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Determinants of Fraudulent Financial Reporting with Board Diversity as A Moderation Variable in Infrastructure Companies Listed on The Indonesia Stock Exchange

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External pressures, ineffective supervision, auditor changes, board changes, CEO duality, political connections, *fraudulent +inancial reporting*, board diversity

Abstract
Fraudulent ;inancial reporting (FFR) remains a critical issue in Indonesia's infrastructure sector due to weak governance and complex external pressures. This study investigates the in;luence of six key factors—external pressure, ineffective supervision, auditor turnover, board change, CEO duality, and political connections—on FFR using the Fraud Hexagon Theory framework. It also examines how board diversity moderates these relationships. A quantitative approach was employed using panel data from 45 infrastructure companies listed on the Indonesia Stock Exchange during 2019–2023. Panel data regression and Moderated Regression Analysis (MRA) were used for hypothesis testing. Results show that external pressure, ineffective supervision, auditor turnover, board change, and CEO duality signi;icantly affect FFR, while political connections do not. Moreover, board diversity signi;icantly moderates the effect of external pressure, ineffective supervision, and CEO duality on FFR, reinforcing the importance of ethical decision-making and oversight. However, board diversity does not moderate the effects of auditor turnover, board change, or political ties. These ;indings suggest that although gender diversity enhances governance in certain contexts, it is insuf;icient to mitigate fraud risks arising from structural and political complexities. The study's novelty lies in integrating board diversity as a moderating factor within the Fraud Hexagon model in the infrastructure sector. Implications include the need for stronger governance, inclusive board composition, and sector-speci;ic regulatory oversight. Future research should expand diversity measures beyond gender and explore other sectors using longer observation periods or mixed-method approaches.

Introduction

Financial statements are the main tool in decision-making for stakeholders and should be prepared accurately and transparently. However, the practice of manipulation of reports by management to achieve certain targets is still common (Ari;in & Prasetyo, 2018). According to *The Association of Certi+ied Fraud Examiners* (2024), although only 5% of the total cases, ;inancial statement fraud caused the highest average loss, at US$766,000. One of the big cases is Evergrande, which falsi;ied revenues of up to US$78 billion and was ;ined Rp9.1 trillion (Ruhulessin & Laksono, 2024).

There are several cases of fraud in companies in Indonesia such as Kimia Farma, Bank Lippo, PT Hanson International, PT Garuda Indonesia, PT Asuransi Jiwasraya, and PT Waskita Karya. According to ACFE Indonesia (2019), fraud in Indonesia was dominated by corruption (69.9%), followed by asset misappropriation (20.9%) and ;inancial statement fraud (9.2%).

The infrastructure sector is among the most vulnerable due to the high value of projects and weak supervision. ICW recorded 339 cases of PBJ corruption in the period 2004–2023, including 63 cases in 2023 (Close, 2023). Manipulation of ;inancial statements is carried out to engineer the progress of the work and cover the project debts (ACLC KPK, 2024).

The Corruption Eradication Commission (KPK) reports that almost 80% of corruption cases come from the infrastructure sector and can reach 50% of the contract value (Mustain, 2021). Major cases such as the construction of the South Sumatra LRT involving of;icials of PT Waskita Karya and PT Wijaya Karya who recorded ;ictitious pro;its in the midst of negative cash ;low conditions (Prosecutor's Of;ice of the Republic of Indonesia, 2024). In 2020, the KPK uncovered a ;ictitious project involving 14 subcontractors of PT Waskita Karya (Ferdiansyah, 2020). According to the analysis of the KPK Investigation Directorate, fraud was found at various stages of ;inancial reporting and auditing, including the endorsement of invalid accounting evidence (ACLC KPK, 2024).

Financial statement fraud has a serious impact on the integrity, quality, and reliability of audited ;inancial statements, as well as undermining market con;idence in the audit profession and corporate governance (Sari & Nugroho, 2020; Kassem & Omoteso, 2023). External auditors play an important role in providing early warning signals against indications of fraud (Arens et al., 2017; ISA 240 FRC, 2021; SAS 99 AICPA, 2002).

This study uses *Hexagon Fraud Theory* developed by Vousinas (2019) by adding collusion as a new factor that encourages ;inancial statement fraud. This theory states that cheating is in;luenced by factors of pressure, chance, rationalization, ability, ego, and collusion. Report ACFE (2024) con;irms that collusion is the main cause *Fraud* because it involves many actors.

This study measures the pressure proxied through external pressure which is an encouragement for management to meet the expectations of external parties, such as creditors or investors, arising from certain funding needs and ;inancial conditions (AICPA, 2002). Research Suryandari et al (2023), Alfarago et al (2023) and Biduri & Tjahjadi (2024) Using the ratio *Leverage* as a tool to measure external pressure so that external pressure has a positive effect on the potential for ;inancial reporting fraud because the higher the ratio *Leverage* In companies, this pressure can encourage management to commit ;inancial statement fraud.

Opportunities are proxied through ineffective supervision. The opportunity for fraud arises when there is a weakness in the company's internal control system (Indriaty & Thomas, 2023). In agency theory, this opportunity can be used by agents to ful;ill their personal interests. Because of this con;lict of interest, the principal must supervise the agent because if the company's supervision is ineffective, the agent can commit fraud (Achmad et al (2022). Research Lastanti et al (2022), Indriaty & Thomas (2023), Biduri & Tjahjadi (2024) using the proportions of the board of commissioners to measure ineffective supervision.

Rationalization is proxied through the replacement of auditors because fraudulent companies tend to replace their external auditors within a certain period of time. Changing auditors within a company can serve as an attempt to hide traces of fraud that may have been identi;ied by previous auditors (Situngkir & Triyanto, 2020). According to research Carla & Pangestu (2021), Biduri & Tjahjadi (2024) and Sari et al (2024) Continuous turnover of auditors can create a con;lict of interest between management as an agent and a major shareholder.

Capabilities are proxied through the change of directors, Research Kusumawati et al (2021), Nugroho et al (2022)and Sudirman et al (2023) argues that the change of directors is a way to hide fraudulent behavior committed by a former director of a company. The change of directors in the company can exacerbate the problem of con;lict of interest arising from the lack of supervision from the shareholders as the principal of the actions taken by the management, thus creating opportunities for the management to commit fraud (Sari et al., 2022).

Arrogance is proxied through the duality of the CEO. Research conducted by Carla & Pangestu (2021), Sari et al. (2022), and Khaimainy (2022) that the duality of CEOs can encourage the occurrence of ;inancial statement fraud because they feel superior, immune to supervision, and not bound by internal control (Sari et al., 2022). The role of the CEO as an agent will act arbitrarily because he feels superior. The company's internal control policy is unable to limit the CEO's actions due to the power that the CEO has because the CEO feels that he has the power (Jannah & Rasuli, 2021).

Collusion is proxied through political connections, namely the relationship between the main shareholders or management and government ;igures or institutions, which can provide access to facilities and preferential treatment that can potentially be used for fraudulent acts. Research Kusumosari & Solikhah (2021), Nadziliyah & Primasari (2022)and Sari et al. (2024) reveals that management can take advantage of the convenience and privileges gained through political connections. The existence of a difference in interests between agents and principals encourages management to pursue personal gains over their performance.

The diversity of the board is positioned as a moderation variable that can strengthen or weaken the in;luence of each variable on *Fraudulent +inancial reporting*. The decision of the board of directors is greatly in;luenced by the background and decision-making mechanism within the company (Katmon et al., 2019). The diversity of the board is believed to be able to strengthen decision-making and supervision which can strengthen the internal control system and encourage transparency and accountability of ;inancial statements (Martins & Júnior, 2020; Kouaib & Almulhim, 2019). However, it can be weakened due to the dominance of CEOs and a discriminatory culture against women (Wahyuningtyas & Aisyaturrahmi, 2022) and high political elements and con;licts of interest in the company (Liao et al., 2019). The variable of board diversity in this study serves as a moderation of the in;luence of Hexagon Fraud factors on the occurrence of *Fraudulent +inancial reporting*.

This research adopts three main theoretical approaches, namely *Agency Theory, Fraud Hexagon Theory,* and *Gender Socialization Theory.* Based on research gaps, inconsistent research results, and there are still many cases of ;inancial statement fraud that occur in the infrastructure sector. In addition, there is still limited research that explicitly tests *the Fraud Hexagon Theory* in the context of board diversity as a moderation variable, especially in the infrastructure sector. This shows that there is a need to explore these relationships through a more comprehensive empirical approach, so this research is interesting and still worth re-researching. This study aims to examine the in;luence of six factors *of Fraud Hexagon* on FFR and assess the role of board diversity as a moderation variable. Theoretically, the study enriches the literature on fraud and corporate governance, while practically providing recommendations for management, auditors, and regulators in strengthening control systems and preventing fraud in the infrastructure sector. Based on the background of high fraud risk and weak supervision in the infrastructure sector, this study is expected to make a real contribution to understanding and tackling *Fraudulent Financial Reporting* more effectively through an approach that considers the diversity of boards as a strategic supervisory mechanism.

Compared to prior studies by Biduri & Tjahjadi (2024), Suryandari et al. (2023), Carla & Pangestu (2021), and Kusumawati et al. (2021), which primarily examined individual elements of the Fraud Pentagon or Hexagon—such as pressure, opportunity, rationalization, and capability—across various sectors, this study makes a distinctive contribution by applying the Fraud Hexagon Theory comprehensively across six variables (external pressure, ineffective supervision, auditor turnover, board change, CEO duality, and political connections) speci;ically within the under-researched yet fraud-prone infrastructure sector in Indonesia. It further introduces board diversity as a moderating variable in the fraud model, offering deeper insight into how gender diversity interacts with each determinant of fraudulent ;inancial reporting—a dimension previously unexplored in depth. By employing panel data from 2019–2023, the study delivers sector-speci;ic empirical evidence that highlights the prevalence of political in;luence and governance challenges, making the integration of board diversity into the Hexagon Fraud framework a novel and contextually signi;icant contribution to corporate governance and fraud prevention discourse.

Research Methods

This study uses a quantitative approach with a causality design to test the in;luence of independent variables, namely external pressure, less effective supervision, auditor turnover, board change, CEO duality, and political connection to dependent variables, namely *Fraudulent Financial Reporting* and board diversity as moderation variables.

The data used is secondary data obtained from the annual reports of infrastructure sector companies listed on the Indonesia Stock Exchange for the 2019–2023 period. Based on the results of the sample calculation using the *purposive sampling* method, it can be seen that there are 48 infrastructure sector companies listed on the Indonesia Stock Exchange that publish complete annual reports for 2019-2023 which will be the object of observation in this study, so the number of research observations is 225.

This study uses panel data regression analysis and *moderated regression analysis* (MRA). Panel data regression analysis was used to test the in;luence between independent variables on dependent variables with the help of the Eviews program. *Moderated regression analysis (MRA)* is used to identify the presence or absence of interaction between moderator variables and independent variables

Table 1 describes the de;inition and measurement of each dependent variable, independent variable and moderation variable.

Table 1. Variable Operational De2initions

Variable	Operational De2inition	Measurement
Fraudulent Financial Reporting (Y)	A scheme in which an employee intentionally causes misrepresentation or omission of material information in an organization's financial statements. (*Association of Certi5ied Fraud Examiners* (ACFE) (2022).	Using Beneish M-Score with 8 ratios, then seen from the M-score value, namely: <-2.2 = companies categorized as committing fraud
External Pressure (X_1)	External pressure is excessive pressure on management to meet requirements or expectations from third parties or pressure from outside the company	$Lev = \frac{Total\ Liabiltas}{Total\ Aset}$
Less Effective Supervision (X2)	Ineffective supervision occurs when the company's audit committee mechanism needs to be improved so that supervision becomes ineffective.	BDOUT = Number of independent board of commissioners / Total board of commissioners
Auditor Turnover (X_3)	The change of auditor was caused by financial reporting fraud. The higher the auditor turnover rate, the more likely financial reporting fraud is to occur.	Dummy variables, coded 1 in case of auditor turnover and coded 0 if there is no auditor turnover
Change of Directors (X_4)	The change of directors was due to signs of fraud in the company by the old directors.	The dummy variable is coded 1 if there is a change of directors in the 2019-2023 research period, and a value of 0 if there is no change of directors.
CEO Duality (X_5)	CEO duality signifies a lack of separation of control in decision-making and decision management.	The dummy variable is coded 1 if there are duplicate positions or affiliations, and given a code 0 if there are no duplicate positions or affiliation relationships.
Political Connections (X_6)	A situation in which at least one person from the company's leadership, major shareholders, or relative holds political office or has close ties to the government (Sari et al., 2024).	Political connections = Number of political connections from the council / Number of councils
Board Diversity (Moderation)	Gender diversity on the board of directors will facilitate careful scrutiny of managers' opportunistic behaviour and improve the quality of financial reporting (Nabwin et al., 2024).	Board diversity = Number of female directors / Total board of directors

Source : Data processed by researchers (2025)

Results and Discussion

Descriptive Statistics

The results of descriptive statistical analysis are presented in table 4.1.

Table 2. Descriptive Statistics

	FFR	EP	IE	AC	DC	DUAL	PC	BD
Mean	-3.122888	0.677105	-0.853372	0.413333	0.386667	0.257778	-0.894251	-1.011097
Maximum	34.38784	17.85245	0.000000	1.000000	1.000000	1.000000	0.336472	0.000000
Minimum	-83.26407	0.002672	-1.609438	0.000000	0.000000	0.000000	-2.708050	-2.944439
Std. Dev.	7.281483	1.253649	0.256768	0.493530	0.488072	0.438386	0.870244	0.992028
Observations	225	225	225	225	225	225	225	225

Source : Data processed by researchers (2025)

Classic Assumption Test

- Stuart O'Neill (2016:314) stating that not all classical assumption tests must be performed, so in this study the classical assumption test carried out was only a multicollinearity test and a heterokedasticity test.

Multicollinearity Test

Based on table 3 showing that each independent variable has a correlation coef;icient value of less than 0.8, it can be concluded that the regression model used does not occur multicollinearity.

Table 3. Multicollinearity Test

	EP	IE	AC	DC	DUAL	PC	BD
EP	1.000000	-0.058293	0.057587	0.130313	0.113300	-0.058895	0.033069
IE	-0.058293	1.000000	0.038297	0.071759	0.054933	-0.095962	-0.159895
AC	0.057587	0.038297	1.000000	0.056342	0.021184	0.003046	-0.006762
DC	0.130313	0.071759	0.056342	1.000000	0.011962	0.046491	-0.199807
DUAL	0.113300	0.054933	0.021184	0.011962	1.000000	-0.288660	-0.058434
PC	-0.058895	-0.095962	0.003046	0.046491	-0.288660	1.000000	-0.043109
BD	0.033069	-0.159895	-0.006762	-0.199807	-0.058434	-0.043109	1.000000

Source : Data processed by researchers (2025)

Heterokedasticity Test

Based on table 4 the results of the Glejser test show that the probability value of each independent variable is greater than 0.05, then it can be concluded that the regression model used does not have a heterokedasticity problem.

Table 4. Heterokedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.175936	0.205200	-0.857390	0.3924
EP	-0.027891	0.029471	-0.946408	0.3453
IE	0.327627	0.334443	0.979620	0.3286
AC	0.029310	0.065774	0.445610	0.6564
DC	-0.023677	0.072624	-0.326026	0.7448
DUAL	0.422803	0.217571	1.943292	0.0536
PC	0.860593	0.485229	1.773581	0.0779

Source : Data processed by researchers (2025)

Panel Data Regression Analysis

This study uses panel data regression analysis. The results of the panel data regression test are presented in table 5.

Table 5. Panel Data Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.982723	0.565779	-5.271886	0.0000
EP	1.976410	0.116420	16.97656	0.0000
IE	-0.493621	0.220185	-2.241849	0.0262
AC	-0.270001	0.079307	-3.404490	0.0008
DC	-0.160086	0.080916	-1.978420	0.0495
DUAL	-5.550523	1.967352	-2.821316	0.0053
PC	0.294008	0.215659	1.363300	0.1746

Source : Data processed by researchers (2025)

The results of the regression of the panel data based on table 5 produce the following regression equation:

FFR = -2.982+ 1.976EP - 0.493IE - 0.270AC - 0.160DC - 5.550DUAL + 0.294PC+ e

The results of the panel's data regression showed that a constant value of -2,982 indicated a decrease in *Fraudulent Financial Reporting* (FFR) when all independent variables were zero. The external pressure variable (EP) with a coef;icient of 1.976 and political connection (PC) with a coef;icient of 0.294 had a positive effect on *Fraudulent Financial Reporting,* indicating that external pressure and change of directors encouraged an increase *in fraudulent +inancial reporting*. On the other hand, the less effective supervision variable (IE) with a coef;icient of -0.493, the change of auditor (AC) with a coef;icient of -0.270, the change of directors with a coef;icient of -0.160, and the duality of the CEO (DUAL) with a coef;icient of -5.550 each showed a negative in;luence on *Fraudulent Financial Reporting* which means that the increase in these variables actually encourages a decrease in FFR.

Moderated *Regression Analysis* (MRA)

Moderated *Regression Analysis* (MRA) aims to ;ind out whether the moderating variable will strengthen or weaken the relationship between independent and dependent variables. The results of *the Moderated Regression Analysis* test are presented in table 6.

Table 6. Moderated *Regression Analysis Test Results*

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.022754	0.393768	-5.136917	0.0000
EP	2.144257	0.020048	106.9537	0.0000
IE	-0.092350	0.264585	-0.349037	0.7275
AC	-0.096837	0.089228	-1.085274	0.2794
DC	-0.239569	0.125419	-1.910153	0.0578
DUAL	-8.649940	0.887788	-9.743252	0.0000
PC	0.236169	0.260026	0.908251	0.3651
X1Z	0.751022	0.185946	4.038928	0.0001
X2Z	0.273867	0.147991	1.850568	0.0660
X3Z	-0.033983	0.076813	-0.442405	0.6588
X4Z	-0.121338	0.084040	-1.443816	0.1507
X5Z	-0.354583	0.163233	-2.172246	0.0313
X6Z	0.077655	0.122069	0.636158	0.5255

Source : Data processed by researchers (2025)

The results of *moderated regression analysis* based on table 4.5 produce the following regression equations:

FFR = -2.022 + 2.144 EP - 0.092 IE - 0.096 AC - 0.239DC - 8.649DUAL + 0.236PC + 0.751EP*BD + 0.273IE*BD - 0.033AC*BD - 0.121DC*BD - 0.354DUAL*BD + 0.077PC*BD + e

The results of the regression of the panel data showed that a constant value of ***-2.022*** indicates that the FFR would decrease if all independent variables and interactions were assumed to be zero. External pressure variables (EP) with a coef;icient of 2.144 and political connections (PC) with a coef;icient of 0.236 have a positive effect, so the increase in these variables will encourage an increase in FFR. On the other hand, the less effective supervision variable (IE) with a coef;icient of -0.092, the replacement of auditors with a coef;icient of -0.096, the change of directors (DC) with a coef;icient of -0.239, and the duality of the CEO (DUAL) with a coef;icient of -8.649 showed a negative in;luence on the FFR, which means that the increase in these variables actually drove the decrease in the FFR.

The results of the variables of interaction of external pressure and board diversity (EP*BD) with a coef;icient of 0.751, less effective supervision and diversity of the board (IE*BD) with a coef;icient of 0.273, and political connection and board diversity (PC*BD) with a coef;icient of 0.077 have a positive effect, so the improvement in these variables will encourage an increase in FFR. Meanwhile, the interaction variables, auditor turnover and board diversity (AC*BD) with a coef;icient of --0.033, board change and diversity (DC*BD) with a coef;icient of -0.121, and CEO duality and board diversity (DUAL*BD) with a coef;icient of -0.354, and have a negative effect, the increase in these variables will encourage a decrease in FFR.

CoefKicient of Determination

The result of the determination coef;icient of 0.9455 showed that 94.55% of the variation *in Fraudulent Financial Reporting* was explained by independent variables and moderation of board diversity, while 5.45% was explained by other factors outside the study. The results of the determination coef;icient are presented in table 7.

Table 7. CoefKicient of Determination

Root MSE	4.077266	R-squared	0.945567
Mean dependent var	-12.54499	Adjusted R-squared	0.927204
S.D. dependent var	22.04813	S.E. of regression	4.725714
Sum squared resid	3707.173	F-statistic	51.49346
Durbin-Watson stat	2.338395	Prob(F-statistic)	0.000000

Source : Data processed by researchers (2025)

Discussion

The Effect of External Pressure on Fraudulent Financial Reporting

The results of the partial test showed that external pressure had a signi;icant effect on *Fraudulent Financial Reporting* (FFR), with a signi;icance value of 0.000 (< 0.10). This is in line with research Biduri & Tjahjadi (2024) Suryandari (2023)and Alfarago (2023) which states that pressure from external parties such as creditors and investors can encourage management to manipulate ;inancial statements. According to SAS No.99, external pressures often arise when companies have high leverage, face funding demands, or have large debt burdens that raise credit risk concerns (Alfarago et al., 2023; Biduri & Tjahjadi, 2024). In agency theory, the results of this study strengthen *con+lict of interest* between *Agent* (management) and *Main* (shareholders). Management who have superior information tends to misuse it to manipulate reporting (Suryani et al., 2023).

The Effect of Less Effective Supervision on Fraudulent Financial Reporting

The results of the partial test showed that less effective supervision had a signi;icant effect on *Fraudulent Financial Reporting* (FFR), indicated by a signi;icance value of 0.026 (> 0.10). These ;indings are in line with research Lastanti et al (2022), Indriaty & Thomas (2023), Biduri & Tjahjadi (2024) that weak supervision creates opportunities for fraud. Ineffective supervision can occur due to management dominance, weak role of directors and audit committees, and the active and independent involvement of commissioners which opens up loopholes for management to manipulate ;inancial statements (AICPA, 2002); Sukmadilaga et al., 2022; Biduri & Tjahjadi, 2024). From the perspective of agency theory, this condition exacerbates information asymmetry and increases the chances of agents acting opportunistically, especially when the appointment of commissioners is only a formality (Bilkis & Reskino, 2022). The existence of a substantial and competent independent board of commissioners plays an important role in improving the effectiveness of supervision, detecting fraud early, and protecting the company's assets (Indriaty & Thomas, 2023; Zhukevyc & Zhuk, 2023).

The Effect of Auditor Change on Fraudulent Financial Reporting

The results of the partial test showed that the change of auditor had a signi;icant effect on the *Fraudulent +inancial reporting*, with a signi;icance value of 0.000 (> 0.10). These ;indings are in line with the results of the study Carla & Pangestu (2021), Nurcahyono et al. (2021), and Biduri & Tjahjadi (2024) that companies that frequently change auditors have a greater tendency to manipulate ;inancial statements. According to SAS No. 99, the replacement of auditors can indicate fraud that occurs within the company (AICPA, 2002), because it can be used as a management strategy to avoid detection and obtain auditors who are easier to control (Biduri & Tjahjadi, 2024). New auditors tend not to fully understand the company's condition, so the limited audit time can be used by management to hide irregularities (Situngkir & Triyanto, 2020; Nurcahyono et al., 2021). In agency theory, this practice exacerbates con;licts of interest and increases information asymmetry between agents and principals (Carla & Pangestu, 2021). Therefore, the frequency of auditor turnover as a form of rationalization needs to be a serious concern for regulators to encourage more transparent and accountable governance.

The Effect of the Change of Directors on Fraudulent Financial Reporing

The results of the partial test show that the change of directors has a signi;icant effect on *Fraudulent +inancial reporting*, with a signi;icance value of 0.871 (> 0.10). These ;indings are in line with research Kusumawati et al. (2021), Nugroho & Diyanty (2022), and Sudirman et al. (2023) that changes in the leadership structure create opportunities for manipulation of ;inancial statements. According to the hexagon fraud theory, individuals who have strategic positions and abilities play a role in fraud (Nugroho & Diyanty, 2022; Sudirman et al., 2023). Changes of directors can also exacerbate con;licts of interest due to weak oversight by shareholders, creating opportunities for management to hide fraudulent practices (Sari et al., 2022; Achmad et al., 2022), Meanwhile, a leadership transition period that is not yet fully effective can open a gap for fraud, especially if the new board of directors does not understand the company's ;inancial condition (Kusumawati et al., 2021).

The In⍰luence of CEO Duality on Fraudulent Financial Repoting

The results of the partial test showed that the CEO duality had a signi;icant effect on *Fraudulent +inancial reporting*, with a signi;icance value of 0.005 (< 0.10). This variable is a proxy of *Arrogance* deep *Fraud Hexagon Theory*. These ;indings are consistent with research Carla & Pangestu (2021), Khamainy et al (2022)and Andhika et al. (2024) that the dual position or af;iliation relationship between the CEO and the board of commissioners, weakens the independence of supervision and increases the risk of fraud for personal or group interests. In agency theory, the duality of the CEO reinforces the con;lict of interest between the principal and the agent due to the weak separation of supervisory and management functions (Jannah & Rasuli, 2021). The af;iliation relationship between the CEO and the commissioner reduces the effectiveness of oversight and creates unbalanced controls that increase the risk of abuse of positions and *Fraudulent Financial Reporting* (Situngkir & Triyanto, 2020 ; Carla & Pangestu, 2021; Wati et al., 2023).

The In⍰luence of Political Connections on Fraudulent Financial Reporting

The results of the partial test showed that political connections had no signi;icant effect on *Fraudulent +inancial reporting*, with a signi;icance value of 0.174 (> 0.10) representing the *collusion* deep *Fraud Hexagon Theory*. These ;indings are in line with research Sari et al. (2022), Alfarago et al (2023)and Indriaty & Thomas (2023). Political connections do not always have a negative impact on ;inancial reporting, but can provide bene;its such as access to funding, market power, and policy stability (Lastanti et al., 2022).

Social pressure, media scrutiny, and strict penalties suppress the possibility of collusion, while companies with political connections tend to be cautious about drafting ;inancial statements due to the public spotlight. Effective internal and external oversight mechanisms and strict regulations strengthen transparency and accountability, so that political connections do not necessarily weaken oversight or increase the risk of fraud in ;inancial reporting (Alfarago et al., 2023).

Board Diversity Moderates the Impact of External Pressure on Fraudulent Financial Reporting

Based on the results of the tests carried out, iThe interaction between external pressures and the diversity of the board showed a signi;icance value of 0.000, (< 0.10). This suggests that the diversity of the board can moderate the in;luence of external pressures on *Fraudulent +inancial reporting*. According to the Theory *Gender Socialization*, women are more likely to have a higher moral orientation and obedience. Gender diversity on boards strengthens governance, as female CEOs are more careful in decision-making and more consider long-term impacts, thereby reducing the potential for manipulation of ;inancial statements (Shropshire et al., 2021; Zahra et al. 2024).

Board Diversity Moderates the In⍰luence of Less Effective Supervision on Fraudulent Financial Reporting

Based on the results of the tests conducted, The interaction between less effective supervision and board diversity showed a signi;icance value of 0.066, (< 0.10). This suggests that the diversity of the board can moderate the in;luence less effective supervision towards *Fraudulent +inancial reporting*. According to the Theory *Gender Socialization*, women are more sensitive to potential fraud and tend to be more ethical and responsible in decision-making, strengthening internal corporate oversight and reducing the risk of fraud (Yami & Hughes, 2022; Wang et al., 2022).

Board Diversity Moderates the Impact of Auditor Turnover on Fraudulent Financial Reporting

Based on the results of the tests conducted, The interaction between auditor turnover and board diversity showed a signi;icance value of 0.658, (> 0.10). This shows that the diversity of the board cannot moderate the in;luence Auditor Turnover towards *Fraudulent +inancial reporting*. According to the theory *Gender Socialization*, women tend to develop higher ethical values and a cautious attitude in decision-making through the socialization process. However, the results of this study show that the in;luence of gender characteristics is not strong enough to moderate the relationship between the variables studied. According to

Tessema et al (2024), Although women tend to have high ethical values, their involvement in auditor selection is still limited, so it is not strong enough to in;luence the risk of fraud associated with auditor turnover.

Board Diversity Moderates the Impact of Changes in Directors on Fraudulent Financial Reporting

Based on the results of the tests conducted, The diversity of the board cannot moderate the in;luence Change of directors towards *Fraudulent Financial Reporting* shows a signi;icance value of 0.150 (> 0.10). Theory *Gender Socialization* explained that women tend to be formed with the values of social responsibility, integrity, and concern for ethics, so that their presence on the board is assumed to strengthen supervision and transparency, especially during the leadership transition period. While gender diversity on boards can improve oversight, the board's focus on organizational stability during the transition period reduces the effectiveness of oversight against fraud risks, while women's involvement in strategic decisions remains limited (July, 2023).

Board Diversity Moderates the In�luence of CEO Duality on Fraudulent Financial Reporting

Based on the test results, board diversity signi;icantly moderated the in;luence of CEO duality on *Fraudulent Financial Reporting* with a signi;icance value of 0.031 (< 0,10). By *Gender Socialization Theory*, women tend to have a high ethical orientation and social concern, so they are more sensitive to the potential for abuse of power. Gender diversity strengthens oversight and broadens perspectives in strategic decision-making. So that the presence of women on the board can be a counterbalance that strengthens transparency and accountability of ;inancial reporting (Wahyuningtyas & Aisyaturrahmi, 2022; Jurnali et al., 2024).

Diversity Council moderates the in�luence of Political Connections on Fraudulent Financial Reporting

Based on the test results, The diversity of the council is not able to moderate the in;luence of political connections on *Fraudulent +inancial reporting*, with a signi;icance value of 0.525 (> 0.10). According to the Theory *Gender Socialization*, women are often positioned in social structures with lower in;luence, including in council settings, so their capacity to control collusion practices is limited. However, the diversity of the council was unable to moderate the in;luence of political connections on *Fraudulent +inancial reporting*. This is possible because Women's in;luence in improving governance and reducing the risk of fraud is stronger in private companies than in state-owned companies due to more dominant political pressure and interests (Liao et al., 2019). The diversity of the board is not effective enough in reducing the risk of fraud related to political connections.

Conclusion

The regression analysis revealed that external pressure, weak supervision, auditor turnover, board changes, and CEO duality signi;icantly in;luence fraudulent ;inancial reporting, while political connections do not. Board diversity—especially the presence of women—can moderate the impact of certain factors like external pressure and CEO duality, enhancing ethical decision-making and oversight, but it does not moderate effects related to auditor or board changes or political ties. These ;indings underscore the importance of reinforcing governance structures, internal controls, and board roles beyond just gender composition. The study, limited to the infrastructure sector and a short observation period, suggests expanding future research to other sectors, longer timelines, and broader measures of diversity, including professional, educational, and ethnic backgrounds. Practically, companies must adopt more comprehensive anti-fraud strategies, regulators should tailor policies to sector-speci;ic risks, and auditors need to better understand client risk pro;iles.

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