

## Analysis of factors affecting fraudulent financial reporting in fraud pentagon perspective

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### ABSTRACT

The data from ACFE show that Indonesia, in the 2014-2020 period, had 126 cases of fraud, ranking the country as the second-highest country with the most fraud cases in the Asia Pacific. This phenomenon attracts the author to investigate factors that encourage the emergence of fraudulent financial reporting from the perspective of the Fraud Pentagon theory. Although many studies have been done on this topic, the results of the previous studies have not shown any uniformity or, even, consistency between theory and empirical reality. This study focus on a similar topic, but with a different object and approach. The objects studied in this study are utility, transportation, and infrastructure companies listed on the Indonesia Stock Exchange in the 2015-2019 period; Meanwhile, for the testing technique, this research applies several computational techniques, ranging from the Classical Assumption Test to the hypothesis test using the IBM SPSS 25 analysis tool Data were obtained from 185 samples selected using the purposive judgment sampling method. The data, then, were analyzed using multiple linear regression analysis. The results of this study indicate that not all of the factors studied influence fraudulent financial reporting. Of the seven hypotheses proposed, only the financial target variable has a positive effect on fraudulent reporting. Similarly, the nature of the industry variable also influences fraud, but in the opposite direction (negative). Meanwhile, the other five variables, namely: external pressure, monitoring effectiveness, change in auditors, change in directors, and dual CEO positions do not indicate having significant influences. This study has several limitations, dealing with measurement techniques and the reliance on information attached to the company's financial statements, which might have been manipulated before. These limitations indicate that further research on this topic is needed to obtain better results.

### KEYWORDS

Fraudulent Financial Reporting;  
Fraud Pentagon Theory;  
Corporate Crime

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## Introduction

The phenomenon of fraudulent financial reporting has attracted the attention of many parties. A survey conducted by the Association of Certified Fraud Examiners (ACFE) in 2014, 2016, 2018, and 2020 found many cases of fraud committed by several companies around the world, including in Indonesia. Specifically for Indonesia, according to ACFE data, the number of cases of fraud committed by entities in Indonesia is always in the top three positions in Asia Pacific, in fact, in 2020, Indonesia occupies the first position in Asia Pacific with 36 cases of fraud (Association of Certified Fraud Examiner, 2020). The most common forms of fraud found were corruption (64.4%), followed by misuse of state and corporate assets (28.9%), and financial statements (6.7%) (Association of Certified Fraud Examiner Indonesia, 2019).

Fraudulent financial reporting can be in the form of misappropriation, manipulation, or modification of supporting evidence, or accounting records that are prepared intentionally, or in the form of financial reports that do not provide facts, or intentionally omit an event, transaction or financial information that is important in nature accompanied by the application of an accounting principle that cannot be justified (Priantara, 2013). To assist the government and companies in reducing the number of fraud cases, both through corrective and preventive actions (Abdullahi & Mansor, 2015), identification of the factors that influence fraud behavior, which includes: who, when, and why the perpetrators of fraud committed these actions, is very necessary (Ruankaew, 2013). Related to this interest, several studies that have been conducted by experts can be used as a reference.

Among the experts who study the causes of fraud in financial reporting is Cressey (1953) who classifies the causes of individuals and groups committing fraud into 3 main things, namely: pressure, opportunity, and rationalization (rationalization). This classification became known as the Fraud Triangle Theory (Cressey, 1953). In the following decades, this theory was developed by Wolfe & Hermanson (2004) by adding the capability factor to the three previous factors. This theory became known as the Fraud Diamond Theory (Wolfe & Hermanson, 2004). In

subsequent developments, the theory of the fraud triangle and the theory of the fraud diamond was further developed by Howarth (2011) into a new theory called the Fraud Pentagon Theory (Howarth, 2011).

The Pentagon Fraud Theory has become so popular among researchers and has become one of the most widely used approaches in studying fraudulent financial reporting. Among previous researchers who have used the Fraud Pentagon perspective are (Tesa & Harto, 2016) who, through their research, concluded that only financial stability, external pressure, and the frequent number of CEO pictures have a significant effect on fraudulent financial reporting. Meanwhile, (Rusmana & Tanjung, 2019), through their research, concluded that only external pressure variables have a significant influence on fraudulent financial reporting. While (Evana et al., 2019), through research, found that only total accruals had a significant effect on fraudulent financial reporting. Still, on the same topic, research by (Sari et al., 2020) concluded that only the auditor's opinion and financial stability variables influence fraudulent financial reporting. Meanwhile, the role of the big four KAPs can only strengthen the relationship between financial stability and fraudulent financial reporting.

This study, through hypothesis testing, is directed to prove whether the factors stated in the Fraud Pentagon theory have relevance to empirical facts. This is because the results of previous studies have not shown any uniformity of results or, even, tend to show inconsistency between theory and empirical reality. This non-uniformity and inconsistency provide opportunities for the author to research the same topic but differ in terms of object and approach. The objects studied in this study are utility, transportation, and infrastructure companies listed on the Indonesia Stock Exchange in the 2015-2019 period; Meanwhile, for the testing technique, this research applies several computational techniques, ranging from the Classical Assumption Test to the hypothesis test using the IBM SPSS 25 analysis tool.

## Literature review

### *Agency theory*

Jensen & Meckling (1976), defines the agency relationship as a relationship that occurs between the owner (principal) and the manager (agent) through a contract (nexus of contract) through which the principal gives decision-making authority to the agent to make every effort to achieve the company of the interest. Related to this theory, Eisenhardt (1989) in Agustia (2013) classifies three basic human nature assumptions, namely (1) Humans in general will prioritize their interests (self-interest). (2) Humans have limited thinking about the future (bounded rationality). (3) Humans in general always avoid risks (risk-averse).

Based on this assumption of human nature, both the owner (principal) and the manager (agent) will try to maximize their respective interests. which leads the agent to do everything to maximize his profit, one of which is by manipulating the company's financial statements. Therefore, according to Godfrey et al (2010). there is no reason to trust the agent that he will act under the wishes of the principal. Such tendencies occur as a consequence of a contract entered into between the owner (principal) and the manager (agent) which results in the separation of functions between the function of managing the company and the function of ownership. This separation of functions, in turn, results in an information gap/asymmetric information) between the two parties where the company managers have more information about the company's future projections than outsiders of the company (Mahawyahrti & Budiasih, 2016).

### *Fraudulent financial reporting*

The Association of Certified Fraud Examiners (ACFE) defines financial statement fraud as a form of material misstatement in financial reports that is carried out intentionally or not by managers that can harm investors and other stakeholders (Bagayub et al., 2018). Forms of fraudulent financial reporting can be misappropriation, manipulation, or modification of supporting evidence, accounting records that are prepared intentionally, or in the form of financial reports that do not provide facts or omit an event, transaction, or financial information that is important intentionally accompanied by the application of an accounting principle that cannot be justified (Priantara, 2013).

Financial reporting fraud is usually caused by pressure in the form of expectations of management's work performance and is often initiated by and for the benefit of management. Account to this, this fraud can also be called management fraud (Priantara, 2013). Some behaviors that indicate fraudulent financial reporting according to (Priantara, 2013) can be in the form of:

1. Encouraging investment through issuing shares or luring investors to buy shares at special prices.
2. Demonstrate good earnings per share or earnings per share or profits from partnerships and joint ventures, to obtain additional compensation for management.
3. Cover up the inability to obtain good operational cash flow
4. Removing bad views of society regarding organizational performance
5. Borrowing cost-effect
6. Cover up misappropriation of organizational assets
7. Bonus plan effect

### ***Fraud pentagon theory***

Fraud pentagon theory is the development of two previous theories of fraud namely: the fraud triangle (Cressey, 1953) and the fraud diamond (Wolfe & Hermanson, 2004). According to Cressey, (1953), three factors influence the emergence of fraudulent financial reporting, namely pressure, opportunity, and rationalization. Pressure, according to T. Mark (2014) in Rusmana & Tanjung (2019) is a condition that motivates a person to commit and hide fraud. This condition, according to Priantara (2013), includes (1) Financial stability and the company's ability to obtain profit; (2) Pressure on management to comply with the requirements and expectations of external party analysts, investors, lenders, and other third parties. (3) The financial situation of the company's managerial personnel is threatened by the company's financial performance; (4) there is excessive pressure on management or operational employees to meet the financial targets set by the board of directors

While opportunity, according to Cressey (1953) in Tuanakotta (2016), implies the perception that there is an opportunity to commit fraud without being noticed by others (perceived opportunity). Cressey (1953) also explained that there are two factors associated with opportunity, namely: general information which includes knowledge that a person's position contains a trust that can be violated without any consequences; and technical skills or expertise needed to commit fraud. Howarth (2011) defines rationalization as the assumption that the fraud that has been committed is not an act of violation. Rationalization arises when acts of fraud committed by management have occurred and are needed by the perpetrators of fraud to maintain their identity as trusted people. Rationalization is intended to convince the owner (principal) that management does not betray the trust of the owner and upholds the welfare of the owner in every decision. At first, someone will commit a violation accompanied by an unpleasant feeling and then tries to find reasons to justify the behavior he is carrying out (Tuanakotta, 2016). According to Karyono (2013) in Ulfah et al. (2017) the perpetrators of fraud seek justification, among others, because (1) the perpetrator thinks that what is being done is normal/natural for others to do as well. (2) The perpetrator feels that he has contributed greatly to the organization which he should have received more than he received. (3) Actors consider the goal is good, namely to overcome problems (problem-solving).

The Fraud Triangle theory was later developed by Wolfe & Hermanson (2004) adding a capability factor to the three previous factors and became known as the Fraud Diamond Theory (Wolfe & Hermanson, 2004). According to Wolfe & Hermanson (2004), a capability is a situation in which the perpetrator of fraud sees himself as having the traits and abilities needed to be the right person to do something, recognize opportunities and be able to turn them into reality. In other words, a capability is an intellectual ability and experience possessed by a fraud perpetrator who knows an opportunity and takes advantage of this opportunity to carry out his fraudulent acts.

Furthermore, the theory of the fraud triangle and the theory of the fraud diamond was further developed by Howarth (2011) by adding competency and arrogance factors into a new theory called the Fraud Pentagon Theory (Howarth, 2011). Competence in Howarth's view is the ability to gain personal advantage by ignoring internal controls or developing concealment strategies or managing social situations or circumstances (Howarth, 2011). Judging from this description, the term competence has no difference from the term capability as referred to by Wolfe & Hermanson (2004). As for Arrogance, according to (Howarth, 2011), is an attitude of superiority over one's rights and feels that internal controls or company policies do not apply to themselves According to Howarth (2011) (Rahmatika, 2020), there are five characteristics of arrogance, from a CEO's perspective which include:

1. High ego - where the CEO is more seen as a celebrity than an entrepreneur
2. Ability to avoid internal control and not get caught
3. has an attitude of suppressing others (intimidation)
4. Adopt an autocratic management style
5. Attitude fear of losing their position and status.

### ***Hypothesis***

#### ***External pressure affected fraudulent financial reporting***

External pressure is a condition where the company receives separate pressure from third parties (Evana et al., 2019). The main task of the manager is to keep the company growing and developing so that it can provide maximum results to the company owner (principal). To carry out this task, it is not uncommon for management to require additional funds from third parties (creditors) to maintain the smooth running of the company's performance. Submission of additional capital through debt is based on several agreements that protect creditors from various credit risks. One of them is the company's restrictions on making other loans to other companies and making the company's total debt indicator a condition for lending, one of which is the leverage ratio This statement gains support from the results of research conducted by (Tiffani & Marfuah, 2015), and (Fitri et al., 2019) which shows that there is a positive and significant influence between external pressure (leverage) and fraudulent financial reporting.

**H1: External pressure has a positive and significant effect on fraudulent financial reporting.**

#### ***Financial target affected fraudulent financial reporting***

In managing a company, management will always be faced with certain targets set by company owners and management. One of these targets is a financial target (Rusmana & Tanjung, 2019). According to Tesa & Harto (2016), financial targets can be in the form of return on business that the company wants to achieve. This financial

target can then be used as a separate motive by the company's management in committing fraudulent financial reporting when the board of directors and management set the company's financial targets too high (aggressive) based on giving certain bonuses or incentives if the target is successfully obtained. However, a high financial target can be a separate pressure on the management when there is an inability of the company to meet the financial target that is too high. Research conducted by (Jaya & Poerwono, 2019) and (Sofa & Sholichah, 2019) concluded that financial targets have a positive and significant effect on fraudulent financial reporting.

**H2: Financial targets have a positive and significant effect on fraudulent financial reporting.**

### ***Nature of industry affected fraudulent financial reporting***

The nature of the industry is the ideal state of a company in industrial activities (Sari et al., 2020). One indicator of an ideal company is the company's ability to suppress and reduce the number of company receivables and increase cash flow receipts (Skousen et al., 2009). The ideal state of the company can be measured through certain account balances which are determined based on subjective judgments and estimates. The object of the assessment can be an estimation of uncollectible accounts, and obsolete inventory, all of which are possible to be assessed subjectively by the company (Summers & Sweeney, 1998). Subjective assessments, in the form of estimates, can provide opportunities for managers to commit fraudulent financial reporting (Priantara, 2013). This follows agency theory stating that the existence of asymmetric information between owners (principals) and company management (agents) opens opportunities for companies to manipulate their financial statements. This theory gains support from research conducted by Sihombing & Rahardjo (2014) which shows that there is a positive and significant influence between the nature of the industry and fraudulent financial reporting.

**H3: The nature of the industry has a positive and significant effect on fraudulent financial reporting.**

### ***Monitoring effectiveness affected fraudulent financial reporting***

Agency relationships arise when there is a contract involving the owner (principal) and management (agent) to perform some services on behalf of the owner (Jensen & Meckling, 1976). The existence of an agency relationship that occurs between the owner and the agent through an approved contract result in a separation of functions, between the ownership function and the management function.

This separation of functions results in an information gap between the two parties. Thus, to carry out supervision so that all policies are following their interests, the owner (principal) will incur costs known as monitoring costs by appointing other parties from outside the company (independent board of commissioners) who will, then, appoint an audit committee to carry out the oversight function. on the process of financial reporting, risk management, conducting audits, and implementing good corporate governance (Efendi, 2018). The existence of domination of company management by one or a small group of supervisors if not matched by adequate compensation can cause the monitoring function ineffective and provide opportunities for fraud (Skousen et al., 2009). In addition, the non-objective monitoring carried out by the independent board of commissioners can also arise due to interventions carried out by internal companies (Sihombing & Rahardjo, 2014). This statement is also supported by the research results (Evander & Ratnaningsih, 2018) which show the number of independent commissioners negatively and significantly affect fraudulent financial statements

**H4: monitoring effectiveness has a positive and significant effect on fraudulent financial reporting.**

### ***Change in auditor-affected fraudulent financial reporting***

Auditor change is a change in public accountants carried out by the company (Selviana & Wendy, 2021). In the concept of agency theory, the owner will delegate his authority regarding the management of the company to the agent by taking into account the interests of the owner. It is based on a contract that separates the functions of the two. The consequence of the contract is that the management understands and knows detailed information related to the company's performance.

The management will maintain the company's performance so that it looks good in the eyes of stakeholders. For this reason, management will choose a public accountant who will follow their interests. If the accountant chosen is not in line with management's interests and endangers investor confidence, management will tend to replace him. A further possibility of this tendency is that company management will choose auditors who can work together in the interests of each party, to do manipulation of financial reports and audit opinions. This is in line with the Pentagon's theory of fraud which states that there are repeated attempts by management to assess or justify accounting practices that are materially unreasonable resulting in a tense relationship between management and its external auditors. As a consequence, there is a change in old auditors to new auditors. This trend is supported by research conducted by (Ulfah et al., 2017) which shows that there is a positive and significant effect between changing auditors and fraudulent financial reporting.

**H5: Change in auditor has a positive and significant effect on fraudulent financial reporting.**

### ***Change in director affected fraudulent financial reporting***

Change of directors is something that naturally occurs in the world of business organizations. This change of directors occurred due to various reasons ranging from considerations to improve company performance to matters of political interest (Saputra, 2016). A change of directors can trigger a conflict of interest which can lead to engineering actions in the financial reports. A director who knows that he will be replaced soon will take advantage of the remaining momentum to manipulate financial reports to obtain greater incentives or bonuses (Handoko & Natasya, 2019).

Engineering is possible because the director still has competence characterized by the function of authority, intelligence to understand and utilize situations, self-confidence, skills in coercion, as well as the ability to carry out effective deception, and a high tolerance for stress (Howarth, 2011). The competency component that is proxied by the change of directors is supported by research results showing a positive and significant influence between changes in directors and fraudulent financial reporting. (Ulfah et al., 2017) and (Septriani & Handayani, 2018).

**H6: Change in Director has a positive and significant effect on fraudulent financial reporting.**

### ***Dualism position of CEO affected fraudulent financial reporting***

CEO dualism Position is a situation where a CEO or company president has multiple positions both inside and outside the company. The existence of an organizational structure that allows the emergence of multiple positions or functions from the CEO can allow the emergence of arrogance, an attitude of superiority over one's rights, and the feeling that internal controls or company policies do not apply to oneself. The CEO who has multiple positions inside and outside the company will use his arrogance to show that he has great influence in the company and press internal company parties to approve all of his decisions.

Thus, the emphasis placed on this by the CEO or president allows the emergence of authoritarian corporate decisions, including decisions to do things that are in line with their interests regardless of the consequences of these actions on the company. This is in line with agency theory which explains that based on the assumptions of basic human nature, in general, will maximize their respective interests, causing a conflict of interest between management and owners. This kind of tendency is proven through research conducted (Rachmawati & Marsono, 2014) which shows that there is a positive and significant influence between dualism position and fraudulent financial reporting.

**H7: Dualism Position of the CEO has a positive and significant effect on fraudulent financial reporting.**

## **Methods**

This research is quantitative research by applying descriptive statistics to find out the description of the data obtained. This study uses several computational techniques, Classical Assumption Test, as well as the hypothesis test using several computational techniques with the IBM SPSS 25 analysis tool.

### ***Participants***

The population in this study are all utility and transportation infrastructure companies listed on the Indonesia Stock Exchange within the 2015-2019 period. Determination of the sample in this study was carried out using a non-probability purposive judgment sampling technique, having limitations in terms of generalization (Ghozali, 2016).

**Table 1.** Purposive Judgement Sampling Criteria

No	Criteria	Total
1	Companies that consistently listed in the utility and transportation infrastructure sector on the Indonesia Stock Exchange during the 2015-2019 period.	95
2	Companies that consistently report negative earnings until the end of the study period	(8)
3	Companies that present their financial reports in dollars	(47)
<b>Number of research samples</b>		<b>40</b>
<b>Total research sample (40 companies x 5 years observation period)</b>		<b>200</b>
<b>Outlier Data</b>		<b>(15)</b>
<b>The total sample used</b>		<b>185</b>

### ***Instruments***

This study uses 2 types of variables, independent or explanatory variables and dependent or dependent variables. The independent variables in this study are certain conditions which include: external pressure, financial targets, the nature of the industry, the effectiveness of supervision, change of auditors, change of directors, and multiple positions. Meanwhile, the dependent is Fraudulent Financial Reporting.

**Table 2.** Measurement of Variables

Variables	Proxies	Measurement
Y	Fraudulent financial reporting (F-Score)	F-Score = RSST Accrual - Financial Performing
X1	External Pressure	LEV=(Total Liabilities)/(Total Assets)
X2	Financial Target	ROA = " "Earning After Interest and Tax " ("EAIT" )/"Total Assets"
X3	Nature of Industry	$Nature\ of\ Industry = \frac{Receivable_t}{Sales_t} - \frac{Receivable_{t-1}}{Sales_{t-1}}$
X4	Effectiveness Monitoring	IND= (Number of board Independen commissioners) /(Total of Board Commisioners)
X5	Change in Auditor	Dummy: 1 if there is a change in external auditor, 0 if there is not a change in external auditor
X6	Change In Director	Dummy: 1 if there is a change in Director, 0 if there is not a change in external auditor
X7	Dualism Position of CEO	Dummy: 1 if the CEO has a dualism position in the current period, 0 if the CEO does not have a dualist position in the current period

### Data analysis

This study uses multiple linear regression analysis to measure multiple independent variables. The data was analyzed using the Classical Assumption Test which includes the Normality Test, Multicollinearity Test, Heteroscedasticity Test, and Autocorrelation Test. The authors tested the hypothesis using several computational techniques which included: The regression Model Feasibility Test (F Test), Determination Coefficient Test (R<sup>2</sup>), Pearson's Correlation Test, and Parameter Significance Test (t-Test).

### Descriptive statistic

**Table 3.** Descriptive Statistic

Variables	N	Minimum	Maximum	Mean	Std. Deviation
External Pressure	185	0,075	1,461	0,545	0,202
Financial Target	185	-0,659	0,229	0,037	0,095
Nature of Industry	185	-0,942	0,604	0,030	0,182
Monitoring Effectiveness	185	0,250	0,750	0,403	0,099
Change in Auditor	185	0	1	0,16	0,365
Change In Director	185	0	1	0,53	0,500
Dualism Position of CEO	185	0	1	0,65	0,479
F-Score	185	-1,494	1,450	-0,016	0,386
Valid N (listwise)					

Meanwhile, the variable of supervision effectiveness shows the lowest value of -0.250, the highest value is 0.750, the average value is 0.403 and the standard deviation value is 0.099. While the auditor turnover variable, as measured by the dummy variable, shows the lowest value is 0, the highest value is 1, the average value is 0.16 and the standard deviation value is 0.365. The average value of auditor turnover which is close to 0 indicates that companies are more likely to retain their external auditors than to replace them. Moreover, the change of directors variable shows the lowest value is 0, the highest value is 1, and the average value is 0.53 with a standard deviation value of 0.500. The average value of the change of directors variable which is close to 1 indicates that companies tend to change directors frequently. Finally, the multiple CEO variable shows the lowest value is 0, the highest value is 1, the average value is 0.65 and the standard deviation value is 0.479. The average value of the variable CEO multiple positions that are close to 1 indicates that company CEOs tend to have more than 1 position. Meanwhile, the dependent variable, namely fraudulent financial reporting shows the lowest value of -1.494, the highest value is 1.450, and the average F-Score is -0.016 with a standard deviation of 0.386.

**Normality test****Table 4.** Result of the Normality Test

		Unstandardized Residual
N		185
Normal Parameters <sup>b</sup>	Mean	0,000
	Std Deviation	0,224
Most Extreme Differences	Absolute	0,061
	Positive	0,052
	Negative	-0,061
Test Statistic		0,061
Asymp. Sig. (2-tailed)		0,094

The normality test results, using the One Sample Kolmogorov Smirnov-Test method, produce an Asymptotic Significance (2-tailed) value of 0.094. This value is higher than the  $\alpha$  value, which is 0.05. Thus, it can be concluded that the residuals are normally distributed

**Multicolilnearity test****Table 5.** Result of Multicollinearity Test

Variables	Collinearity Statistics		Conclusion
	Tolerance	VIF	
External Pressure	0,785	1,274	No multicollinearity
Financial Target	0,771	1,297	No multicollinearity
Nature of Industry	0,939	1,065	No multicollinearity
Effectiveness Monitoring	0,901	1,109	No multicollinearity
Change in Auditor	0,921	1,085	No multicollinearity
Change In Director	0,884	1,131	No multicollinearity
Dualism Position of CEO	0,932	1,073	No multicollinearity

The multicollinearity test results produce a Variance Inflation Factor (VIF) value for each variable that is below the number 10 with a tolerance value for each variable under the number 0.10. So, it can be concluded that in this study there was no interference with multicollinearity in the research data

**Heteroskedasticity test****Table 6.** Result of Heteroskedasticity Test

Variables	t	Sig.	Conclusion
External Pressure	0,569	0,570	No Heteroscedasticity
Financial Target	-0,912	0,363	No Heteroscedasticity
Nature of Industry	-0,524	0,601	No Heteroscedasticity
Effectiveness Monitoring	1,138	0,257	No Heteroscedasticity
Change in Auditor	1,845	0,067	No Heteroscedasticity
Change In Director	-0,159	0,874	No Heteroscedasticity
Dualism Position of CEO	-0,525	0,600	No Heteroscedasticity

The results of the heteroscedasticity test, using the Glejser method, yield a significant value for each variable that exceeds the  $\alpha$  value of 0.05. So, it can be concluded that the data used in this study did not have heteroscedasticity disorders

**Autocorrelation test****Table 7.** Result of the Autocorrelation Test

Runs Test	Unstandardized Residual
Test Value	-0,016
Cases < Test Value	92
Cases $\geq$ Test Value	93
Total Cases	185

Number of Runs	85
Z	-1,253
Asymp. Sig. (2-tailed)	0,210
a. Median	

The autocorrelation test results yield an Assymptotic Significance (2-tailed) value of 0.210. This magnitude is higher than the value of  $\alpha$ , which is 0.05. Thus, it can be concluded that the model in this study is free from autocorrelation.

## Result and discussion

**Table 8.** Result of Individual Parameter Significance Test

	Expected correlation	Unstandardized Coefficients	t-ratio	p-value
(Constant)	?	0,046	0,465	0,643
External Pressure	+	-0,007	-0,072	0,943
Financial Target	+	1,697	8,391	0,000
Nature of Industry	+	-1,402	-14,680	0,000
Supervision Effectiveness	-	-0,150	-0,835	0,405
Change of Auditor	+	-0,022	-0,459	0,647
Change of Directors	+	0,004	0,110	0,912
CEO Concurrent Position	+	-0,025	-0,681	0,497
Adjusted R <sup>2</sup>				0,649
F count				49.692
Sig. F				0,000

From the equation above, the calculated F-value is 49.692, with a significance value of 0.000  $< \alpha$  value (0.05). These results indicate that the regression model formed is a fit. Similarly, based on the results of the coefficient of determination test (Adjusted R<sup>2</sup>), a value of 0.649 was obtained, which means that the 7 variables tested were able to explain 64.9% of the factors influencing fraudulent financial reporting. While the remaining 35.1% is explained by other variables.

Moreover, the results shown in table 8 for the external pressure variable, regression coefficient value is -0.007 with p-value  $> \alpha$  value, which is 0.943  $> 0.05$ . So it can be concluded that **the first hypothesis (H<sub>1</sub>) is not supported**. This finding is in line with research (Septriani & Handayani, 2018) and (Sasongko & Wijyantika, 2019) which concludes partially, external pressure does not affect fraudulent financial statements. Rahmanti & Daljono (2013) explained that this is because companies that have a high level of leverage tend to avoid adding risk by looking for other ways to get additional company capital. Because leverage does not put pressure on the entities, this ratio automatically does not affect the motivation to commit acts of fraud. Moreover, the results shown in table 8 for the financial target variable show a regression coefficient of 1.697 with a p-value  $< \alpha$  value, which is 0.000  $< 0.05$ . which means that **the second hypothesis (H<sub>2</sub>) is supported**. This finding is in line with agency theory which states that when the principal maximizes his interests by increasing the financial target, a conflict of interest will arise in self-management which will lead to fraudulent financial reporting. The findings of this study are following the implications of the fraud pentagon theory which explains that entity risk (achievement of a target) can directly put pressure on company managers to manipulate financial reports (Priantara, 2013). This is also in line with the results of the research by (Jaya & Poerwono, 2019) and (Sofa & Sholichah, 2019) which state that, partially, financial targets have a positive effect on fraudulent financial statements. The emergence of motives to manipulate financial reports is rational because in general humans will prioritize their interests rather than the interests of other parties. (Eisenhardt, 1989) in (Agustia, 2013).

Furthermore, the results shown in table 8 for the nature of industry variable regression coefficient is -1.402 with a p-value  $< \alpha$  value, which is 0.000  $< 0.05$ . It can be concluded that **the third hypothesis (H<sub>3</sub>) is not supported**. In other words, the nature of the industry, partially, has a negative influence on fraudulent financial reporting. This finding can be explained through the findings of Priantara (2013) which concludes that the valuation of assets, liabilities or debts, income, and expenses, carried out based on subjective assessment estimates, is difficult to determine the truth so that it can provide opportunities for financial report manipulation. The explanation is as follows: Total revenue, which is dominated by accounts receivable, can indirectly affect the company's cash flow. If in the future risk of default by the debtor occurs then to cover this risk, stakeholders will tend to choose companies that can reduce their receivable balance not too high. The tendency to minimize this receivable balance can be done in various ways, one of which is by manipulating financial reports. This is in line with the research findings of Rahmawati & Nurmala (2019) which concluded that a significant decrease in the number of receivables could be an indication of fraudulent financial statements. This finding is also in line with the results of research (Lestari & Nuratama, 2020) and (Rahmawati & Nurmala, 2019) which states that, partially, the nature of the industry has a negative influence on fraudulent financial statements. Next, the results shown in table 8 for monitoring effectiveness variable regression coefficient is -0.150 with a p-value  $> \alpha$  value, namely 0.405  $> 0.05$ . With a p-value that exceeds the value of  $\alpha$  it can be concluded that **the fourth hypothesis (H<sub>4</sub>) is also not supported**. Supervision will not be effective, especially if the appointment of independent commissioners by the company is only done to



fulfill regulatory requirements and not as an effort to enforce or implement good corporate governance or as a form of mitigating fraudulent financial statements. This result is in line with the results of research conducted (Septriani & Handayani, 2018) and (Santoso, 2019) which partially stated that effectiveness monitoring did not affect fraudulent financial statements.

manipulation of financial statements. This is in line with the results of research conducted by (Septriani & Handayani, 2018) which concluded that a change in director does not affect fraudulent financial; reporting. Finally, the Moreover, the results shown in table 8 for change in auditor variable regression coefficient is -0.022 and the p-value is  $0.647 > \alpha$  value is 0.05. So it can be concluded that **the fifth hypothesis (H<sub>5</sub>) is not supported**. This finding is supported by the results of descriptive statistical tests which show that 84.5% of the sample prefers to retain their auditor compared to replacing the auditor with another auditor. Even if there is a change of auditors, this was likely done to comply with regulatory requirements, not merely to erase the previous auditor's track record. Thus, changing the external auditor is not a form of justification for fraudulent financial reporting, nor is it an attempt to erase the company's audit track record. Therefore, changing the auditor cannot be used as a rationalization in cases of manipulation of financial statements. This conclusion is in line with the results of research (Yesiariani & Rahayu, 2017) which confirms that auditor changes do not necessarily indicate fraud because auditor changes are mostly carried out to comply with regulatory requirements. The results of this study are also in line with research conducted by (Sihombing & Rahardjo, 2014) which concludes that partially changing auditors (change in auditor) does not affect fraudulent financial reporting.

Furthermore, the authors tested the significance of individual parameters on the change in the director variable. The test results show a regression coefficient of -0.022 and a p-value of  $0.647 > \alpha$  value of 0.05. This result means that **the sixth hypothesis (H<sub>6</sub>) is not supported**. The authors, indeed, encountered companies in the utility and transportation infrastructure sector that changed their board of directors more frequently. However, this is done solely for the benefit of improving organizational performance and not to create certain conditions conducive to the results shown in table 8 for dualism positions of CEO variable regression coefficient is -0.022, and the p-value  $> \alpha$  value is  $0.647 > 0.05$ . These results can be used as a basis for concluding that **the seventh hypothesis (H<sub>7</sub>) is not supported**. This absence of influence may be due to a company having multiple positions, especially if it is accompanied by supervision from the board of commissioners and the company's audit committee to maximize company performance, aligned with company goals. Meanwhile, companies having no multiple positions, prefer to focus on corporate governance so that company performance can be better and managed more seriously. The results of this study are in line with research conducted by (Siddiq & Suseno, 2019) which concludes that a partial CEO dualism position does not affect fraudulent financial reporting

## Conclusion

This study finds that not all of the factors studied influence fraudulent financial reporting. Of the seven hypotheses proposed, only the financial target variable has a positive effect on fraudulent reporting. Similarly, the nature of the industry variable also influences fraud, but in the opposite direction (negative). Meanwhile, the other five variables, namely: external pressure, monitoring effectiveness, change in auditors, change in directors, and dual CEO positions do not indicate having a significant influence on fraudulent financial reporting. These findings indicate that financial targets and the nature of the industry can be a starting point for all stakeholders to detect the possibility of fraudulent financial reporting by company management. It should be noted that this research has several limitations, including: *first*, the dual position variable which is proxied by a dummy variable results in no difference between companies having multiple CEO positions and companies having few multiple positions. *Second*, the materials used for measurements come from diverse information that requires the removal of data with extreme values (outliers), Therefore, the final measurement may affect the results. *Third*, the information used as measurement material is the information attached to the company's financial statements which might have been manipulated before. Consequently, it is also possible that the picture obtained could not represent the facts. The limitations above indicate that further research on this topic is needed, using different methods, approaches, and measurement techniques to obtain more perfect results.

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