

**PENTAGON FRAUD ANALYSIS OF FRAUD FINANCIAL STATEMENT  
ACTIONS: THE ROLE OF FAMILY OWNERSHIP AS MODERATION  
VARIABLE**



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**Abstract**

Financial statements will function optimally if presented with qualitative elements, including easy-to-understand, reliable, comparable, and relevant. In preventing any acts of misrepresentation of financial statements, it is necessary to encourage the ownership of family shares. The research method uses quantitative analysis using the Moderator Regression Analysis (MRA) model. The results of this study indicate that in the first hypothesis, it is suspected that there is an influence of Pressure on financial statements fraud. From the results of the T-test, it is known that the sig value is smaller than 0.05, which is 0.000. The t-count value is greater than the t-table ( $5.461 > 1.661$ ). This study concludes that the pressure variable influences fraud. The variable financial statements of Family Ownership cannot strengthen the impact of Competence on fraudulent financial statements, and the variable family ownership cannot enhance the effect of arrogance on fraudulent financial statements.

**Keywords:** Financial Statement, Family Ownership, Moderation Variable, Fraud Analysis

## INTRODUCTION

Financial statements will function optimally if presented with qualitative elements, including easy-to-understand, reliable, comparable, and relevant. Financial statements are presented to stakeholders. The basic framework for the preparation and presentation of financial statements issued by the Institute of Indonesia Chartered Accountants (Robinson, 2020) states that users of financial statements include investors, employees, the government, financial institutions, and the public. Then in terms of making economic decisions, financial statements are influenced by many factors, including economic conditions, politics, and industrial prospects. The financial statement components implemented in Indonesia have become more comprehensive. However, there are many loopholes in financial statements that can be a space for management and specific individuals to commit fraud in financial statements.

Fraud committed by companies is commonly referred to as fraud. Fraud is an unlawful act that may be an entity or organization and benefit the perpetrator. According to the Association of Certified Fraud Examiner (ACFE) in the Fraud Examiners Manual, fraud is related to a person's benefit obtains by presenting something that does not match the actual situation. One form of fraud in the company is financial statement fraud. Fraud on financial statements can be done by presenting financial statements as better than they actually are and worse than they really are. As explained in the study (Craja, Kim, & Lessmann, 2020), the disclosure of cases of fraud or fraud that occurs in the company is carried out by the company's manager.

The distinguishing factor between error and fraud is the underlying action, whether the financial statement error occurred due to intentional actions or unintentional actions. Intentional actions are more difficult to detect and control than unintentional actions (Nasir, Ali, & Ahmed, 2019). ACFE Asia-Pacific in 2018 showed that financial statement fraud was the least case at 13% compared to asset abuse and corruption. However, financial statement fraud was one of the biggest causes of losses, with an average loss of US\$700,000. According to SIA section 316, financial statement fraud is the

misrepresentation or intentional omission of the amount or disclosure in the financial statements to deceive the user of the financial statements. Financial statement fraud committed by companies varies, ranging from deceiving Financial Accounting Standards, and conducting aggressive profit management to committing illegal actions that impact the company's strength (Seifzadeh, Rajaei, & Allahbakhsh, 2022).

These factors are pressure, opportunity, rationalization, capability, and arrogance. These five factors are related to the pentagon fraud proposed by (Ozcelik, 2020). Pressures proxied with financial targets, financial stability, and external pressures are considered to be one of the factors in the pentagon fraud.

In preventing any acts of misrepresentation of financial statements, it is necessary to encourage the ownership of family shares. Studies have found that families who enjoy group activities together share a stronger emotional bond as well as an ability to adapt well to situations as a family. Family ownership is share ownership by individuals and companies that are not public (Amore, Pelucco, & Quarato, 2022). Family ownership is not limited to companies that place family members in the CEO, commissioner, or other management positions.

The differences from the previous study, which is this study give the latest variable, namely the existence of the family ownership variable as a moderation variable, namely family ownership. From the presentation above, the researcher then took the research theme "Pentagon Fraud Analysis of Financial Statement Fraud: The Role of Family Ownership as a Moderation Variable."

## **REVIEW OF LITERATURE**

### **Financial Statement Fraud**

According to the Association of Certified Fraud Examiners (ACFE, 2016), financial statement fraud is an act of misleading and deceiving users of financial statements by providing information about the condition of financial statements that are deliberately blamed in their presentation by deleting several numbers on financial statements.

Financial statement fraud in this study was measured using the fraud score model formula. According to (Zelin, 2018) outlined the F-Score or fraud score model is calculated by the formula:

$$\text{F-Score} = \text{Accrual Quality} + \text{Financial Performance}$$

### **Pentagon Fraud**

The pentagon fraud theory is an expansion of the fraud triangle theory previously proposed by (G. L. Vousinas, 2019) and the diamond fraud theory previously proposed by (G. Vousinas, 2018); in this theory adds one other element of fraud, namely arrogance (Padayachee, 2021).

The fraud pentagon consists of 5 elements, namely pressure, opportunity, rationalization, capability, and arrogance (Faradiza, 2019):

#### **Pressure**

Pressure encourages people to commit fraud, and it can cover almost everything related to financial and non-financial. Pressure in this study is proxied by financial targets. The financial target is measured by ROA, which has the following formula:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Total Asset}}$$

#### **Opportunity**

Opportunity is a condition that allows a person to act or occupy a position in a particular position (Endrawati et al., 2022). The proxy used in the opportunity in this study is ineffective monitoring. The formula for ineffective monitoring is as follows:

$$\text{BDOUT} = \frac{\text{Number of Board of Independent Commisioners}}{\text{Number of Board of Commisioners}}$$

#### **Rationalization**

Rationalization is an act carried out by a person in committing fraud by calming himself or when a person who commits fraud feels that he has not committed a mistake. In this study, rationalization was proxied by the ratio of total accruals (TATA). The ratio of total accruals (TATA) formula is as follows:

$$TATA = \frac{\text{Working} - \text{Cash} - \text{Current Tax Payable} - \text{Depreciation Ammortisation}}{\text{Total Assets}}$$

### **Capability**

Capability is the amount of power and capacity that a person does to commit fraud in the company environment. Capability is measured using a dummy variable with a change of directors, where code 1 states that there is a change of directors while code 0 is used to state that there is no change of directors.

### **Arrogance**

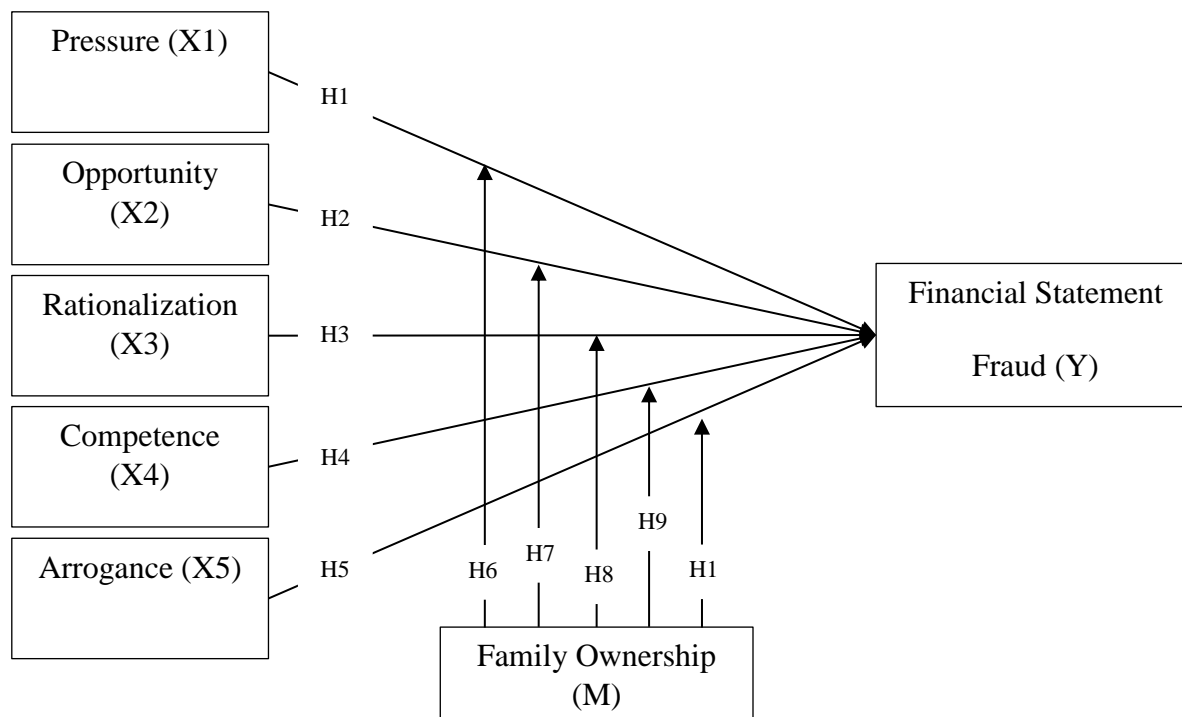
Arrogance is the nature of superiority or greed possessed by the perpetrator of the crime, and feels that the internal control and policies of the company and the procedures are not applied to him. Arrogance is measured using the variable dummy variable: code 1 if the CEO or president in a company concurrently holds office and code 0 if there is no CEO or president concurrently in office.

### **Family Ownership**

According to (Villalonga & Amit, 2020) a family company includes a company that is run based on the ancestry or heritage of people who have already run it or by a family that blatantly bequeaths its company to the next generation. family ownership serves as a substitute for weak legal structures, since trust between family members can be a substitute for missing governance and contractual enforcement. From this perspective, family ownership magnifies these effects, as family members not only have the ability to closely supervise executives but are also often members of the board of directors and thus actively participate in the decision-making process.

The family ownership variable will be valued at 1 if the family holds direct ownership of at least 20% of the number of ordinary shares outstanding. However, a value of 0 will be given if the family holds the ownership of the family lower than 20% of the company's shares. The calculation of family ownership in this study refers to the study (Murro & Peruzzi, 2019).

## Conceptual Framework



**Figure 1**  
**Conceptual Framework**

Hypothesis:

- H1: There is an influence between pressure and financial statements fraud
- H2: There is an influence between opportunity and financial statements fraud
- H3: There is an influence between rationalization and financial statements fraud
- H4: There is an influence between competence and financial statements fraud
- H5: There is an influence between arrogance and financial statements fraud
- H6: There is an influence between pressure and financial statements fraud moderated by family ownership
- H7: There is an influence between opportunity and financial statements fraud moderated by family ownership

H8: There is an influence between rationalization and financial statements fraud moderated by family ownership

H9: There is an influence between competence and financial statements fraud moderated by family ownership

H10: There is an influence between arrogance and financial statements fraud moderated by family ownership

## RESEARCH METHOD

Quantitative techniques were used in the study. The purpose of quantitative studies is to test known hypotheses. This method uses numbers generated by time series and cross section data (Eksandy, 2017). This research was conducted on mining sector companies listed on the IDX. The sampling technique in this study used a possessive sampling technique so that 32 mining sector companies were listed on the IDX in 2018-2020. The analysis technique used is the Moderator Regression Analysis (MRA) model, with the help of the SPSS version 26 application (Budhiyasa & Badera, 2022).

## RESULTS AND DISCUSSION

The results of the research conducted by the researcher are necessary to pass the classical assumptions carried out by the researcher. In this study, the classic assumptions needed to proceed to the analysis test stage are the multicollinearity test and the auto correlation test. If the test results pass, it can be continued to the next stage for the MRA test. Here are the results of the classical assumptions carried out (Saraswati & Rioni, 2019).

### **The Effect of Pressure on Financial Statements Fraud**

The results of this study indicate that in the first hypothesis, it is suspected that there is an influence of pressure on financial statements fraud. From the results of the T test, it is known that the sig value is smaller than 0.05, which is 0.000. The t-count value is greater than the t-table ( $5.461 > 1.661$ ). So, it can be concluded that Pressure has an influence on fraudulent acts of financial statements. Managers face pressure to commit fraud in financial reporting when the company's financial stability is threatened by economic conditions, the

industry, or the situation of the operating entity. Management is often under pressure to show that the company has been able to manage its assets properly, so that profits are generated and generate high returns for investors. Earnings management actions carried out by management as a result of agency problems that occur between agents and principals are closely related to fraud. Fraud that is deliberately committed by management is an act that violates the rules set by the regulator. The results of this study are in line with research conducted by (Nilzam, 2020), (Utomo, 2018), and (Eko Adit, 2019) which shows that Pressure has an influence on financial statements fraud.

### **The Effect between Opportunity and Financial Statement Fraud**

The results of this study indicate that in the second hypothesis, it is suspected that there is an influence of Opportunity on financial statements fraud. From the results of the T test, it is known that the sig value is smaller than 0.05, which is 0.002. The t-count value is greater than the t-table ( $3.259 > 1.661$ ). (Yulianti, Pratami, Widowati, & Prapti, 2019) argues that a change in directors will be able to cause a stress period which has an impact on increasing opportunities to commit fraud. there is an opportunity to trigger fraud in the financial statements. perpetrators need to be in the right place and at the right time to take advantage of the weaknesses in the company's control system so that they can cover up fraudulent acts. So, it can be concluded that opportunity has an influence on financial statements fraud. The results of this study are in line with research conducted by (Nilzam, 2020), (Utomo, 2018), and (Eko Adit, 2019), which shows that opportunity has an influence on fraudulent financial statements.

### **The Effect Between Rationalization on Financial Statement Fraud**

The results of this study indicate that in the third hypothesis, it is suspected that there is an influence between rationalization on financial statements fraud. From the results of the T test, it is known that the sig value is smaller than 0.05, which is 0.000. The t-count value is greater than the t-table ( $10.186 > 1.661$ ). So it can be concluded that rationalization has an influence on financial statements fraud. According to (Surjaatmaja, 2018), rationalization is the existence of attitudes, characters, or a set of ethical values that allow



certain parties to commit acts of fraud, or people who are in a sufficiently pressing environment that makes them rationalize the actions they have taken, rationalization can be measured using a proxy for changes or changes in public accounting firms (Nindito, 2018). Research by (Agusputri & Sofie, 2019) shows that there is a negative effect of changing auditors on fraudulent financial statements. The results of this study are in line with research conducted by (Nilzam, 2020), (Utomo, 2018), and (Eko Adit, 2019), which shows that Rationalization has an influence on financial statements fraud.

### **The Effect between Competence and Financial Statement Fraud**

The results of this study indicate that in the fourth hypothesis in this study, it is suspected that there is an influence between competence on financial statements fraud. The results of the T test, shows that the sig value is smaller than 0.05, which is 0.000. At the value of t, the calculation is greater than in the table t ( $-3.615 < 1.661$ ). So, it can be concluded that Competence has a negative influence as significantly as possible on the act of financial statement fraud. The more often the company changes the board of directors, the higher the possibility of management committing fraudulent financial statements, the change of directors by companies is done for many reasons, one of the reasons is so that the company can develop with a new director who may have a vision and mission and background the same with the company. In addition, the former director who has been replaced may be transferred to a higher position because of his good contribution performance to the company. The results of this study are in line with research conducted by (Nilzam, 2020), (Utomo, 2018), and (Eko Adit, 2019) which show that Competence has an influence on fraudulent financial statements.

### **The Effect between Arrogance and Financial Statements Fraud**

The results of this study indicate that in the fifth hypothesis in this study, it is suspected that there is an influence between arrogance on financial statements fraud. From the results of the T test, it is known that the sig value is greater than 0.05, which is 0.236. The t-count value is smaller than the t-table ( $1,192 < 1,661$ ). So, it can be concluded that Arrogance has no effect on fraudulent acts of financial statements (Nilzam, 2020), (Utomo,

2018), and (Eko Adit, 2019) which shows that arrogance has influence on fraudulent acts of financial statements. Arrogance is the number of depictions of a CEO in a company by displaying a display picture or profile, achievements, photos, or other information about the CEO's track of record which is presented repeatedly in the company's annual report (Situngkir & Triyanto, 2020). According to (Agusputri & Sofie, 2019) the power they have can lead to arrogant behavior within the CEO, assuming that no one person can stop his actions including the internal control policies within the company. (Arisandi & Verawaty, 2017) in their research found a positive effect on fraudulent financial statements.

### **The Effect between Pressure and Financial Statements Fraud Moderated by Family Ownership**

The results of this study show that in the results of the sixth hypothesis, it is suspected that family ownership can strengthen the relationship between pressure and financial statements fraud. The T test result show that the pressure and family ownership of the SIG have a sig value of 0.524, which is greater than 0.05. So, family ownership cannot strengthen the impact of pressure on fraudulent financial statements. The results of this study are in line with research conducted by (Melati, Kirana, & Lastiningsih, 2020) which shows that family ownership cannot strengthen the impact of Pressure on fraudulent financial statements.

### **The Effect between Opportunity and Financial Statements Fraud Moderated by Family Ownership**

The results of this study show that in the results of the seventh hypothesis, it is suspected that Family Ownership can strengthen the relationship between Opportunity and financial statements fraud. The T-test results show that the Opportunity and Family Ownership has a sig value of 0.905, which is greater than 0.05. Thus, Family Ownership cannot strengthen the impact of opportunity on the act of financial statement fraud. The study's results align with research conducted by (Melati et al., 2020) which shows that family ownership cannot strengthen the impact of opportunities on financial statements fraud.



### **The Effect between Rationalization and Financial Statements Fraud Moderated by Family Ownership**

The results of this study show that in the results of the eighth hypothesis, it is suspected that family ownership can strengthen the relationship between rationalization and financial statements fraud. The T-test results show that rationalization and family ownership have a sig value of 0.701, which is greater than 0.05. Therefore, family ownership cannot strengthen the impact of rationalization on fraudulent financial statements. This study's results align with research conducted by (Melati et al., 2020) which shows that family ownership cannot strengthen the impact of rationalization on fraudulent financial statements.

### **The Effect between Competence and Financial Statements Fraud Moderated by Family Ownership**

The results of this study show that in the results of the ninth hypothesis, it is suspected that Family Ownership can strengthen the relationship between competence and financial statements fraud. The T-test results show that Competence and Family Ownership has a sig value of 0.521, which is greater than 0.05. Thus, family ownership cannot strengthen the impact of competence on fraudulent financial statements. This study's results align with research conducted by (Melati et al., 2020), which shows that family ownership cannot strengthen the impact of competence on financial statements fraud.

### **The Effect between Arrogance and Financial Statements Fraud Moderated by Family Ownership**

The results of this study show that in the results of the tenth hypothesis, it is suspected that family ownership can strengthen the relationship between arrogance and the act of financial statement fraud. The results of the T test can be seen that arrogance and family ownership has a sig value of 0.776 which is greater than 0.05. Family ownership cannot strengthen the impact of arrogance on fraudulent financial statements. The results of this study are in line with research conducted by (Melati et al., 2020), which shows that

family ownership cannot strengthen the impact of arrogance on fraudulent financial statements.

## CONCLUSION

The conclusions in this study are that the pressure variable has an influence on financial statement fraud, the opportunity variable has an influence on financial statement fraud, the rationalization variable has an influence on financial statement fraud, the competence variable has a significant negative influence on financial statement fraud, the arrogance variable has no influence on financial statement fraud, the family ownership variable cannot strengthen the impact of pressure on financial statement fraud, the family ownership variable cannot strengthen the opportunity's impact on financial statement fraud, the family ownership variable cannot strengthen the impact of rationalization on financial statement fraud, the family ownership variable cannot strengthen the competence's impact on financial statement fraud, and the family ownership variable cannot strengthen the impact of arrogance on financial statement fraud actions.

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