

Fraud Analysis of Financial Statements in the Perspective of Fraud Triangle

(Empirical Study on Property and Real Estate Companies Listed on the Indonesia Stock Exchange 2016-2018)

*Ardi Julianto¹, Ripki Mohamad Sopian², Siti Nurlisma Vebrianti³

¹Accounting Study Program, Faculty of Business and Humanities, Nusa Putra University, Indonesia

²Accounting Study Program, Faculty of Business and Humanities, Nusa Putra University, Indonesia

³Accounting Study Program, Faculty of Business and Humanities, Nusa Putra University, Indonesia

*Corresponding author. E-mail: ardi.julianto_ak18@nusaputra.ac.id

ABSTRACT

This research aims to look at falsified financial statements via the lens of the deep triangle (empirical studies on property and real estate companies listed on the Indonesian stock exchange in 2016-2018). Earnings management is used in this study to commit financial statement fraud. Financial Statement Fraud, which earnings management proxies, is the study's dependent variable. OSHIP is a proxy for personal financial needs; ROA is a proxy for financial objectives, and IND is a proxy for successful monitoring. The study's dependent variables are ACHANGE represents financial stability pressure, whereas FREEC represents external pressure. The purpose sample technique was utilized to choose the research sample, which consisted of 82 professional and real estate businesses from 2016 to 2018.

Keywords: *Financial Statement Fraud, Financial Stability Pressure, Financial Targets, Personal Financial Need, External Pressure, Effective Monitoring, Earnings Management.*

1. INTRODUCTION

Every company needs accurate financial reports when preparing financial statements to depict the organization's status in terms of operations and management. The financial statements are designed to help report users make economic decisions by providing information on the company's financial condition, financial performance, and cash flows. The financial statements are prepared following the Indonesian Institute of Accountants' generally accepted Financial Accounting Standards [1]. Even financial statement information can be changed, resulting in data in the company that is not real or not true. Manipulation of data is a form of deception [2]. Manipulation is a sort of deception. A corporation's purposeful attempt to deceive and mislead users of financial statements, particularly investors and creditors, by presenting and distorting the report's substantial value is known as fraudulent financial reporting [3].

As in 2017, there were cases of fraudulent financial statements of Pt Tiga Pilar Sejahtera Tbk.

Based on the fact-based investigation report of PT Ernst & Young Indonesia to the new management of AISA dated March 12, 2019, the alleged inflation was suspected of having occurred in the accounts receivable, inventories, and fixed assets accounts of the AISA Group. It was found that the old board of directors had inflated funds worth Rp 4 trillion, and then there were also findings of allegations of increased revenues of Rp. 662 billion and other inflations of Rp. 329 billion in the EBITDA (earnings before interest, tax, depreciation, and amortization) items of the food business of the issuer. Another finding from the EY report is the flow of funds of Rp 1.78 trillion through various schemes from the AISA Group to parties suspected of being affiliated with the old management.

The goal of publishing SAS No. 99 is to improve auditors' ability to identify fraud by evaluating the company's fraud risk indicators. The fraud factor adopted is the Fraud Triangle concept, namely pressure, opportunity, and rationalization [4].

So, from the location of the situation described above, this research is entitled "FRAUD ANALYSIS OF FINANCIAL STATEMENTS IN THE FRAUD TRIANGLE PERSPECTIVE (Empirical Study on Property and Real Estate Companies Listed on the Indonesia Stock Exchange 2016-2018)".

2. LITERATURE REVIEW

2.1. Fraud

The triangle of deception is an idea that examines the causes of fraud. Fraud is translated as cheating or embezzlement. As a result, fraud may be defined as dishonest action carried out by people, groups, or organizations to obtain personal or collective gains. There are three conditions in a fraud situation described in the fraud triangle: pressure (incentive/ pressure), opportunity, and rationalization [4].

2.2. Pressure

People are encouraged to perpetrate fraud when they are put under pressure. Pressure can be caused by various factors, including lifestyle, financial obligations, etc. This includes both financial and non-financial issues [5]. In terms of finances, having material possessions is an example of encouragement. Non-financial pressures drive someone to conduct fraud, such as concealing poor performance due to job obligations to achieve positive outcomes. Four types of situations typically occur under pressure that might lead to fraud, according to SAS No. 99 [6].

2.3. Opportunity

Fraud can occur when there is a chance for it to happen. Fraudsters hope their deception will go unnoticed. Weak internal controls, inadequate managerial oversight, and the utilization of roles can all lead to opportunities. Compared to employees, the management of a corporation has a greater chance to commit fraud based on their general position. However, it should be noted that the possibility of committing fraud exists in every job. Failure to implement effective fraud processes might also increase the likelihood of fraud. Opportunity is the most powerful of the three aspects in the fraud triangle [7]. As a result, the organization must have an effective method, procedure, and control to detect fraudulent activities. According to SAS No. 99, there are three chances for misleading financial statements. The nature of the industry, poor oversight, and organizational structure are all examples of these situations [8].

2.4. Rationalization

Rationalization is a critical component in fraud since it allows offenders to justify their acts. Rationalization is the most difficult to measure an aspect of the fraud triangle [9]. One or more people's attitude or character leads them to commit deception reasonably. The quality of financial reporting is heavily influenced by management honesty. When management's honesty is questioned, the financial statements' dependability is also interviewed. Cheating will be easy to justify for generally dishonest individuals. It may not be so simple for individuals with higher moral standards. Fraudsters are constantly looking for plausible excuses for their acts. According to SAS No. 99, The auditor turnover cycle, the company's audit opinion, and the general condition of accruals split by total assets are all indicators of a company's rationalization [10].

2.5. Earning Management

Many prior academics have defined earnings management. The auditor turnover cycle, the company's audit opinion, and the general condition of accruals split by total assets are all indicators of a company's rationalization [11]. Financial Accounting Standards give managers many leeways when choosing accounting standards. Earnings management is thought to result from financial managers' or report preparers' efforts to control the number of profit numbers for personal and company purposes [12].

2.6. Hypotheses Development

Financial stability refers to a company's ability to withstand pressure from the economy, industry, or other operating entity [13].

H1: Financial stability pressure affects fraudulent financial statements.

Financial target is the risk of putting too much pressure on management to meet financial targets established by the board of directors or control, such as obtaining sales and profit incentives [14]. The researcher's theory, based on the description above, is as follows:

H2: Financial targets affect financial statement fraud.

A circumstance in which the financial crisis of the company's leaders influences the company's finances is known as the personal financial need [14]. The company's financial performance will jeopardize company executives' own financial needs. The executive company will have a say in disclosing its financial performance because it owns a portion of the stock. As a result, the percentage of

ownership held by insiders is used to estimate personal economic necessity (OSHIP).

H3: Personal financial targets affect financial statement fraud.

Excessive pressure on management to meet the requirements or expectations of third parties is known as external pressure. The possibility of financial statement fraud is higher when there is much pressure from outside sources [5]. The following explanation is offered because external pressure has little effect on financial statement fraud

H4: External pressure does not affect fraudulent financial statements.

One of them, fraud, can be reduced with the help of a robust monitoring system. The independent audit committee, also known as the board of commissioners from outside the corporation, is one of the good supervisors who guarantee that the company's performance is more effective. An independent audit committee is a proxy for effective monitoring [15].

H5: Effective monitoring does not affect fraudulent financial statements.

3. RESEARCH METHODS

3.1. Definitions of Variables

3.1.1. Dependent Variable

Research can use one of three approaches: quantitative, qualitative, or a combination of qualitative and quantitative. The purpose of this study is to investigate the link between the independent variable, which is a component of the fraud triangle, and false financial statements. This study uses quantitative approaches to analyze the research issues outlined in Chapter I by using numbers to indicate research variables to answer research questions. This study looks at 6 (six) variables: a dependent variable and five of which are independent variables. Each variable's definition and operation will be described in depth below.

The dependent variable in this study is financial statement fraud, proxied by earnings management (Y). Discretionary accruals, which are computed by setting aside total accruals (TACC) and nondiscretionary accruals, can be used to monitor earnings management (DACC) (NDACC). Discretionary accrual (DACC) is a unique accrual rate that allows management to tailor outcomes to their preferences. The researcher uses the Modified Jones Model to determine DACC. This model was chosen to detect earnings management more accurately than other models.

3.1.2 Independent Variable

This study uses independent variables, including:

Financial stability is a term used to characterize a company's financial situation when stable [16]. When the company's financial stability is challenged, management will use a variety of tactics to restore it. The condition of a company's assets can be used to determine its financial stability. ACHANGE, the ratio of asset changes over two years, is a proxy for financial stability pressure. The formula calculates ACHANGE:

$$\text{ACHANGE} = \frac{(\text{total asset } t - \text{total asset } t - 1)}{\text{total asset } t} \quad (1)$$

The profit to total assets (ROA) ratio is a frequently used metric for determining how well acquisitions have performed. Return on Asset is a component of financial statement analysis or firm performance measuring profitability ratios [17]. The following formula can calculate ROA:

$$\text{ROA} = \frac{(\text{net income before extraordinary } t - 1)}{\text{total asset } t} \quad (2)$$

Personal financial necessity occurs when the financial state of the company's leaders has an impact on the company's finances. Individual financial need proxied by OSHIP is measured by:

$$\text{OSHIP} = \frac{\text{total shares own by insiders}}{\text{total shares outstanding}} \quad (3)$$

External pressure is defined as excessive pressure on management to meet the needs or expectations of other parties. This variable may be calculated by comparing total liabilities (debt) to total assets. The free cash flow ratio is one of the company's performance indicators that demonstrates its assets' potential to create an operational profit. The formula calculates the free cash flow ratio:

$$\text{FREES} = \frac{\text{total net cash from operating activities} - \text{cash dividends} - \text{capital expenditures}}{\text{total assets}} \quad (4)$$

Effective monitoring is a corporate state in which internal control is fair. The presence of an independent audit committee is believed to increase firm performance oversight and decrease fraud. The audit committee was established as one of the company's special committees to improve the

supervisory role, which had previously been solely the board of commissioners' responsibilities. The proportion of independent audit committees (IND) may be calculated using the following formula :

$$IND = \frac{\text{number of independent audit committee members}}{\text{total number of audit committee}} \quad (5)$$

The type of research used is descriptive quantitative research because quantitative descriptive describes the description of the research results. The subject under study is the finance department of PT. Astra International Tbk. The firm's financial accounts are included in this study's data, which were analyzed and then concluded about the company's performance.

3.2. Source of Data

The kind of data utilized in this inquiry was secondary data. Secondary data is independent variable data gathered and processed by others in a final form, generally in the form of publications. Data from the company's annual financial report is secondary data in this study; it is simple to collect and does not incur significant fees. The data obtained is more accurate and valid because public accountants have audited the published financial statements. Secondary data was gathered from www.IDX.co.id.

3.3. Population and Sample

Purposive sampling is a sampling strategy that seeks to get a representative sample based on predetermined criteria. Data for this study was acquired through documentation and a literature review. The method of documenting is gathering information by documenting and analyzing papers or archives relevant to the subject under investigation. Collecting all secondary data from www.IDX.co.id is part of the method. The literature study method examines various research literature, including financial statement fraud.

Table 1. Sample Selection Process

No	Criteria	Amount
1	Property and real estate company listed on the IDX for 2016-2018 years.	81
2	The company never delisted over time 2016-2018 years	1

3	Property and real estate company that issues complete report finance during 2016-2018 period	11
Year of Observation		3
Number of observations sampled during the research period		11

3.4. Data Analysis Techniques

The regression model employed by the researcher to test the hypothesis that has been formulated is multiple linear regression with SPSS as the data analysis tool (Statistical Product Service Solution). Researchers utilize numerous regression analyses to anticipate how a variable's condition (up and down) will change. As shown in Figure 1.2, the histogram of this study displays a bell-shaped data distribution. It does not skew to the left or right, indicating that the data is usually distributed. Similarly, using the plot graph below, the results of the normalcy test. As a result, this analysis was performed since the number of independent variables evaluated was more significant than one.

4. RESULT AND DISCUSSION

4.1. Classic Assumption Test

An example of a classical assumption test required to determine whether the multiple regression equation utilized deviates from the classical assumption. The normality, multicollinearity, autocorrelation, and heteroscedasticity tests are all included in this test.

4.1.1. Normality Test

The normality test examines if the regression model's residual variables have a normal distribution or not. The normality test that we used is the graphical analysis and statistical analysis. The normality test can be done with the standard PP of the residual regression graph and the Kolmogorov-Smirnov quantity.

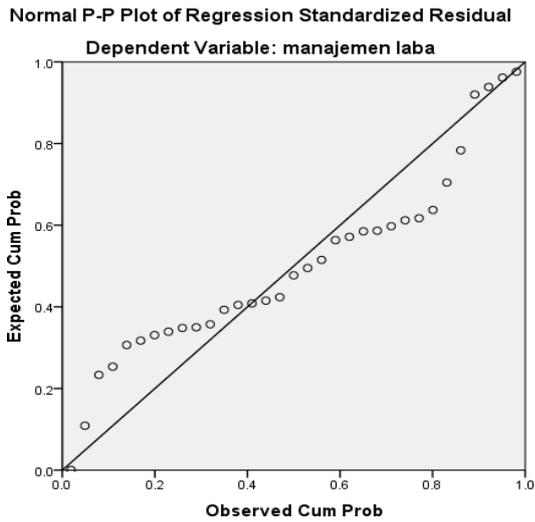


Figure 1. Normality Test

Figure 1 depicts an average plot graph, and This demonstrates how the points are dispersed about the diagonal line and how near the distribution is to it, indicating that the data in the regression model is typically distributed. To determine normality, the data in this study were rechecked.

Table 2. Kolmogorov Smirnov Test

	Unstandardized Residual
Asymp Sig. (2-tailed)	0.017

The value of Kolmogorov-Smirnov in this study is 0.0170, according to table 2. The data is considered normal if the K-S One-Sample test significance is greater than 0.05. The signification is 0.017, which means $(0.017) > 0.05$, according to this test. Normality testing with histogram graphs and normal plots yielded similar results.

4.1.2. Multicollinearity Test

Table 3. Multicollinearity Test

	Tolerance	VIF
ACHANGE	0.963	1.038
ROA	0.915	1.093
OSHIP	0.629	1.589
FREEC	0.945	1.059
IND	0.621	1.612

The data is said to be free of multicollinearity symptoms. It is known that there is no multicollinearity symptom in each independent variable, as shown in Table 2.1, where:

4.1.3. Heteroscedasticity Test

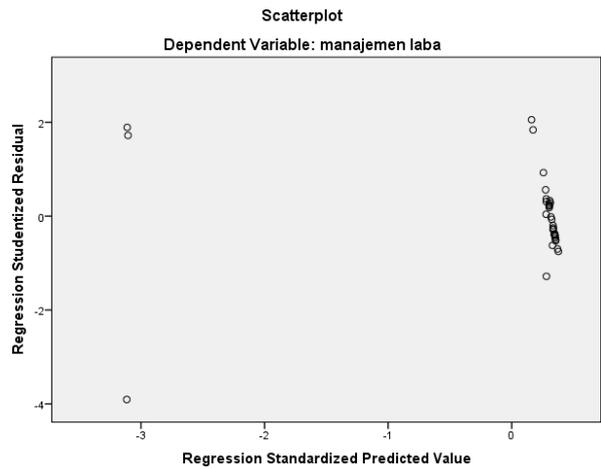


Figure 2. Heteroscedasticity Test

4.1.4. Autocorrelation Test

Table 4. Autocorrelation Test

	Durbin Watson
Asymp Sig. (2-tailed)	1.635

The DW statistic value is 1.635, $(d) > 2$; this study has no positive or negative autocorrelation.

4.2. Multiple Linear Regression Test

The goodness of fit of the sample regression function can be used to determine its accuracy in guessing the actual value. At the very least, the statistical significance may be determined using the coefficient of determination, the value of F, and the statistical value of t.

Table 5. Regression Test

	B	Sig.
Constant	-44.574	0.266
ACHANGE	7.636E-06	0.010
ROA	6.728	0.000
OSHIP	-2.039	0.000
FREEC	829.889	0.005
IND	0.953	0.956

The regression equation is as follows, based on the table above.

Earnings management =
 $44,547 + 7,636ACHANGE + 6,728ROA - 2,039OSHIP + 829,889FREEC + 0,953IND$ (5)

- 7.636 indicates that for every 1% increase in financial stability pressure, it will be followed by an increase in earnings management of 7.636%, assuming that other independent variables remain constant.
- 6.728 indicates that for every 1% increase in Financial targets, it will be followed by an increase in earnings management of 6.728%, assuming other independent variables remain.
- 2.039 indicates that for every 1% increase in Personal Financial Need, it will be followed by an increase in earnings management of 2.039%, assuming other independent variables remain.
- 829,889 indicates that every 1% increase in External Pressure will be followed by an increase in earnings management of 829,889%, assuming other independent variables remain.
- 0.953 indicates that for every 1% increase in Effective monitoring, it will be followed by an increase in earnings management of 0.953%, assuming that all other independent variables are constant.

4.3. Coefficient of Determination

Table 6. Coefficient of Determination

	Adjusted R Square
Asymp Sig. (2-tailed)	0.994

The Adjusted R² value obtained from the data processing results using SPSS is 0.994, which means that variations in the five independent variables need Effective monitoring can explain 99.4 percent of the earnings management variation. In contrast, the rest (100 % - 99.4 % = 1.6 %) is explained by other reasons.

4.4. F Test

Table 7. F Test

F	Sig.
1013.06824	0..000

The F-test revealed the f-value is 1013.06824 with a 0.000 probability level, and the f-table is 2.23 with a 0.05 probability level, with df1 being five and df2 being 27. Because f-value > f-table (1013.06824 > 2.23) and probability 0.05 (0.000 0.05).

4.5. t-Test

Table 8. t-Test

	t	Sig.
Constant	-1.137	0.266
ACHANGE	2.759	0.010
ROA	3.975	0.000
OSHIP	-56.375	0.000
FREEC	3.070	0.005
IND	0.055	0.956

The data processing results show the value of t-value for the variable ACHANGE of 2.759 with a significance value of 0.010 and t-table, with df = 27 (df = number of observations-number of independent independent variables variables), is 2.051 so that t-value > t-table is 2.759 > 2.051. The significance value > 0.05 is 0.010 > 0.05; it is concluded that financial stability pressure harms earnings management because the coefficient value of financial stability pressure is negative.

5. CONCLUSION

This study's three findings may be derived from data analysis and discussion outcomes. In 2016-2018, effective monitoring had a favorable In the years 2016-2018, the impact on earnings management in property and real estate businesses listed on the IDX was significant. Effective monitoring positively impacted the IDX. Financial stability, financial targets, personal financial need, and external pressure had a partially unfavorable impact on property and real estate earnings management on the IDX from 2016 to 2018.

There are some suggestions for future research. They use a different stock analysis, namely technical analysis, and add independent variables to other internal and external elements not covered in this study. They are using research objects that are in motion in different industries. Increasing the observation period will allow researchers to gain more exact and reliable research results.

REFERENCES

[1] K. C. Lelly and N. N. Afiah, "Does quality of financial statement affected by the internal control system and internal audit?," *Int. J. Econ. Financ. Issues*, vol. 7, no. 2, pp. 568–573, 2017, [Online]. Available: <https://dergipark.org.tr/en/download/article->

- file/365935%0Ahttp:www.econjournals.com.
- [2] G. Iatridis, "International Financial Reporting Standards and the quality of financial statement information," *Int. Rev. Financ. Anal.*, vol. 19, no. 3, pp. 193–204, 2010, DOI: 10.1016/j.irfa.2010.02.004.
- [3] G. Soepriyanto, Y. Indra, O. The, and A. Zudana, "Firms' Participation in Tax Amnesty Program Engaged in Financial Reporting Manipulation: An Empirical Evidence from Listed Companies in Indonesia," *The Winners*, vol. 20, no. 2, p. 85, 2019, DOI: 10.21512/tw.v20i2.5616.
- [4] C. Free, "Looking through the fraud triangle: A review and call for new directions," *Meditari Account. Res.*, vol. 23, no. 2, pp. 175–196, 2015, DOI: 10.1108/MEDAR-02-2015-0009.
- [5] S. Nickell and D. Nicolitsas, "How does financial pressure affect firms?" *Eur. Econ. Rev.*, vol. 43, no. 8, pp. 1435–1456, 1999, DOI: 10.1016/S0014-2921(98)00049-X.
- [6] E. Bertero and L. Rondi, "Financial pressure and the behavior of public enterprises under soft and hard budget constraints: Evidence from Italian panel data," *J. Public Econ.*, vol. 75, no. 1, pp. 73–98, 2000, DOI: 10.1016/S0047-2727(99)00057-2.
- [7] F. K. Fitriyah, "The Role of the Internal Audit Unit in Detecting and Preventing Fraud at Public Universities in West Java, Indonesia," *Int. Sch. Sci. Res. Innov.*, vol. 10, no. 5, pp. 1802–1809, 2016, [Online]. Available: scholar.waset.org/1307-6892/10006417.
- [8] Z. Rezaee, "Causes, consequences, and deterrence of financial statement fraud," *Crit. Perspect. Account.*, vol. 16, no. 3, pp. 277–298, 2005, DOI: 10.1016/S1045-2354(03)00072-8.
- [9] D. M. Roden, S. R. Cox, and J. Y. Kim, "The Fraud Triangle as A Predictor of Corporate Fraud," *Acad. Account. Financ. Stud. J.*, vol. 20, no. 1, pp. 80–92, 2016.
- [10] J. Said, M. M. Alam, M. Ramli, and M. Rafidi, "Integrating ethical values into fraud triangle theory in assessing employee fraud: Evidence from the Malaysian banking industry," *J. Int. Stud.*, vol. 10, no. 2, pp. 170–184, 2017, DOI: 10.14254/2071-8330.2017/10-2/13.
- [11] H. Jahanzab, A. Ali, and T. Sadiq, "Earnings management and dividend policy Empirical evidence from Pakistan listed companies," *Eur. J. Bus. Manag.*, vol. 4, no. 1, pp. 83–90, 2012.
- [12] D. L. T. S. Dwi Lusi Teasing Swastika, "Corporate Governance, Firm Size, and Earning Management: Evidence in Indonesia Stock Exchange," *IOSR J. Bus. Manag.*, vol. 10, no. 4, pp. 77–82, 2013, DOI: 10.9790/487x-1047782.
- [13] W. A. Allen and G. Wood, "Defining and achieving financial stability," *J. Financ. Stab.*, vol. 2, no. 2, pp. 152–172, 2006, DOI: 10.1016/j.jfs.2005.10.001.
- [14] H. A. Skaife and D. D. Wangerin, "Target financial reporting quality and M&A deals that go bust*," *Contemp. Account. Res.*, vol. 30, no. 2, pp. 719–749, 2013, doi: 10.1111/j.1911-3846.2012.01172.x.
- [15] R. Alifianti, H. Putri, and A. Chariri, "Pengaruh Financial Distress Dan Good Corporate Governance Terhadap Praktik Tax Avoidance Pada Perusahaan M Anufaktur," *Diponegoro J. Account.*, vol. 6, no. 2, pp. 56–66, 2017.
- [16] D. Listyaningrum et al., "Pengaruh Financial Stability, External Pressure, Financial Target, Ineffective Monitoring Dan Rasionalisasi Terhadap Kecurangan Pelaporan Keuangan (Fraud) Pada Perusahaan Manufaktur Di Bei Tahun 2012-2015," pp. 1–16, 2017.
- [17] R. Handayani, "Pengaruh Return on Assets (ROA), Leverage dan Ukuran Perusahaan Terhadap Tax Avoidance Pada Perusahaan Perbankan yang Listing di BEI Periode Tahun 2012-2015," *J. Akunt. Maranatha*, vol. 10, no. 1, pp. 72–84, 2018, doi: 10.28932/jam.v10i1.930.