FRAUD PENTAGON THEORY IN DETECTING FRAUDULENT FINANCIAL REPORTING IN FINANCIAL COMPANY

TEORI PENIPUAN PENTAGON DALAM MENDETEKSI LAPORAN KEUANGAN YANG MENIPU DI PERUSAHAAN KEUANGAN

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ABSTRACT
Indonesia's banking sector has experienced recurrent fraud incidents, particularly those involving falsified financial statements, revealing persistent vulnerabilities despite heightened regulatory scrutiny. These issues position banking and financial services as one of the most fraud-prone industries in Indonesia, necessitating a deeper understanding through advanced frameworks like the fraud pentagon theory, which identifies pressure (Financial Target) as a primary driver of dishonest reporting, alongside opportunity (Financial Stability), rationalization (Change in Auditor), competence (Change in Director), and arrogance (CEO's Photo Frequency). This study utilizes secondary data obtained from the IDX, with 30 companies as samples, resulting in 150 panel data points from the banking and financial sector in Indonesia. The data was analyzed using Eviews. The research indicate that only the financial target variable, proxied by ROA, has a positive and significant effect. Meanwhile,the other variables are insignificant, although the variables financial stability, change in auditor, and change in director show a negative direction. The implications of these findings suggest that by increasing its application in developing market environments and demonstrating that not all proxies suggested for ability and arrogance have predictive power in non-Western environments like Indonesia, where cultural and institutional factors can reduce their relevance, this research advances the Fraud Pentagon Theory. Specifically, this casts doubt on the universality of arrogance as an incentive for deception, arguing that the visual depiction of leadership is more consistent with enhancing corporate image than with dishonesty.
Keywords: *Fraud Pentagon Theory, Fraudulent Financial, Financial Stability, Financial Target*

ABSTRAK
Sektor perbankan Indonesia telah mengalami insiden penipuan berulang, terutama yang melibatkan laporan keuangan palsu, yang menunjukkan kerentanan yang persisten meskipun ada pengawasan regulasi yang ketat. Masalah ini menempatkan sektor perbankan dan jasa keuangan sebagai salah satu industri paling rentan terhadap penipuan di Indonesia, sehingga memerlukan pemahaman yang lebih mendalam melalui kerangka kerja canggih seperti teori pentagon penipuan, yang mengidentifikasi tekanan (Tujuan Keuangan) sebagai pendorong utama pelaporan yang tidak jujur, bersama dengan kesempatan (Stabilitas Keuangan), rasionalisasi (Perubahan Auditor), kompetensi (Perubahan Direksi), dan kesombongan (Frekuensi Foto CEO). Studi ini menggunakan data sekunder yang diperoleh dari IDX, dengan 30 perusahaan sebagai sampel, menghasilkan 150 titik data panel dari sektor perbankan dan keuangan di Indonesia. Data dianalisis menggunakan Eviews. Penelitian menunjukkan bahwa hanya variabel target keuangan, yang diproksikan oleh ROA, memiliki efek positif dan signifikan. Sementara itu, variabel-variabel lain tidak signifikan, meskipun variabel stabilitas keuangan, perubahan auditor, dan perubahan direktur menunjukkan arah negatif. Implikasi dari temuan ini menyarankan bahwa dengan meningkatkan Aplikasi dalam lingkungan pasar yang sedang berkembang dan menunjukkan bahwa tidak semua proxy yang diusulkan untuk mengukur kemampuan dan kesombongan memiliki daya prediksi di lingkungan non-Barat seperti Indonesia, di mana faktor budaya dan institusional dapat mengurangi relevansinya, penelitian ini memperkuat Teori Pentagon Penipuan. Secara khusus, hal ini meragukan universalitas kesombongan sebagai insentif untuk penipuan, dengan argumen bahwa penggambaran visual kepemimpinan lebih konsisten dengan peningkatan citra korporat daripada dengan ketidakjujuran.
Kata Kunci: Teori Pentagon Penipuan, Keuangan Curang, Stabilitas Keuangan, Target Keuangan

INTRODUCTION

The persistence of fraud as a deliberate criminal act that benefits perpetrators while causing unintended harm to others remains a critical concern for organizations worldwide. Fraudulent financial reporting, characterized by false assertions related to the amount, classification, presentation, and disclosure of financial data, represents a significant subset of fraud with considerable economic repercussions (Situngkir, 2020). According to the Association of Certified Fraud Examiners, corruption is the most frequently encountered fraud type, followed by fraudulent financial reporting and asset misappropriation, with the highest monetary losses contributed by asset misappropriation. This highlights the disproportionate impact of inaccurate financial disclosures on stakeholders, including creditors and investors (ACFE, 2025).

Over the years, Indonesia's banking industry has seen a number of noteworthy fraud events, most notably those involving falsified financial statements. The 2002 Bank Lippo Corp case, in particular exposed false reporting in which companies showed asset values below their true net assets a blatant manipulation that undermines financial integrity. The 2008 Century Bank crisis, which was serious enough to jeopardize the nation's financial stability, brought this pattern of dishonesty back into the spotlight. More recently, in 2015, the insider trading controversy involving shares of Bank Danamon Indonesia Corp and Rajiv Louis, the former County Head of UBS Group, brought attention to persistent weaknesses in the banking sector (B. L. Handoko et al., 2020). In the most recent study conducted by the Association of Certified Fraud Examiners, banking and financial services came in third place among Indonesia's most fraud prone industries, after the government and the building sector (ACFE, 2025). Despite heightened regulatory scrutiny, this finding highlights the ongoing risk of fraudulent activities in financial institutions. Compared to previous frameworks like the fraud triangle or diamond (Murtado et al., 2022), the fraud pentagon theory provides a more sophisticated viewpoint for comprehending the reasons behind these scams. It outlines five essential components that together lead to fraud: pressure, opportunity, rationalization, competence, and arrogance. Of these, pressure which is generated by things like financial targets, lifestyle expectations, and economic pressures is the main cause of dishonest financial reporting (Andriani et al., 2022). Furthermore, discrepancies in financial reports, such as abnormal accounting movements or the incidence of financial statement restatements, may frequently be used to identify possible fraud within businesses. These restatements are important warning signs of potential fraud or manipulation in financial reporting (Sasongko & Wijayantika, 2019).

An important factor in determining the trajectory of fraudulent financial reporting in the Indonesian banking industry is the pressure dimension, which is symbolized by financial targets like Return on Assets (ROA). Numerous studies confirm that higher levels of pressure, especially those resulting from the desire to achieve ambitious financial targets, are strongly correlated with the chance of fraud (Andriani et al., 2022; Rukmana, 2021). While all of the factors in the fraud pentagon theory collectively impact fraud occurrences, research revealed that pressure and rationalization have a significant impact on fraudulent financial reporting, while other factors

such as opportunity, competence, and arrogance did not show any significant partial effect (Maulidiana & Triandi, 2020). Similarly, a typical motivation behind financial statement fraud is management's pressure to meet investor expectations and exhibit good financial data, which frequently results in falsified records to suggest profitability and development (Aulia Haqq & Budiwitjaksono, 2019). A major risk factor for such fraud is identified in the Statement on Auditing Standards (SAS) No. 99 as pressure from owners, boards of directors, and market expectations to meet high financial targets. This is particularly true when the targets are viewed as unrealistic or unduly ambitious, which encourages shortcuts through accounting manipulation (Tamaela et al., 2025). Nevertheless, there are inconsistencies in the empirical results of how financial target affect fraudulent reporting in the banking industry. For instance, there is conflicting information about the impact of financial objectives like ROA on Fraudulent reporting. According to certain study, fraud does not always grow with bigger financial targets, indicating that opportunity is a more important element (B. L. Handoko et al., 2020). On the other hand, establishing greater ROA goals may greatly increase the possibility of financial statement fraud (Antawirya et al., 2019).

In addition to pressure there are opportunity, represented by financial stability plays a significant role in understanding fraudulent financial reporting. Numerous studies demonstrate that financial stability can raise the risk of fraud as precarious financial situations frequently put pressure on management to falsify financial reports in order to preserve favorable opinions among stakeholders. For instance, studies reveal that a greater likelihood of fraudulent reporting is associated with financial instability, which is demonstrated by changes in the company's assets. This is because businesses want to lessen the negative perceptions associated with unstable assets and high business risks (Aulia Haqq & Budiwitjaksono, 2019; Tamaela et al., 2025). Furthermore, a company's ability to sustain stable financial circumstances in both regular and emergency situations is reflected in its financial stability, which affects management's ability to run operations effectively and responsibly (Zhu et al., 2021). Nevertheless, empirical results about the impact of financial stability on fraud detection show contradictions. Studies show that firms with unstable finances are more likely to perpetrate fraud, and that financial stability significantly affects the rise in false financial reporting (Tamaela et al., 2025). However, according to some studies, financial stability has no bearing on false financial statements since management could refrain from manipulation in order to protect long-term investment prospects (B. L. Handoko et al., 2020; Utami & Pusparini, 2019).

The rationalizations dimension in fraud theories such as the Fraud Pentagon and Fraud Hexagon is represented by auditor changes, which are often viewed as a mechanism to justify unethical actions within the context of financial eporting (Ramos Montesdeoca et al., 2019). However, a comprehensive analysis of the existing body of research reveals that auditor changes whether voluntary or mandated by regulations, do not significantly influence the incidence or detection of fraudulent financial reporting in the Indonesian financial context. Multiple studies, including Tamaela et al.,(2025), Antawirya et al., (2019), and Achmad et

al., (2022), consistently demonstrate that corporate decisions to switch auditors do not statistically contribute to heightened fraud risk, finding that chalenges prevailing assumptions that such transitions might facilitate manipulative practice. This lack of impact is largely anttibuted to robust audit governance mechanism, encompassing stringent professional audit standards, formalized communications channels between outgoing and incoming auditors, and the active involvement of audit committees, all of the which collectively ensure audit continuity and integrity. However, the findings are not entirely uniform, while some studies reinforce the insignificance of auditor changes in fraud occurrence or detection, others acknowledge auditor turnover's theoritical relevance but find no empirical support for its effect due to regulatory compliance motivations behind auditor changes rather than concealment efforts (Achmad et al., 2022; Nanda et al., 2019).

Building in the preceding analysis of auditor change as a proxy for rationalization, the dimension of capability as embodied by change in directors, encapsulaating the ability to manage stress and navigate leadership transitions (Sasongko & Wijayantika, 2019). Theoritically positioning director turnover as facilitator of fraud through enhanced competence in evading controls during periods of upheaval. Nevertheless, empirical evidence presents a nuanced picture. While some studies affirm that director changes exert no significant influence on the prevelence of financial statement fraud, attributing this to fortified internal controls, governance structures, and regulatory oversight that curb manipulative opportunities (Achmad et al., 2022; B. L. Handoko et al., 2020; Nanda et al., 2019; Tamaela et al., 2025), others reveal a positive correlation,

suggesting that transitional stresses can create windows for concealment or initial lapses that enable fraud (Arizanda Rahayu et al., 2024; Utami & Pusparini, 2019). This dichotomy challenges the assumption that capability inherently amplifies fraud risk, as agency theory's rejection in certain context implies director changes may instead bolster performance rather than signal deceit (Achmad et al., 2022; Nanda et al., 2019). Reflecting on these contradictions, it becomes evident that the mixed findings likely shaped by disparities in governance quality, regulatory stringency, and sectoral dynamics highlight a fertile ground for further investigation, urging researchers to delve deeper into how director transitions interplay with fraud vulnerability in Indonesia's banking landsape to refine detection strategies and theoritical applications.

Extending the exploration of fraud dimensions beyond capability as manifested through director changes, the arrogance dimension symbolized by the frequency of the CEO's photo ini the company's annual report, introduces another layer of complexity in assessing fraudulent financial reporting. This proxy, drawing from the Fraud Pentaon, theoritically posits that excessive CEO visibility might reflect hubris and a disregard for controls, potentially enabling financial manipulation driven by a desire for status preservation (Arizanda Rahayu et al., 2024; Rukmana, 2021). However, empirical insights reveal a paradoxical landscape. Some studies indicate a negative correlation, where frequent CEO imagery promotes transparency, accountability, and reduced fraud risk by highlighting achievement and leadership to stakeholders (Achmad et al., 2022; Andriani et al., 2022; Maulidiana & Triandi, 2020), while others support a

positive link, suggesting that arrogance fueled pride can lead to misrepresentation as CEOs bypass safeguards to uphold their image (Situngkir, 2020; Yanto, 2023).

The persistent prevalence of fraudulent financial reporting in Indonesia's banking sector, as evidenced by historical cases and empirical inconsistencies across the Fraud Pentagon dimensions: Pressure (financial targets), opportunity (financial stability), rationalization (change in auditor), capability (Change in Director), and Arrogance (CEO photo frequency) underscores the urgent need for this study. By addressing these gaps through a focused investigation in the Indonesian financial context, where regulatory frameworks like those enforced by the OJK and unique sectoral dynamics amplify fraud risks, this research aims to provide naunced insights into how these dimensions interplay to facilitate or deter manipulation, thereby informing tailored prevention strategies that mitigate economic repercussions for stakeholders.

Literature Review
Financial Target and Detecting Fraudulent Financial Reporting

Drawing from the synthesis of prior research, the hypothesis posits that financial targets exert a significant positive influence on fraudulent financial reporting. These targets, frequently measured through Return on Assets (ROA), embody managerial asporations to showcase corporate profitability and operastional efficacy (Sasongko & Wijayantika, 2019). Escalating financial targets amplify the pressure in managers to achieve or surpass anticipated outcomes, potentially prompting deceptive maneuvers in financial disclosures to fulfill these ambitions and circumvent

adverse repercussions. The dynamic emerges as heigtenend ROA benchmarks render management susceptible to earnings manipulation, fabricating an illusion of prosperous performance paths (Rukmana, 2021; Sasongko & Wijayantika, 2019). Upon deeper contemplation, this lingkage resonates with human behavioral tendencies, where the drive for recognition and security compels individuals to rationalize shortcuts, even at the expense of integrity, highlighting how psychological pressures intertwine with economic incentives to foster fraud. Empirical corroboration further bolsters this view , illustrating that rising ROA levels align with an elevated fraud propensity, mirroring managers' motivations to depict contrived achievements for pecuniary gains or career preservation (Bader et al., 2024; Burlacu et al., 2025). Reflecting on these patterns, it becomes evident that such hypotheses not only underscore the predictive power of performance metrics in fraud models but also invite scrutiny into the ethical dilemmas faced by decision makers, urging a holistic approach that integrates behavioral insights to preeemt manipulative behaviors in corporate settings. H1= Financial Target has an effect on Detecting Fraudulent Financial Reporting

Financial Stability and Detecting Fraudulent Financial Reporting

The integration of international and Indonesian empirical research alongside theoritical underpinnings, the hypothesis emerges that financial stability exerts a significant impact on fraudulent financial reporting. This stability, commonly gauged through fluctuations in asset values, signifies a fimr's aptitude to uphold steady economic circumstances. In scenarios of

instability, characterized by volatile or diminishing asset valuations, executives confront intensified pressures to project an image of resilience and prosperity via modified financial disclosures. This imperative stems from stakeholder vigilance and the need to safeguard corporate image and investor trust, potentially inciting deceptive alterations to obscure deteriorating fiscal health (Sasongko & Wijayantika, 2019; Utami & Pusparini, 2019). This phenomenon illuminCates human cognitive processes, where the fear of reputational fallout and personal accountability drives individuals to rationalize unethical shortcuts, transforming economic vulnerabilities into psychological burdens that justify manipulationa as a survival mechanism. Empirical validations further substantiate this, demostrating that diminished stability equating to greater instability correlates positively with fraud incidence, as organizzations endeavor to veil financial decline and perpetuate illusions of enduring operational soundness (Achmad et al., 2022; Aulia Haqq & Budiwitjaksono, 2019; Burlacu et al., 2025). Reflecting on these insights, it becomes clear that such hypotheses not only pinpoint stabilit metrics as pivotal fraud predictors but also prompt introspection into the ethical quandaries confronting leaders, advocating for integrated framework that blend financial indicator with behavioral interventions to curb the human propensity for deceit in times of incertainty. H2= Financial Stability has an effect on Detecting Fraudulent Financial Reporting

Change in Auditor and Detecting Fraudulent Financial Reporting

The hypothesis asserting that shifts in external auditors exert a notable influence on fraudulent financial reporting is anchored in theoretical foundations and corroborated by empirical data. As outlined in SAS No. 99 (AICPA, 2002), auditor transitions can herald avenues for fraud, especially when antecedent auditors possessed superior acumen in uncovering managerial improprieties. Study by Sasongko & Wijayantika, (2019) stress that such turnover might epitomize endeavors by leadership to legitimize fraudulent conduct by dismantling audit footprints unearthed by former auditors. Arizanda Rahayu et al., (2024) elaborate that rationalization the cognitive vindication of deceit can be embodied by auditor replacements, thereby enabling sustained or nascent subterfuge. The inclination to rationalize unethical actions as pragmatic necessities, where changing auditors serves as a psychological shield, alleviating guilt by framing deception as a strategic evasion of scrutiny, thus revealing how cognitive dissonance drives individuals to compartmentalize morality in pursuit of self preservation or organizational gain. Empirical investigations further solidify this network. Farida et al., (2022) bserve that elevated rationalization levels, gauged by auditor rotations, align with amplified fraudulent disclosures, as such changes aid in veiling previously identified deceit. Validate by Handoko et al., (2020) that auditor alterations markedly impact erroneous financial reporting, whereas Antawirya et al., (2019) portray auditor shifts as calculated tactics to obfuscate audit artifacts, diminishing the prospects of detection by novices unacquainted with historical operations. Similarly, Khoirunnisa et al., (2020) affirm that auditor substitutions frequently target the erasure of antecedent engagement trails. H3= Change in Auditor has an effect on Detecting Fraudulent Financial Reporting

Change in Director and Detecting Fraudulent Financial Reporting

Empirically, shifts in directors are construed through dual lenses. Study by Sasongko & Wijayantika, (2019) posit that such changes may signify endeavors to elevate organizational performance by supplanting prior directors with adept successors, albeit potentially diminishing interim efficacy amid acclimatization phases. Furthemore, Farida et al., (2022) uncover statistically robust proof that modifications in board stewardship positively correlate with fraudulent financial reporting, intimating that director rotations might engender exploitable fragilities. Likewise,Sukmadilaga et al., (2022) theorize that such transitions could denote corporate turbulence or stratagems to obscure antecedent misconduct, thus escalating fraud perils.Antawirya et al., (2019) and Arizanda Rahayu et al., (2024) further affirm that leadership rotations epitomize a salient capability facet in fraud paradigms, where incoming directors' accrued institutional acumen could facilitate manipulation amid governance lacunae. Upon deeper introspection, these insights reveal a profound human frailty, the allure of power transitions often tempts individuals to leverage newfound authority for personal or group gain, rationalizing deceit as a means to navigate uncertainty or assert control, thereby necessitating frameworks that probe not only structural shifts but the psychological underpinnings of ambition and accountability to preempt fraud's insidious creep. H4= Change in Director has an effect on Detecting Fraudulent Financial Reporting

CEO's Photo Frequecy and Detecting Fraudulent Financial Reporting

The frequency of CEO photographs in a company's annual report acts as a visible sign of the CEO's arrogance and sense of superiority within the organization (Aulia Haqq & Budiwitjaksono, 2019). This superior attitude can create a psychological setting where the CEO feels immune to internal controls because of their position and rank, thereby raising the chances of fraudulent conduct (Aulia Haqq & Budiwitjaksono, 2019; Sasongko & Wijayantika, 2019). While certain studies indicate that arrogance assessed only through CEO photo frequency might not always directly lead to fraud (Bader et al., 2024), substantial empirical evidence supports a positive link between frequent CEO photo appearances and cases of financial statement fraud (Aulia Haqq & Budiwitjaksono, 2019). The underlying motivation for this connection can be attributed to the CEO's aim to outwardly display dominance and entitlement to authority, which is consistent with Hubris Theory, positing that heightened hubris results in unethical choices, such as financial misreporting (Sasongko & Wijayantika, 2019). Furthermore, the belief in immunity from regulatory and internal oversight promotes risk-taking and fraudulent activities to fulfill financial targets or personal goals (Arizanda Rahayu et al., 2024; Aulia Haqq & Budiwitjaksono, 2019). H5= CEO's Photo Frequecy has an effect on Detecting Fraudulent Financial Reporting

METHODS

This research was conducted on companies operating in the banking and financial sector listed on the Indonesia Stock Exchange (IDX) from 2020-2024. The sampling method used purposive sampling technique, resulting in 30 companies selected as the research

sample and generating 150 research data points. Data was analyzed using Eviews version 12. The research variables and instruments used are the Fraud Pentagon Theory, which consists of 5 main elements: pressure proxied by Financial Target (ROA), opportunity proxied by

Financial Stability, rationalization proxied by Change in Auditor, capability proxied by Change in Director, and arrogance proxied by CEO's photo Frequency. All of these variables and their measurement methods are detailed in the table below:

Table 1. Variable Measurements

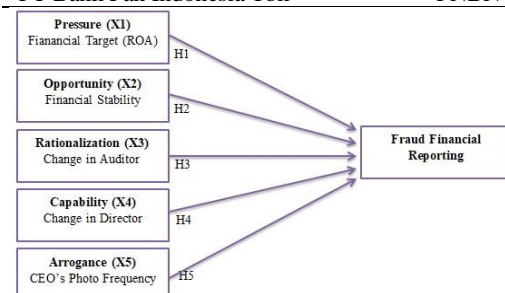| Definition	Measurement	Source	Scale
Financial Targets	$ROA = \frac{Net\ income}{Total\ Assets}$	(Khoirunnisa et al., 2020)	Ratio
Finanial Stability	$ACHANGE = \frac{(total\ assets_t - total\ assets_{t-1})}{total\ assets_{t-1}}$	(Meihendri et al., 2023; Utami & Pusparini, 2019)	Ratio
Change in Auditor	Change in Auditor = 1 Otherwise = 0	(Maulidiana & Triandi, 2020; Utami & Pusparini, 2019)	Nominal
Change in Director	Change in Director = 1 Otherwise = 0	(Utami & Pusparini, 2019)	Nominal
CEO's Photo Frequency	Frequency pergantian CEO	(Agusputri & Sofie, 2019; Sasongko & Wijayantika, 2019)	Nominal
Fraudulent Financial Reporting	F- Score= nilai acrual+financial performance	(Burlacu et al., 2025)	Ratio

Population and Sample:

The population in this study is all banking companies listed on the Indonesia Stock Exchange (BEI) in 2020-2024. The sample was chosen using purposive sampling technique with criteria as follows: (1) Publicly traded banking and financial firms listed on the Indonesia Stock Exchange (BEI) in 2020-2024. (2) Companies publishing audited annual report in the period of 2020-2024. (3) The data required for the study was published between 2020-2024.

Table 2. Sample

Company	Code
Asuransi Bina Dana Arta Tbk	ABDA
PT Bank Raya Indonesia Tbk	AGRO
PT Asuransi Bintang Tbk	ASBI
PT Asuransi Jasa Tania Tbk	ASJT
PT Bank MNC International Tbk	BABP
PT Bank Central Asia Tbk	BBCA
PT Buana Finance Tbk	BBLD
PT Bank Mestika Dharma Tbk	BBMD
PT Bank Negara Indonesia (Persero) Tbk	BBNI
PT Bank Rakyat Indonesia (Persero) Tbk	BBRI
PT Bank Neo Commerce Tbk	BBYB

Company	Code
PT Bank Pembangunan Daerah Jawa Barat dan Banten Tbk	BJBR
PT Bank Pembangunan Daerah Jawa Timur Tbk	BJTM
PT Bank Maspion Indonesia Tbk	BMAS
PT Bank Mandiri (Persero) Tbk	BMRI
Bank Bumi Arta Tbk	BNBA
PT Bank CIMB Niaga Tbk	BNGA
PT Bank Maybank Indonesia Tbk	BNII
PT Bank Permata Tbk	BNLI
Bank Danamon Indonesia Tbk	BDNM
PT Bank Syariah Indonesia Tbk	BRIS
PT Bank SMBC Indonesia Tbk	BTPN
PT Bank Victoria International Tbk	BVIC
PT Equity Development Investment Tbk	GSMF
PT MSIG Life Insurance Indonesia Tbk	LIFE
PT Bank Mayapada International Tbk	MAYA
PT Bank Mega Tbk	MEGA
PT Bank OCBC NISP tbk	NISP
PT Bank Panin Sekuritas Tbk	PANS
PT Bank Pan Indonesia Tbk	PNBN

Figure 1 Research Design

RESULT AND DISCUSSION

Table 3. Descriptive analysis result

	Y	X1	X2	X3	X4	X5
Mean	4.800000	0.012653	0.106953	0.160000	0.173533	3.320000
Median	5.000000	0.011960	0.080000	0.000000	0.000000	3.000000
Maximum	7.000000	0.121600	0.823000	1.000000	1.000000	7.000000
Minimum	3.000000	-0.180580	-0.170000	0.000000	0.000000	1.000000
Std. Dev.	0.912258	0.024383	0.141703	0.367894	0.379863	1.51519
Skewness	-0.180944	-3.001065	1.704413	1.854852	1.72651	0.82848
Kurtosis	2.806452	32.12355	7.814657	4.440476	3.978908	3.627962
Jarque-Bera	1.052646	5526.292	217.5063	98.98048	80.46184	7.060213
Probability	0.590773	0.000000	0.000000	0.000000	0.000000	0.029302
Sum	720.0000	1.897920	16.04300	24.00000	26.00000	498.0000
Sum Sq. Dev.	124.0000	0.088587	2.991877	20.16000	21.49333	184.6400
Observations	150	150	150	150	150	150

Model feasibility test

Model suitability tests are used to determine the best model for analyzing research data, which consists of 3 types of tests: the Chow test with the test criteria: probability > 0.05, then use the Common Effects Model (CEM), and if probability < 0.05, then use the FEM. Meanwhile, the Hausman test criteria are: probability > 0.05, then use the Random Effects Model (REM), and if probability < 0.05, then use the Fixed Effects Model. The final test is the Lagrange Multiplier test with the test criteria: prob. > 0.05, then use the CEM, and if prob. < 0.05, then use the REM. Based on these test criteria, the results of the model suitability test used are as follows:

Table 3. Model feasibility test

Test	Criteria	Probability	Model
Chow test	<0,05	0,0314	FEM
Hausman test	>0,05	0,8539	REM
Lagrange Multiple test	>0,05	0,2727	CEM

Normality Test

The Normality Test in Eviews uses the Jaque Bera probability value as a reference for determining the normality of research data with the condition that if the JB probability > 0.05, then the data is normally distributed, and if the JB probability < 0.05, then the data is not normally distributed.

Series: Standardized Residuals	
Sample 2020 2024	
Observations 150	
Mean	-1.23e-16
Median	0.149607
Maximum	2.158629
Minimum	-1.989290
Std. Dev.	0.881564
Skewness	-0.218053
Kurtosis	2.905232
Jarque-Bera	1.244809
Probability	0.536652
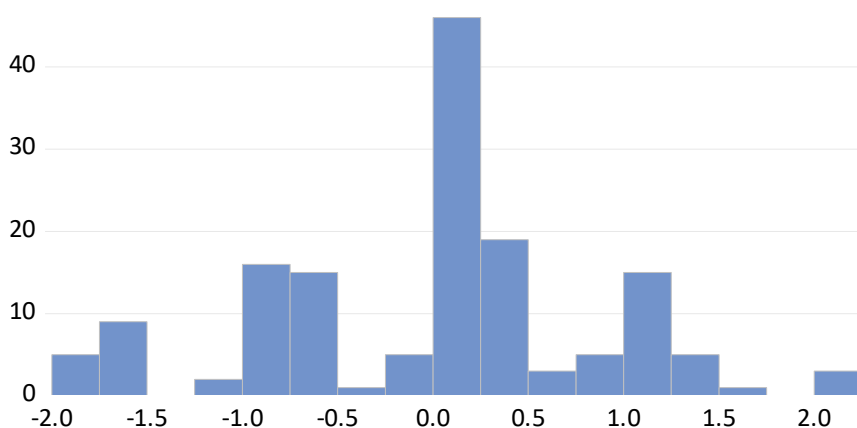
Figure 2 Normality Test

Based on the JB probability results above, which show a value of 0,5366 > 0,05 with the previous test criteria, the data is concluded to be normally distributed. And it can proceed to the stage of further classical assumption testing.

Multikolinierity

The criteria for testing multicollinearity is by identifying the VIF value; if VIF > 10, then there is multicollinearity, and if VIF < 10, then there is no multicollinearity.

Table 4. Multikolinierity Test

Variance Inflation Factors
Date: 11/06/25   Time: 08:12
Sample: 2020 2024
Included observations: 150

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.059248	11.05178	NA
X1	9.584110	1.342034	1.055824
X2	0.286018	1.674457	1.064158
X3	0.041660	1.243378	1.044437
X4	0.039342	1.272032	1.051547
X5	0.004918	11.24119	1.129256

Heteroscedasticity

The criteria for the heteroscedasticity test are that if the probability > 0.05, then there are no signs of heteroscedasticity, and if the probability < 0.05, then there are no signs of multicollinearity.

Table 5. Heteroscedasticity Test

Dependent Variable: ABS_RES
Method: Panel Least Squares
Date: 11/06/25   Time: 09:32
Sample: 2020 2024
Periods included: 5
Cross-sections included: 30
Total panel (balanced) observations: 150

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.531356	0.150836	3.522750	0.0006
X1	-1.061281	1.497628	-0.708641	0.4800
X2	-0.423658	0.245082	-1.728634	0.0866
X3	-0.081279	0.079525	-1.022067	0.3089
X4	-0.034401	0.079093	-0.434944	0.6644
X5	-0.003543	0.044335	-0.079909	0.9364

Effects Specification

Cross-section fixed (dummy variables)

Root MSE	0.269007	R-squared	0.264540
Mean dependent var	0.441886	Adjusted R-squared	0.047099
S.D. dependent var	0.314729	S.E. of regression	0.307228
Akaike info criterion	0.678511	Sum squared resid	10.85474

Schwarz criterion	1.380992	Log likelihood	-15.88830
Hannan-Quinn criter.	0.963907	F-statistic	1.216609
Durbin-Watson stat	2.465720	Prob(F-statistic)	0.220683

Based on the test results in Table 5, all independent variables are free from heteroscedasticity because they exceed the value of 0.05.

Table 6. Autocorrelation Test

Root MSE	0.878621	R-squared	0.066160
Mean dependent var	4.800000	Adjusted R-squared	0.033735
S.D. dependent var	0.912258	S.E. of regression	0.896738
Akaike info criterion	2.659073	Sum squared resid	115.7961
Schwarz criterion	2.779498	Log likelihood	-193.4305
Hannan-Quinn criter.	2.707998	F-statistic	2.040416
Durbin-Watson stat	1.873633	Prob(F-statistic)	0.076418

The test criterion used is to identify the Durbin Watson value; there is no autocorrelation when the Durbin Watson value lies between dU and 4-dU or dU < DW < 4-dU. Based on these criteria, we have: dU: 1.8024 < Dw: 1.87633 < 4-dU: 2.1976, with the conclusion that there is no autocorrelation.

HYPOTHESIS

Table 7. Hypothesis result

Dependent Variable: Y
Method: Panel Least Squares
Date: 11/06/25   Time: 08:08
Sample: 2020 2024
Periods included: 5
Cross-sections included: 30
Total panel (balanced) observations: 150

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.568347	0.243409	18.76821	0.0000
X1	8.057084	3.095821	2.602567	0.0102
X2	-0.457476	0.534807	-0.855404	0.3937
X3	-0.083123	0.204109	-0.407249	0.6844
X4	-0.067573	0.198348	-0.340680	0.7338
X5	0.061340	0.070129	0.874674	0.3832

Referring to the result tabel 7:

1. Financial Target (ROA)(X1) has significant positif effect on Fraudulent financial reporting accroding to probability 0,0102 < 0,05 and coefficient 8,05708. So H1 Accepted.

2. Financial Stability (X2) has insignificant effect on Fraudulent financial reporting accroding to

probability 0,3937 > 0,05 and coefficient -0,457. So H2 rejected

3. Change in Auditor (X3) has insignificant effect on Fraudulent financial reporting accroding to probability 0,6844 > 0,05 and coefficient -0,0831. So H3 rejected.

4. Change in Director has insignificant effect on Fraudulent financial

reporting accroding to probability 0,7338 > 0,05 and ciefficient -0,06757. So H4 rejected.

5. CEO's photo frequency (X5) has insignificant effect on Fraudulent financial reporting accroding to probability 0,3832 and coefficient 0,061340. So H5 rejected.

Simultaneous Test (F Test)
Table 11. Simultaneous Test Results

F-statistic	2.040416
Prob(F-statistic)	0.076418

DISCUSSION
Influence of Financial Target on Detecting Fraudulent Financial Reporting

The findings evidently illustrate that ROA, serving as a proxy for financial targets, exerts a substantial influence on fraudulent financial reporting, thereby embodying the pressure dimension within the Fraud Pentagon Theory. Research by Nanda et al., (2019) establishes that ROA has a positive and significant association with financial statement fraud. Likewise, (Agusputri & Sofie, 2019) observed that elevated ROA levels incentivize management to engage in earnings manipulation to achieve heightened profit objectives, underscoring how financial targets amplify pressure on executives. This pressure emerges due to the critical role of financial targets in shaping bonuses, compensation, and investor expectations, as elucidated by Andriani et al., (2022),who noted that intensified targets drive management to manipulate outcomes to circumvent performance shortfalls. Further Burlacu et al., (2025) corroborated this by demonstrating that high ROA figures create incentives for managers to

perpetrate fraud, stemming from unmet expectations or opportunities to alter financial statements in Romanian firms. Additionally, Bader et al., (2024) affirmed that ROA serves as a significant predictor of fraud, with coefficient values revealing a positive correlation between rising ROA and the incidence of fraudulent activities. Indriaty & Thomas, (2023) delineated the pressures imposed on management by shareholder demands and financial targets, which can precipitate fraudulent conduct to satisfy these requirements. This finding aligns with previous findings stating that financial targets proxied by ROA can be a detector of financial statement fraud (Agusputri & Sofie, 2019; Burlacu et al., 2025; Nanda et al., 2019).

Influence of Financial Stability on Detecting Fraudulent Financial Reporting

The analysis reveals that financial stability, proxied by changes in total assets (ACHANGE) does not significantly influence fraudulent financial reporting, suggesting that variations in financial stability do not inherently provoke fraudulent actions by management. For instance, Sasongko & Wijayantika, (2019) identified no

substantial influence of financial stability on financial statement fraud. This aligns with Andriani et al., (2022), who argued that executives are disinclined to manipulate financial reports when the firm's financial health is precarious or deteriorating, as such actions could exacerbate subsequent financial woes. Engaging in manipulation during periods of weakness might discourage investors or creditors, thereby impairing the company's ability to secure capital. Further Agusputri & Sofie, (2019) support this by reporting a significance value, thereby rejecting the notion that financial stability prompts fraudulent reporting. Likewise, Utami & Pusparini, (2019) documented a significance value, concluding that diminished financial stability does not compel management to perpetrate fraud, as it would merely complicate future financing endeavors. Study by Khamainy et al., (2022) also emphasize that shifts in asset growth percentages typically reflect strategic asset management choices rather than deceptive practices. Their research revealed that alterations in total assets fail to serve as dependable fraud indicators, given that changes may arise from legitimate managerial strategies focused on enhancing asset efficiency. The lack of a significant association between financial stability and fraudulent financial reporting in the present study closely corresponds with these antecedent investigations. This congruence implies that management generally refrains from fraudulent manipulation during financially unstable periods to avert aggravating the entity's challenges. Consequently, financial stability, as proxied by asset changes, proves ineffective as a predictor of fraud in the examined context, validating prior literature on the subject. This finding aligns with previous findings stating that

financial stability proxied by ACHANGE can be a detector of financial statement fraud (Agusputri & Sofie, 2019; Andriani et al., 2022; Sasongko & Wijayantika, 2019; Utami & Pusparini, 2019).

Influence of Change in Auditor on Detecting Fraudulent Financial Reporting

The analysis reveals that rationalization, proxied by Change in Auditor does not significantly influence fraudulent financial reporting, revealing that auditor transitions are typically prompted by regulatory adherence or unrelated factors rather than efforts to obscure financial misconduct. Elucidated by Murtado et al., (2022) that auditor rotation adheres to Indonesian Government Regulation No. 20 of 2015, which caps the provision of audit services by a Public Accountant at a maximum of five successive financial years. Firms may also switch auditors owing to discontent with prior audit quality, rather than to conceal fraudulent endeavors. Andriani et al., (2022) corroborate this, asserting that auditor turnover fails to serve as a dependable fraud marker, as such changes align with regulations like the Minister of Finance Regulation Number 17/PMK.01/2008, rather than constituting a tactic to evade fraud detection. Moreover, Fitriyah & Novita, (2021) underscore that audit opinions, including unqualified ones, do not entirely preclude the presence of fraud. Auditors may accommodate certain materiality thresholds, and management might justify marginal cases as non-erroneous, thereby creating a loophole where fraud could endure despite favorable opinions. This indicates that auditor changes may not pertain to fraud rationalization but instead to audit procedures and materiality assessments. Burlacu et al.,

(2025) offer statistical substantiation, where the rationalization factor, represented by auditor changes resulting in the dismissal of the hypothesis linking auditor changes to fraud. This further implies that prolonged auditor-client affiliations do not inherently undermine auditor independence or elevate fraud risk in the examined settings. Likewise, Bader et al., (2024) determined that the change of external auditor was statistically insignificant, affirming that auditor shifts stemmed from mandated rotation cycles rather than fraudulent intentions. The findings from the present study align with these antecedent results, affirming that within Indonesian banking and financial sectors, auditor changes do not constitute reliable predictors for identifying fraudulent financial reporting. This congruence bolsters the perspective that the rationalization motive, as embodied by auditor changes, is not a predominant catalyst for fraud in these domains, endorsing the inferences drawn from prior empirical analyses (Andriani et al., 2022; Bader et al., 2024; Burlacu et al., 2025; Fitriyah & Novita, 2021; Murtado et al., 2022)

Influence of Change in Director on Detecting Fraudulent Financial Reporting

The analysis reveals that capability, proxied by Change in Director does not significantly influence fraudulent financial reporting, revealing that change in director stems from motives unrelated to fraud, such as enhancing competence and improving organizational performance. Study by Andriani et al., (2022) state that changes in directors are predominantly motivated by the appointment of more qualified individuals, rather than efforts to dismiss those implicated in fraudulent activities. Moreover, newly appointed directors typically undergo an adaptation phase,

during which their effectiveness may not immediately reach optimal levels, thereby decoupling turnover from fraudulent intentions Agusputri & Sofie, (2019). Reinforce this perspective by demonstrating that firms replace directors with the goal of bolstering managerial efficacy, which is perceived as a tactic to elevate future performance, not as a response to fraud. Similarly Burlacu et al., (2025) dismiss the notion that director changes influence fraudulent reporting, underscoring that capability-oriented modifications are linked to legitimate endeavors to refine leadership quality rather than fraud concealment. Furthemore, Bader et al., (2024) validate this viewpoint, observing that despite notable rates of director turnover, such changes generally reflect strategic choices to recruit more proficient directors, rather than connections to the manipulation of financial statements. From a wider standpoint, Im & Nam, (2019) underscore the pivotal role of corporate and managerial ethics in ensuring the quality of financial reporting. While director changes signify shifts in capability, the ethical environment within the organization exerts a more immediate impact on the integrity of financial disclosures. Diminished managerial ethics are associated with inferior accrual quality and elevated discretionary accruals, which tend to undermine the trustworthiness of financial statements. In summary, this research corroborates antecedent studies positing that director turnover, as a proxy for capability in fraud frameworks, does not reliably signal fraudulent behavior (Agusputri & Sofie, 2019; Bader et al., 2024; Burlacu et al., 2025). This alignment underscores that director changes are more commonly tied to initiatives aimed at performance enhancement rather than fraud

mitigation, thereby bolstering prior empirical evidence in the domain.

Influence of CEO's Photo Frequecy on Detecting Fraudulent Financial Reporting

The analysis reveals that arrogance, proxied by CEO's photo frequency does not significantly influence fraudulent financial reporting. This outcome mirrors a wider comprehension that the inclusion of CEO photos is more indicative of affirmative communication and leadership acknowledgment than a manifestation of arrogance precipitating fraud. Study by Sawaka K. & Ramantha, (2020) elucidate that, while indications of arrogance may exist among certain respondents, these are largely confined to aspirations for social validation rather than the form of arrogance that engenders fraudulent conduct. This inclination toward seeking approval from others does not equate to unethical alterations of financial statements.

In corroboration, Murtado et al., (2022) contend that recurrent CEO depictions underscore leadership accomplishments and visions directed toward organizational advancement, thereby diminishing the propensity for fraud. Likewise, Fitriyah & Novita, (2021)stress that the quantity of photographs signifies the CEO's chronicle of triumphs and self-assurance, as opposed to avarice or arrogance that might incite fraud. Such images frequently depict instances of commendation, such as accolades or corporate gatherings, projecting an image of reliability rather than narcissistic motives. Furthermore, Agusputri & Sofie, (2019) elucidate that CEO photographs chiefly function to present company executives and chronicle organizational endeavors. In numerous instances, certain firms abstain from displaying CEO images altogether, signifying that photographic frequency in isolation does not encapsulate the existence or extent of arrogance within the entity. Bader et al., (2024) affirm that arrogance, as gauged via CEO imagery in financial disclosures, exerts no appreciable influence on financial statement fraud. They advocate for the investigation of alternative metrics to more accurately delineate the arrogance motive in fraud paradigms. Lastly, Khamainy et al., (2022) bolster this perspective by demonstrating that elements perceived as symbols of ego frequently serve to elevate corporate image and foster public confidence, rather than denoting fraudulent inclinations. The present research outcomes concur with antecedent investigations positing that CEO photographic frequency constitutes an ineffective proxy for arrogance in anticipating fraudulent financial reporting. This alignment reinforces the notion that such visual elements pertain more to reputation and constructive leadership depiction than to the arrogance that precipitates fraud. The findings of this research align with previous findings of a similar nature (Khamainy et al., 2022; Murtado et al., 2022).

CONCLUSION

The research findings indicate that, within the Indonesian banking and financial sector, changes in the board of directors,representing the capability component of the Fraud Pentagon Theory and the frequency of CEO photographs in annual reports serving as a proxy for arrogance do not significantly predict fraudulent financial reporting. This outcome suggests that director turnover is more frequently associated with legitimate efforts to enhance organizational competence and

performance rather than fraud concealment, while CEO photo prevalence reflects positive leadership messaging and reputation-building rather than egotistical motives leading to unethical financial practices. Consequently, these results imply that fraud detection in this sector should prioritize other elements of the Fraud Pentagon Theory, such as opportunity, pressure, and rationalization, alongside broader governance mechanisms. The impact of these findings is substantial, as they underscore the resilience of Indonesian financial institutions against certain internal fraud triggers, potentially fostering greater investor confidence and regulatory efficiency by directing oversight toward more predictive indicators of misconduct, thereby mitigating risks of financial instability in a critical economic sector.

sThe study contributes to the Fraud Pentagon Theory by refining its application in an emerging market context, demonstrating that not all proposed proxies for capability and arrogance hold predictive power in non Western setting like Indonesia, where the cultural and institutional factors may dilute their relevance. Specially, it challenges the universality of arrogance as a fraud motivator, suggesting that visual representations of leadership are more aligned with corporate image enhancement that deceit. Concurrently, the findings encrich Agency Theory by highlighting how board changes, often viewed as mechanisms to align managerial interest with shareholders, do not necessariliy signal agency conflicts manisfesting as fraud instead, the may represent proactive governance to optimize performance, thereby reducing perceived agency costs in financial reporting integrity. These contributions collectively advance theoritical frameworks by advocating for spesific context adaptations, emphasizing that fraud models must account for socio economic nuances to enhance their explanatory and predictive accuracy.

Regarding the strengths and limitations of this research, particularly concerning the time series data spanning 2020-2024, the study benefits from utilizing recent and contemporaneous data, which captures the effects of post pandemic economic recovery and evolving regulatory landscapes in Indonesia, such as reforms under the Financial Services Authority (OJK). This temporal relevance ensures the findings reflect current dynamics in the banking and financial sector, providing timely insights for practitioners and policymakers amid rapid digital transformations and global economic shifts. However, the relatively short timeframe poses limitations, as it may not encompass long-term cyclical patterns or rare fraudulent events that unfold over extended periods, potentially leading to underestimation of fraud risks during economic downturns or crises. Additionally, the five-year window could introduce biases from short-term anomalies, such as regulatory changes or market volatilities, without sufficient historical depth to validate trends. To advance future research based on these findings and aligned with the Fraud Pentagon Theory and Agency Theory, scholars are encouraged to extend the time series beyond 2024 to incorporate multi-decade data, enabling longitudinal analyses that reveal how capability and arrogance proxies interact with macroeconomic cycles. Integrating qualitative methods, such as interviews with directors and CEOs, could provide deeper insights into the ethical dimensions of board changes and photo usage, refining proxies for arrogance within cultural contexts. Furthermore, cross-sectoral comparisons within

Indonesia or with other emerging markets would test the generalizability of these theories, while incorporating advanced econometric techniques, like machine learning models, could identify non-linear relationships between agency conflicts and fraud, ultimately enhancing the predictive robustness of both frameworks for fraud prevention in financial institutions.

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