization refers to the feeling of justification that the action is not criminal because it is a common act (Kassem, 2021).

Crowe (2011) shows that other factors trigger fraud: arrogance and competence. Arrogance is a superior attitude toward the ability to feel they are the best, and internal control does not affect them (Sarikhani & Ebrahimi, 2021). Competence is the skill of ignoring internal control, developing concealment strategies, and observing social conditions for personal purposes (Crowe, 2011; Devi et al., 2021).

Financial statement fraud (FSF) is a misstatement made intentionally by management to deceive financial statements stakeholders (Khamainy et al., 2022; Owusu et al., 2022). Several reasons management does this, according to Baskaran et al. (2020):

1. improve performance and cover weaknesses to generate profits,
2. benefits from the increased performance to eliminate negative perceptions
3. lower taxes.

Hypothesis Development

Crowe (2011), the first factor that causes fraud is pressure. One of the problems management faces is financial targets in the form of business returns (Omukaga, 2021). Return on Assets (ROA) is the ratio used to show the rate of return (Khamainy et al., 2022). Higher ROA indicates a higher probability of committing FSF. It is triggered by pressure to show high financial performance (Saluja et al., 2021). Rashid et al. (2022), the pressure to commit fraud is higher when management is required to attract investors to invest in their company. Khamainy et al. (2022) indicate that management also pressures institutional ownership. A large amount of institutional ownership forced management to do more activities to avoid losing investors (institutions) who dared to make up financial statements. Therefore, the first hypothesis is:

H1. Pressure affects financial statement fraud.

The second factor, according to Crowe (2011), is opportunity. The audit committee supervises the company's financial statements, external audits, and internal control (Jaswadi et al., 2022). A supervisory mechanism improves reporting integrity and minimizes the possibility of FSF (Nasir et al., 2019). On the other hand, the nature of the industry, indicated by the company's conditions, provides an opportunity for committing fraud (Khamainy et al., 2022). Good companies reduce the receivable amount by increasing their income from cash. Therefore, receivables on sales provide an opportunity for management to commit fraud by making the receivables amount low (Khamainy et al., 2022). The following hypothesis is proposed:

H2. Opportunity affects financial statement fraud.

Rationalization is the third factor in Crowe (2011). Skousen et al. (2009) show that changes in auditor opinion and auditor rotation are proxies for rationalization. Companies often change their auditors to avoid fraud detected by previous auditors (Khamainy et al., 2022; Skousen et al., 2009). Demetriades & Owusu-Agyei (2022) indicate that management feels rational about the modified unqualified opinion provided by the auditor. They feel that a modified unqualified opinion is the auditor's tolerance for the earnings management they are doing, and this is not a mistake or a crime (Baskaran et al., 2020). The third hypotheses are:

H3. Rationalization affects financial statement fraud.

Competence is the new factor proposed by Crowe (2011). The executive directors' position in companies triggers fraud by utilizing their authority to influence others and smooth out their act (Avortri & Agbanyo, 2020; Skousen et al., 2009; Zahari et al., 2022). Hence, Khamainy et al. (2022) state that the changes in the board of director (Olaniyi et al.) indicate FSF. In addition, they also proved that the ineffectiveness of supervision by the independent board of commissioners (BOC) was triggering fraud. Ineffective monitoring of the independent BOC in supervision makes it easy for perpetrators to commit FSF. The fourth hypothesis proposed is:

H4. Competence affects financial statement fraud.

Crowe (2011) argues that arrogance is a trigger for perpetrators to cheat. Sarikhani & Ebrahimi (2021) used the number of CEOs' pictures as a proxy to measure arrogance. Arrogant CEOs want to show the public their existence, so they put a lot of photos of them in the annual report. His arrogance makes the CEO feel superior by being able to do anything, including committing fraud. Based on that, the last hypothesis is:

H5. Arrogance affects financial statement fraud.

Methods

The data is sourced from the annual reports of banking companies accessed through www.idx.co.id and the banking official websites. The research sample is banking companies listed on the Indonesia Stock Exchange from 2013 to 2017. The population was 225 observations. Companies that do not publish research data are removed from the sample, resulting in 76 observations. Numerous companies that do not publish their annual reports either on the IDX website or their official website during the observation cause a high number of samples excluded from the initial population. The measurement of research variables is presented in Table 1. Multiple linear regression is used as a research analysis technique with the following model:

$$DACC_{it} = \beta_0 + \beta_1 ROA_{it} + \beta_2 ACHANGE_{it} + \beta_3 DER_{it} + \beta_4 OSHIP_{it} + \beta_5 AUFSIZE_{it} + \beta_6 RECEIVABLE_{it} + \beta_7 AUCHANGE_{it} + \beta_8 AOPINION_{it} + \beta_9 DCHANGE_{it} + \beta_{10} BDOUT_{it} + \beta_{11} PIC_{it} + e \quad (1)$$

Table 1
Variable Measurements

Variable	Measurement	Formula	Source
Independent:			
Pressure	Financial Target	$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$	Skousen et al. (2009)
	Financial Stability	$ACHANGE = \frac{\text{Total Asset}(t) + \text{Total Asset}(t-1)}{\text{Total Asset}(t-1)}$	
	External Pressure	$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$	
	Institutional Ownership	$OSHIP = \frac{\text{institutional-owned shares}}{\text{number of outstanding shares}}$	
Opportunity	The Number of Audit Committee Members	$AUFSIZE = \text{number of audit committee}$	Akbar (2017)
	Nature of Industry	$RECEIVABLE = \frac{\text{Receivable}_t}{\text{Sales}_t} - \frac{\text{Receivable}_{t-1}}{\text{Sales}_{t-1}}$	Skousen et al. (2009)
Rationalization	Change of Auditor	AUCHANGE = Dummy, one, if there is a change of auditor during the observation period. 0 otherwise.	
	Auditor's Opinion	AOPINION = Dummy, one, if it has an unqualified opinion during the observation period. 0 otherwise.	
Competence	Change of Director	DCHANGE = Dummy, one, if there is a change of directors during the observation period. 0 otherwise.	Demetriades & Owusu-Agyei (2022)
	Ineffective Monitoring	$BDOUT = \frac{\text{The Number of independent commissioner}}{\text{The total of number commissioner}}$	Skousen et al. (2009)
Arrogance	The Number of CEOs Picture	PIC = the number of CEO images in the annual report	Antawirya et al. (2019)
Dependent:			
Financial Statement Fraud (FSF)	Discretionary Accrual (earnings management)	$ DACC_{it} = TACC_{it} - NDACC_{it} $	Dechow et al. (1995)

Results

Table 2 shows the mean of ROA = 0.0121079; ACHANGE = 0.1225461; DER = 6.6280961; OSHIP = 0.7316355; AUCSIZE = 3.8026; RECEIVABLE = -0.0497539; AUCHANGE = 0.54; AOPINION = 0.62; DCHANGE = 0.57; BDOUT = 0.5911041; PIC = 2.14. A multicollinearity test was conducted to find out whether there was a multicollinearity problem (Alzeban, 2019). The VIF value of all variables < 10 means that there is no multicollinearity problem (Table 3).

Hypothesis Testing and Discussion

In Table 4, ROA is significant at 1% level with a negative coefficient. It concludes that financial targets have a negative effect on FSF. AUOPINION is significant at the 5% level with a positive coefficient. It means Auditors' opinion has a positive effect on FSF. Finally, with a positive coefficient, DCHANGE is significant at the 5% level. It means the director's change has a positive effect on FSF.

In contrast, other variables are not significant. It means that, apart from the previous three variables, all variables do not affect FSF. The adjusted R square value indicates that the independent variable explains the dependent variable by 35%, and factors outside the study explain the remaining 65%.

Table 2
Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
ROA	76	0,00	0,03	0,01	0,01
ACHANGE	76	-0,07	0,31	0,12	0,09
DER	76	3,44	11,50	6,63	2,19
OSHIP	76	0,26	1,10	0,73	0,18
AUCSIZE	76	3,00	6,00	3,80	0,88
RECEIVABLE	76	-2,82	3,62	-,005	1,14
AUCHANGE	76	0,00	1,00	0,54	0,50
AUOPINION	76	0,00	1,00	0,62	0,49
DCHANGE	76	0,00	1,00	0,57	0,50
BDOUT	76	0,40	0,75	0,59	0,08
PIC	76	0,00	4,00	2,14	0,86
DACC	76	-148,12	0,08	-5,51	26,02
Valid N (listwise)	76				

*Source: Processed Data, 2022

Table 3
Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
ROA	0,71	1,40
ACHANGE	0,51	1,95
DER	0,57	1,76
OSHIP	0,67	1,50
AUCSIZE	0,55	1,82
RECEIVABLE	0,76	1,31
AUCHANGE	0,57	1,74
AUOPINION	0,61	1,64
DCHANGE	0,48	2,07
BDOUT	0,69	1,44
PIC	0,70	1,42

*Source: Processed Data, 2022

Effect of Pressure on financial statement fraud

The test results prove that financial targets have a negative effect on FSF. Meanwhile, financial stability, external pressure and ineffective monitoring have no effect (Table 4). Therefore, because there is one influential variable, H1 is accepted.

In contrast, Akbar (2017) and Antawirya et al. (2019) stated that the higher ROA provokes investors to invest in the company and encourages management to commit FSF. However, the research findings prove that Indonesian banking truly works excellent. Evidently, the higher the ROA, the lower the FSF (Table 4).

Table 4
Multiple Linear Regression Test Results

	B	T	Sig.
const	52,35	1,38	0,17
ROA	-1676,46	-4,22	0,00*
ACHANGE	-46,44	-1,26	0,21
DER	0,302	0,20	0,84
OSHIP	17,81	1,09	0,28
AUCSIZE	-1,96	-0,52	0,60
RECEIVABLE	-3,64	-1,48	0,14
AUCHANGE	-8,99	-1,40	0,16
AUOPINION	16,03	2,51	0,01**
DCHANGE	15,22	2,17	0,03**
BDOUT	-69,84	-1,88	0,06
PIC	-5,09	-1,50	0,14
Adjusted R Sq	0,35		

Signs *, ** are significant at the 1% and 5% levels.

Source: Processed Data, 2022

In investors' perception, the higher ROA indicates that the management of banking companies can work well to generate profits (Khamainy et al., 2022). In line with that perception, Indonesian banking management is competing to maximize their ROA with an excellent way to attract investors (Rashid et al., 2022; Saluja et al., 2021). Therefore, the financial target is a good pressure that motivates Indonesian banking management to keep their distance from FSF.

The excellent effect of pressure is strengthened by the results of ACHANGE, DER and OSHIP (Table 4). Indonesian banking management does not simply carry out earnings management to improve performance while financial conditions are unstable. They are aware that customer and shareholder trust is paramount. Therefore, fluctuations in customer deposits (leverage) or institutional ownership do not affect how they work. In addition, the bank's directors enforce good governance to maintain the firm value, so they do not waver in committing fraud. This result extends to Crowe (2011) that pressure affects FSF, but in Indonesian banking, this has a good tone.

Effect of Opportunity on financial statement fraud

The regression test shows that AUCSIZE and RECEIVABLE do not affect FSF. In conclusion, H2 is rejected. Antawirya et al. (2019) show the negative effect of the number of audit committees on FSF. In contrast, the research findings prove that each Indonesian banking audit committee is independent, and the number has no effect. The Indonesian banking audit committee upholds the independence of its profession. Therefore, regardless of the number of members, it does not create opportunities for fraud. Furthermore, each audit committee member works independently to ensure that the financial statements are fairly presented (Akbar, 2017).

The nature of the industry, as proxied by the ratio of receivables to sales, does not affect fraudulent financial statements because Indonesian banking management is strict on good corporate governance. Indonesian banking management has proven to have good character because it prioritizes the flow of cash receipts (Akbar, 2017). It is proven by the low mean ratio of receivables to sales (Table 2). The Indonesian banking directors work excellently, so the ratio of receivables to sales is low. They do not have the ambition to take advantage of opportunities by manipulating the ratio to look dashing. Research findings expand on Crowe (2011) that opportunity is not constantly triggering FSF. Indonesian banking directors uphold independence and good character, so they are not interested in committing fraud even though there is an opportunity.

Effect of Rationalization on financial statement fraud

Rationalization proxied by AUCHANGE does not affect FSF. Meanwhile, AOPINION shows the opposite. Because one of the two measurements has an effect, H3 is accepted. Rationalization affects FSF.

The change of auditors does not mean banks are trying to eliminate traces of FSF (Akbar, 2017). Government Regulation No.20 of 2015 states that public accountants have a maximum limit of five consecutive years to audit one client. Therefore, the change of auditors does not affect the FSF because the bank in Indonesia complies with these rules.

Auditor opinion has a positive effect because Indonesian banking management is aware of the importance of getting an unqualified or modified unqualified opinion for going concerned (Bayo Flees & Mouselli, 2022; Sandhu, 2022). Therefore, banking directors try to achieve this opinion by conducting earnings management (Baskaran et al., 2020).

Baskaran et al. (2020) stated that earnings management is not necessarily bad. Banking directors strive to fulfil their obligations to shareholders by maximizing firm value through income smoothing to show sustainable growth and tax interests (Purwanti et al., 2015). This action is known as informative earnings management because it increases investor confidence through stable earnings (Sun & Al Farooque, 2018). This practice is typical in the business world (Kassem, 2021). Therefore, at the end of the audit, the auditor will continue to provide an unqualified or modified unqualified opinion if they have sufficient assurance about the financial information reported by management. Referring to Crowe (2011) perspective, it must be realized that this rationalization can trigger FSF if there is poor communication between the auditor and management.

Effect of Competence on financial statement fraud

DCHANGE has a positive effect on FSF. Meanwhile, BDOUT has no effect. In conclusion, H4 is accepted. In line with Puspitha & Yasa (2018) and Avortri & Agbanyo (2020), individuals with high positions have competence, so they easily commit fraud and have a significant impact. These results support Crowe (2011) that the competence of banking directors is a resource for him. However, they can easily commit FSF without being detected if there is an opportunity. Therefore, Indonesian banking management must limit the authority of its board of directors to prevent fraud (Antawirya et al., 2019).

Financial Services Authority Regulation No. 55/POJK.03/2016 requires 50% of the board of commissioners to be independent members. Table 2 shows that, in general, Indonesian banking companies have complied with these regulations. The research means that above 50% proves that the supervision of independent commissioners is very dominant and influential (Akbar, 2017). However, the existence of financial services authority regulations biases the influence of independent commissioners' competence on FSF because all banks are closely monitored. Therefore, ineffective monitoring does not affect FSF.

Effect of Arrogance on financial statement fraud

The number of CEOs pictures does not affect FSF. H5 is rejected. The number of pictures in the annual report indicates the CEO's arrogance, but this arrogance does not necessarily affect his desire to commit FSF (Akbar, 2017).

The findings broaden Crowe (2011) perspective that the arrogance of Indonesian banking CEOs does not encourage them to commit FSF. The number of their images in the annual report is intended to make them known to the public (Murthy & Gopalkrishnan, 2022). The more popular CEOs perform high because they must make decisions carefully to maintain their reputation (Wardhani & Supratiwi, 2021).

Conclusion

Crowe (2011) mentions the factors that trigger the occurrence of FSF: pressure, opportunity, rationalization, competence, and arrogance. The purpose is provide empirical evidence that the five factors of Crowe (2011) affect FSF. The research findings prove that pressure, rationalization, and competence affect FSF. Uniquely, these findings make Indonesian banking seem excellent. The existence of pressure and rational reasons for earnings management makes banking directors

optimally motivated to maximize the interests of shareholders and ultimately minimize the potential for FSF. However, this significant effect is practical if the authority of the banking directors is limited to prevent fraud.

Referring to Crowe (2011) perspective, the research has implications for two conditions. First, Indonesian banking management must maintain good corporate governance and improve its quality to minimize FSF. Second, the supervision of the Government through the relevant authorities on Indonesian banking must be maintained so there is no room for FSF. The number of companies that do not publish their annual reports either on the IDX website or their official website during the observation period is a limitation of the study. Future research is expected to have adequate access to published banking annual reports and more observations so results can be generalized properly. Finding other arrogance measurement proxies can be carried out by subsequent research to complement these findings to be comprehensive.

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References

- ACFE. (2022). Report to the Nations on Occupational Fraud and Abuse. 2022 Global Fraud Study.
- 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.
- Alzeban, A. (2019). An examination of the impact of compliance with internal audit standards on financial reporting quality. *Journal of Financial Reporting and Accounting*.
- Antawirya, R., et al. (2019). Application of fraud pentagon in detecting financial statement fraud. *International Research Journal of Management, IT and Social Sciences*, 6(5), 73-80.
- Avortri, C., & Agbanyo, R. (2020). Determinants of management fraud in the banking sector of Ghana: the perspective of the diamond fraud theory. *Journal of Financial Crime*, 28(1), 142-155. <https://doi.org/10.1108/JFC-06-2020-0102>
- Baskaran, S., et al. (2020). Earnings management: a strategic adaptation or deliberate manipulation? *Journal of Financial Crime*.
- Bayo Flees, R., & Mouselli, S. (2022). The impact of qualified audit opinion on stock returns: an empirical study at Amman stock exchange. *Journal of Financial Reporting and Accounting*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JFRA-02-2021-0056>
- Cheliatsidou, A., et al. (2021). The international fraud triangle. *Journal of Money Laundering Control*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JMLC-09-2021-0103>
- Cressey, D. R. (1953). *Other people's money; a study of the social psychology of embezzlement*.
- Crowe, H. (2011). *Why the fraud triangle is no longer enough*. Horwath, Crowe LLP.
- Dechow, P. M., et al. (1995). Detecting earnings management. *Accounting Review*, 193-225.
- Demetriades, P., & Owusu-Agyei, S. (2022). Fraudulent financial reporting: an application of fraud diamond to Toshiba's accounting scandal. *Journal of Financial Crime*, 29(2), 729-763. <https://doi.org/10.1108/JFC-05-2021-0108>
- Devi, P. N. C., et al. (2021). The effect of fraud Pentagon theory on financial statements: Empirical evidence from Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(3), 1163-1169.
- IFRS. (2020). Conceptual framework for financial reporting. <https://www.ifrs.org/-/media/project/conceptual-framework/fact-sheet-project-summary-and-feedback-statement/conceptual-framework-project-summary.pdf>
- Jaswadi, J., et al. (2022). Financial statement fraud in Indonesia: a longitudinal study of financial misstatement in the pre- and post-establishment of financial services authority. *Journal of Financial Reporting and Accounting*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JFRA-10-2021-0336>
- Kaawaase, T. K., et al. (2021). Corporate governance, internal audit quality and financial reporting quality of financial institutions. *Asian Journal of Accounting Research*, 6(3), 348-366. <https://doi.org/10.1108/AJAR-11-2020-0117>
- Kassem, R. (2021). How could external auditors assess the rationalization of fraud? *Journal of Financial Crime*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JFC-08-2021-0184>
- Khamainy, A. H., et al. (2022). Detecting financial statement fraud through new fraud diamond model: the case of Indonesia. *Journal of Financial Crime*, 29(3), 925-941. <https://doi.org/10.1108/JFC-06-2021-0118>

- Latan, H., et al. (2021). Social media as a form of virtual whistleblowing: empirical evidence for elements of the diamond model. *Journal of business ethics*, 174(3), 529-548.
- Murthy, N., & Gopalkrishnan, S. (2022). Creating a Nexus between Dark Triad Personalities, Non-Performing Assets, Corporate Governance and Frauds in the Indian Banking sector. *Journal of Financial Crime*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JFC-05-2022-0097>
- Nasir, N. A. B. M., et al. (2019). Corporate governance, board ethnicity and financial statement fraud: evidence from Malaysia. *Accounting Research Journal*, 32(3), 514-531. <https://doi.org/10.1108/ARJ-02-2018-0024>
- Olaniyi, C. O., et al. (2017). Analysis of the nexus between CEO pay and performance of non-financial listed firms in Nigeria. *African Development Review*, 29(3), 429-445.
- Omukaga, K. O. (2021). Is the fraud diamond perspective valid in Kenya? *Journal of Financial Crime*, 28(3), 810-840. <https://doi.org/10.1108/JFC-11-2019-0141>
- Owusu, G. M. Y., et al. (2022). Examining the predictors of fraud in state-owned enterprises: an application of the fraud triangle theory. *Journal of Money Laundering Control*, 25(2), 427-444. <https://doi.org/10.1108/JMLC-05-2021-0053>
- Purwanti, L., et al. (2015). Cosmetics and tricks: representing the meanings of earning management practices. *Procedia-Social and Behavioral Sciences*, 211, 704-710.
- Puspitha, M. Y., & Yasa, G. W. (2018). Fraud pentagon analysis in detecting fraudulent financial reporting (study on Indonesian capital market). *International Journal of Sciences: Basic and Applied Research*, 42(5), 93-109.
- Rashid, M., et al. (2022). Auditors' perspectives on financial fraud in Pakistan – audacity and the need for legitimacy. *Journal of Accounting in Emerging Economies*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JAEE-04-2021-0135>
- Saluja, S., et al. (2021). Understanding the fraud theories and advancing with integrity model. *Journal of Financial Crime*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/JFC-07-2021-0163>
- Sandhu, N. (2022). Red flag behaviors in financial services frauds: a mixed-methods study. *Journal of Financial Regulation and Compliance*, 30(2), 167-195. <https://doi.org/10.1108/JFRC-01-2021-0005>
- Sarikhani, M., & Ebrahimi, F. (2021). Whistleblowing by accountants: an integration of the fraud pentagon and the extended theory of planned behavior. *Meditari Accountancy Research*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/MEDAR-10-2020-1047>
- Skousen, C. J., et al. (2009). Detecting and predicting financial statement fraud: The effectiveness of the fraud triangle and SAS No. 99. In *Corporate governance and firm performance*. Emerald Group Publishing Limited.
- Sun, L., & Al Farooque, O. (2018). An exploratory analysis of earnings management practices in Australia and New Zealand. *International Journal of Accounting & Information Management*, 26(1), 81-114. <https://doi.org/10.1108/IJAIM-09-2016-0087>
- Vousinas, G. L. (2019). Advancing theory of fraud: the S.C.O.R.E. model. *Journal of Financial Crime*, 26(1), 372-381. <https://doi.org/10.1108/JFC-12-2017-0128>
- Wardhani, D. K., & Supratiwi, W. (2021). THE INFLUENCE OF THE CEO POPULARITY ON PERFORMANCE OF BANKING COMPANIES AT THE EARLIER STAGES OF COVID-19. *Jurnal Akuntansi dan Keuangan Indonesia*, 18(1), 1.
- Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: considering the four elements of fraud. *The CPA Journal*, 74(12), 38-42.
- Xu, Q., et al. (2020). Financial report readability and audit fees: a simultaneous equation approach. *Managerial Auditing Journal*, 35(3), 345-372. <https://doi.org/10.1108/MAJ-02-2019-2177>
- Zahari, A. I., et al. (2022). Public sector fraud: the Malaysian perspective. *Journal of Financial Crime*, 29(1), 309-324. <https://doi.org/10.1108/JFC-01-2021-0013>.



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