

## Institutional Ownership as Moderation Variable of Fraud Triangle on Fraudulent Financial Statement

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### Abstrak

**Tujuan Utama** - Penelitian ini dilakukan untuk menilai risiko terjadinya peristiwa kecurangan laporan keuangan..

**Metode** - Pengukuran tingkat kecurangan laporan keuangan dilakukan dengan menggunakan model F-score dan menggunakan analisis regresi data panel sebagai metode analisis

**Temuan Utama** - Penelitian ini menemukan bahwa dari tiga unsur kecurangan, hanya unsur tekanan yang diprosikan dengan keuangan yang berpengaruh signifikan terhadap praktik kecurangan pelaporan keuangan. Sedangkan elemen kedua lainnya adalah peluang yang diprosikan dengan pengawasan yang tidak efektif dan rasionalisasi yang diprosikan dengan *auditor switching* tidak menunjukkan pengaruh yang signifikan terhadap tingkat pelaporan keuangan.

**Implikasi Teori dan Kebijakan** – Implikasi pada riset ini ditujukan pada investor, peneliti percaya bahwa kehadiran investor institusi mampu meningkatkan pengawasan terhadap kinerja perusahaan. Hal ini tentunya dinilai efektif dalam menstabilkan kondisi keuangan sehingga praktik kecurangan laporan keuangan dapat dikendalikan..

**Kebaruan Penelitian** - penelitian ini mengangkat kepemilikan institusional sebagai variabel moderasi. Keberadaan kepemilikan institusional hanya mampu memoderasi hubungan antara stabilitas keuangan dan kecurangan laporan keuangan, hal tersebut lantaran investor institusional yang memiliki saham besar dalam perusahaan cenderung mengabaikan kepentingan dari minoritas dan justru berpihak pada manajemen. Dengan begitu, meningkatnya kepemilikan institusional dapat mempermudah manajemen dalam menjalankan aksinya untuk melakukan manipulasi laporan keuangan.

### Abstract

**Main Purpose** - This study was conducted to assess the risk of occurrence of financial statement events.

**Method** - The measurement of the level of financial statement fraud is carried out using the F-score model, and using the panel data regression analysis method.

**Main Findings** - The results of the study find that from the element of fraud, only the element of financial stability has a significant effect on fraudulent financial reporting. While the other two elements, namely the ineffectiveness of monitoring and auditor switching, did not show a significant effect on the level of financial reporting.

**Theory and Practical Implications** - The implications of this study are aimed at investors, researchers believe that the presence of institutional investors can improve oversight of company performance. This is of course considered effective in stabilizing financial conditions so that fraudulent financial reporting practices can be controlled.

**Novelty** - This study raised institutional ownership as a moderating variable. The existence of institutional ownership is only able to moderate the relationship between financial stability and fraudulent financial statements, this is because institutional investors who have large shares in companies tend to ignore the interests of the minority and side with management. That way, increasing institutional.

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## INTRODUCTION

Financial statements are essential for a company. The importance of these financial

statements often spurs management's desire to present attractive value. Not infrequently this is done through the wrong way and deviates

from the applicable guidelines. In this way, stakeholders often make wrong decisions, thus providing a distinct advantage for management. The situation above has attracted the attention of many groups, ranging from the general public, investors, analysts, and regulators.

Various guidelines were created as the basis for the company's tools in presenting reports. Indonesia has a Statement of Financial Accounting Standards (PSAK) which contains several adaptations of IFRS as an international standard. This is intended so that there is harmony between financial statements so that they can be compared each year and each entity (Indonesian Institute of Accountants, 2019). In fact, management often manipulates in presenting financial statements for their personal interests. Especially when there are phenomenal scandals from several leading entities.

One of them is the case involving Toshiba. Reporting from CNN Indonesia, the electronics company from the bamboo curtain country is known to have overstated profits that reached US \$ 1.22 billion. This was done to cover up his inability to achieve the target since 2008. As a result of this incident, the company's CEO Hisao Tanaka and eight other staff members resigned and the company restructured (Panji, 2015).

The above incident also occurred in several entities in Indonesia. According to the survey results obtained by the anti-fraud association ACFE, financial statement fraud is rarely done in companies with a percentage of 6.7%. However, this type of fraud triggers the greatest losses with a percentage of up to 70%. (ACFE, 2019). Practitioners seek to examine the causes of incidents of financial statement fraud.

Research on financial stability was obtained from Tiffani & Marfuah (2015), Indarto & Ghozali (2016) and research by Fitri et al. (2019) which confirms that there is a significant positive influence between financial stability and fraudulent financial statements. However, this is contradictory to the research conducted by Wahyuni & Budiwitjaksono (2017) and Larasati et al.,

(2020) which did not find any significant effect between financial stability and financial statement fraud. Cases of fraudulent financial statements can occur due to unstable financial conditions, while the principal wants financial performance to always be in good and stable condition. This often pressures management to deceive the principal by presenting inappropriate financial statements.

Other research attempts to examine the correlation between the ineffectiveness of supervision and fraudulent financial statements. Research that came from Mardianto & Tiono (2019) resulted in a significant negative relationship between monitoring ineffectiveness and financial statement fraud. Contrary to research from Fitri et al. (2019) and Hermawati & Murtanto (2019), there is a significant positive relationship between monitoring ineffectiveness and financial statement fraud. However, other research from Indarto & Ghozali (2016), Fajri (2018), and Ramdany et al. (2021) which states that there is no significant relationship between the ineffectiveness of supervision on fraudulent financial statements. Opportunities for fraud within the company can be opened in line with less effective supervision. Thus, the application of a good supervisory mechanism is one way that can be done to minimize fraudulent financial reporting

Previous research has also attempted to examine the relationship between KAP switching and the possibility of fraud in financial presentation. Wahyuni & Budiwitjaksono (2017) found a positive influence between the change of KAP and fraudulent practices in financial presentation. These results are inversely proportional to the research of Larasati et al. (2020) who found a negative effect between the change of KAP and fraudulent practices in financial presentation. Meanwhile, research from Rahma & Suryani (2019) and Ramdany et al. (2021) did not find any significant effect on these two variables. The audited financial statements are presented to provide assurance that the financial statements are not materially misstated and provide a reasonable assessment. Sometimes

companies change KAP as a strategy to cover up past fraud. The higher the audit turnover rate, the higher the possibility of fraud in the company.

It can be seen that there are inconsistencies from previous research and there will continue to be differences in research results along with the number of cases of fraud that are revealed (Abbas, 2017). This study raised institutional ownership as a moderating variable. Institutional ownership is considered capable of tightening control in a company because of the authority possessed by the company in mediating agency problems, so that institutional ownership can harmonize information between agents and principals. Institutional ownership is also considered capable of maintaining the effectiveness of supervision through setting standards on entities (Santiso, 2016). In addition, institutional ownership has a role in influencing companies to change independent KAPs, this becomes the authority for institutional investors who have a large share of ownership in the company to detect fraud in financial statements.

Agency theory is the basic concept in this research, where this theory explains the correlation between management and investors. Jensen and Meckling (1976) describes investors as principals who entrust management to carry out their business activities. In the relationship between the two parties, there are often differences, one of which is the information gap. The authority to regulate the company makes management obtain broader information. This is often misused to commit acts of fraud. Therefore, agency costs are needed to avoid this information gap which includes monitoring, engagement and residual costs (Eisenhardt, 1989).

This research is expected to be able to make a universal contribution to science related to the study of fraud, especially when companies are faced with unstable financial conditions. In addition, it is hoped that this research will also be a persuasive signal for stakeholders, especially investors and creditors in making economic decisions. Based on this

description, the researcher is interested in studying more deeply through a study entitled "Institutional Ownership as Moderation Variable of Fraud Triangle on Fraudulent Financial Statement ". This study makes the manufacturing sector listed on the Indonesia Stock Exchange (IDX) for the 2017-2020 period as the object of this study.

## METHOD

This study is designed to examine the effect of financial stability, less effective monitoring and KAP rotation in detecting fraudulent financial statements in the perspective of the fraud triangle in manufacturing companies. The population of this study are all properties and manufacturing companies listed on the Indonesia Stock Exchange for the 2017-2020 period. The sampling technique was carried out using purposive sampling method in order to obtain 512 samples that match the specified criteria. The data used in this research is secondary data. according to Sugiyono (2013), secondary data is data that has been previously processed by other people and has been in the form of publications. The secondary data used in this study are the company's annual financial statements, journals, research and books related to this research. The data collection method used in this research is the method of documentation and literature. This study uses a quantitative type as an indicator to answer the problems in this study, so this research uses quantitative methods to answer these problems. This study consisted of six variables, namely one dependent variable and three independent variables, one moderating variable, and one control variable. The operational definition and measurement of each variable will be explained in detail as follows.

This research raises financial statement fraud as the dependent variable. Financial statement fraud is a violation of the accountant's code of ethics that is carried out intentionally through misstatement or manipulating financial disclosures in related entities (Hermawati & Murtanto, 2019). Financial statement fraud testing can be done using various methods, including benefit M-

Score and F-Score. However, in the research conducted by Tarjo & Herawati (2015), several components of Beneish M-Sore were unable to prove fraudulent financial statements. So that, refers to Dechow et al. (2012), this dependent variable was measured using the F-score Model. This model is considered appropriate because compared to several other models, the F-score model produces a more accurate value (Hugo, 2019). Fraud risk in the F-score model is classified into 4 levels. Normal risk is in the range of -1 to 1, pre-normal risk is in the range of 1 to 1.85, substantial risk is in the range of 1.85 to 2.45, and the highest risk has a value above 2.45. Calculating the value of the F-score using the following formulation

*F - Score = Accrual Quality + Financial Performance*

Source: Dechow et al. (2012)

Accrual Quality in this study calculated using the RSST Accrual formulation as follows

$$\text{RSST accrual} = \frac{(\Delta WC + \Delta NCO + \Delta FIN)}{\text{Average Total Assets}}$$

Source: Skousen & Twedt (2009)

Description:

*ΔWC (Working Capital)*

$$\begin{aligned} &= (\text{Current Assets} \\ &\quad - \text{Current Liabilities})_t \\ &\quad - (\text{Current Assets} \\ &\quad - \text{Current Liabilities})_{t-1} \end{aligned}$$

*ΔNCO (Non Current Operating Accrual)*

$$\begin{aligned} &= ((\text{Total Assets} \\ &\quad - \text{Current Assets} \\ &\quad - \text{Investment and Advances}) \\ &\quad - (\text{Total Liabilities} \\ &\quad - \text{Current Liabilities} \\ &\quad - \text{Long Term Deb}))_t \\ &\quad - ((\text{Total Assets} \\ &\quad - \text{Current Assets} \\ &\quad - \text{Investment and Advances}) \\ &\quad - (\text{Total Liabilities} \\ &\quad - \text{Current Liabilities} \\ &\quad - \text{Long Term Deb}))_{t-1} \end{aligned}$$

*ΔFIN (Financial Accrual)*

$$\begin{aligned} &= (\text{Total Investment} \\ &\quad - \text{Total Liabilities})_t \\ &\quad - (\text{Total Investment} \\ &\quad - \text{Total Liabilities})_{t-1} \end{aligned}$$

*ATS (Average Total Assets)*

$$= \frac{(\text{Beginning Total Assets} + \text{End Total Assets})}{2}$$

Meanwhile, financial performance is measured using the following formulation

*Financial Performance*

$$\begin{aligned} &= \text{Change in Receivable} \\ &\quad + \text{Change in Inventories} \\ &\quad + \text{Change in Cash Sales} \\ &\quad + \text{Change in Earnings} \end{aligned}$$

Source: Skousen & Twedt (2009)

Description :

*Change in Receivable*

$$= \frac{\text{Receivable}_t - \text{Receivable}_{t-1}}{\text{Average Total Assets}}$$

*Change in Inventories*

$$= \frac{\text{Inventories}_t - \text{Inventories}_{t-1}}{\text{Average Total Assets}}$$

*Change in Cash Sales*

$$\begin{aligned} &= \frac{\text{Sales}_t - \text{Sales}_{t-1}}{\text{Sales}_t} \\ &\quad - \frac{\text{Receivable}_t - \text{Receivable}_{t-1}}{\text{Receivable}_t} \end{aligned}$$

*Change in Earnings*

$$= \frac{Earnings_t}{Average\ Total\ Assets_t} - \frac{Earnings_{t-1}}{Average\ Total\ Assets_{t-1}}$$

This research raises the components of the fraud triangle, namely pressure, opportunity, and rationalization proxied by financial stability (ACHANGE), less effective monitoring (BDOUT), and change of Public Accounting Firm (AUCHANGE) as independent variable.

The first element in the fraud triangle is pressure, In the fraud philosophy as Cressey points out, pressure is recognized as a significant motivation for fraud. Financial stress is one important form of pressure; this burden causes management to behave in several illegal ways to meet shareholder performance (Alsinglawi et al., 2021). As usual the owners of capital will pressure the company to always maintain the level of financial stability. The stability of the company's financial level is a condition where the entity is able to meet all its dependents. A company is said to have a stable financial rate if its assets can meet its current and future operational activities. Financial stability is measured by the rate of change in the value of assets in the financial statements

$$ACHANGE = \frac{Total\ Asset_t - Total\ Asset_{t-1}}{Total\ Asset_t}$$

Source :Skousen et al. (2009)

Pressure is a component of cheating that occurs a lot. But oftentimes, fraudsters can't commit fraudulent financial statements if there is no opportunity, which is one of the elements of the fraud triangle. Opportunities can arise when internal controls are weak, and there is an ineffective monitoring of management. Ineffective monitoring within the company often opens the way for management to manipulate financial reports. The existence of an independent board of commissioners is able to increase the effectiveness of monitoring in the company, thereby minimizing the opportunity for fraud to occur. formulate the

ineffectiveness of supervision into the following formula

*BDOUT*

$$= \frac{Number\ of\ Independent\ Commissioners}{Total\ of\ Commissioners}$$

Source :Wahyuni & Budiwitjaksono (2017)

The research of Lin et al. (2015) results show that only the dimensions of pressure and opportunity are included in the top five categories. This gap warns that auditors and users of financial statements should pay more attention to the attitude/rationalization dimension, especially when companies have a high frequency of financial restatements. Rationalisation of the fraud triangle is the most difficult to measure because it is difficult to guess what the fraudster is thinking. Rationalization is an attitude that can justify something. A person with low integrity can produce thoughts that make the person not feel wrong when he has done the wrong thing. The replacement of a Public Accounting Firm is an event that occurs when the cooperation is terminated in using the services of KAP as the company's independent auditor. The change of KAP is a proxy for rationalization, where the change of KAP is often suspected as an attempt to cover up the fraud committed. KAP switching is measured using a dummy variable, with 0 points for companies that do not rotate KAP and 1 point for companies that do KAP rotation.

This research is supported by moderating variables are variables whose presence is able to influence the relationship between the independent and dependent variables, either becoming stronger or getting weaker (Sugiyono, 2013). This research uses Ownership as a moderating variable. Institutional ownership is the portion of shares held by institutional investors with concentrated rights (Zureigat, 2011). Researcher Achmad (2018) measure the level of institutional ownership with the following calculation:

$$INST = \frac{Proportion\ Shares\ by\ Institutional}{Total\ Outstanding\ Shares}$$

Source :Achmad (2018)

The control variable is a variable that cannot be manipulated and is used as a step to limit the influence of this aspect. External pressure is used as a control variable in this study because it consistently affects the dependent. External pressure in this research is measured using a leverage ratio with the following formulation:

$$LEV = \frac{\text{Total Liabilities}}{\text{Total Asset}}$$

Source :Fajri (2018)

### Analysis Techniques and Hypothesis Testing

This research examines the effect of financial stability, ineffective monitoring, and auditor switching on fraudulent financial statements by building 2 regression models as follows

Model 1:

$$F \text{ Score} = \alpha + \beta_1 Achange + \beta_2 Bdout + \beta_3 Achange + \beta_4 Inst + \delta_1 Lev + \varepsilon$$

Model 2:

$$F \text{ Score} = \alpha + \beta_1 Achange + \beta_2 Bdout + \beta_3 Achange + \beta_4 Inst + \beta_5 Achange * Inst + \beta_6 Bdout * Inst + \beta_7 Achange * Inst + \delta_1 Lev + e$$

Description :

F Score	= Fraudulent Financial Statement
$\alpha$	= constant
1, 2, 3, 4, 5, 6, 7	= Regression Coefficient of each proxy
ACHANGE	= Financial Stability (Pressure)
BDOUT	= Ineffective Monitoring (Opportunity)
AUDCHANGE	= Auditor Switching (Rationalization)
INST	= Institutional ownership
ACHANGE*INST	= Moderation Institutional Ownership to Financial Stability
BDOUT*INST	= Moderation Institutional Ownership to Ineffective Monitoring
AUCHANGE*INST	= Moderation institutional Ownership to Auditor Switching
e	= error

### RESULTS AND DISCUSSION

The data in this research are presented in table 1 which includes the average value, standard deviation from the average value, minimum value, and maximum value. This value was obtained from 128 companies with a total of 512 observations as follows:

Table 1. Descriptive Statistical Results

<i>Descriptive Statistics</i>					
<i>Variable</i>	<i>Obs</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
<i>F-Score</i>	512	-0.0336	0.4556	-3.0227	4.1277
<i>Change</i>	512	0.0611	0.1981	-0.7858	1.6760
<i>Bdout</i>	512	0.4104	0.1127	0	1
<i>Achange</i>	512	0.1640	0.3706	0	1
<i>Inst</i>	512	0.7071	0.2882	0	0.9995
<i>Lev</i>	512	0.5509	0.5764	0.0034	5.1677

Source: Processed data (2021)

It can be seen in table 1 that the dependent variable of financial statement fraud gets the maximum value 4.1277 and a minimum of -3.0227, both values are held by

food producer PT Tiga Pilar Sejahtera. This value is included in the high risk category based on the classification Dechow et al. (2012), so there is an allegation that the company is conducting financial manipulation.

It can be seen in table 1 that the independent variable financial stability has a minimum value of -0.7858 achieved by PT Tiga Pilar Sejahtera, indicating that there has been a decline in assets that has reached 78 percent of the entity. As well as the maximum value of 1.6760 obtained by PT Indofood, there was a significant increase in assets.

It can be seen in table 1 that the independent variable is the ineffectiveness of

supervision where the minimum independent commissioner portion of 0 indicates that there are companies that have not met applicable regulatory standards. The maximum value presented is 1 at Bentoel Internasional Investama Tbk shows The company has a high level of supervision.

It can be seen in table 2 that the independent variables of KAP changes were carried out on 512 observations, 83.59% of them did not change KAP. On the other hand, the other 16.41% change KAP as an independent auditor.

Table 2. Tabulation of Nominal Scale Variables

<i>AUCHANGE</i>			
<i>Dummy Variable</i>	<i>Frequency</i>	<i>Percent</i>	<i>Cumulative Percent.</i>
<i>0</i>	428	83.59%	83.59%
<i>1</i>	84	16.41%	100.00%
<i>Total</i>	512	100.00%	

Source: Processed data (2021)

It can be seen in table 1 that the independent variable of institutional ownership shows a minimum value of 0 at PT Wismilak Inti Makmur Tbk which proves the existence of a company controlled by an individual. Meanwhile, the maximum value of 0.995 indicates that there are companies whose shares are almost entirely owned by institutional investors.

It can be seen in table 1 that the independent variable external pressure has a minimum leverage value of 0.0034 which is held by PT Star Petrochem Tbk, indicating that the entity is able to fulfill all its dependents with its assets. While the maximum value for this variable is obtained by PT Asia Pacific Fibers Tbk of 5.1677, indicating the proportion

of debt is much larger than assets. In other words, the total assets owned by the company will not be sufficient to pay all liabilities.

**Determination of Panel Data**

To be able to test the hypothesis, it is necessary to determine the most suitable model to use. Panel data regression data, there are three models that are often used, namely the common effect, fixed effect model, and random effect model. To choose between the three models, it is necessary to go through several stages of testing, namely the chow test, the lagrange multiplier test, and the hausman test. Chow test was conducted to compare the best results between CEM and FEM.

Table 3. Chow Model 1 . Test Results

sigma_u	.56903096
sigma_e	.45542003
rho	.609552

F test that all u\_i=0: F(127, 378) = 0.54  
 Prob > F = 0.8735

Source: Processed data (2021)

Table 4. Chow Model 2 . Test Results

sigma_u	.32468455
sigma_e	.36510721
rho	.44159998

F test that all u\_i=0: F(127, 378) = 0.86  
 Prob > F = 0.8375

Source: Processed data (2021)

Table 3 above shows the value of the Chow test in the regression model I presents the value of Prob > F = 0.8735. This result is greater than alpha (0.05), so that in this test the most appropriate approach is used, namely the common effect model. Likewise with table 4, the value of the Chow test presented in the regression model II is Prob > F = 0.8375. This

result is also greater than alpha (0.05). So in this test, the most appropriate approach is used for model II, namely the common effect model. Furthermore, the Lagrange multiplier test was carried out to determine the best model between CEM and REM, and the following results were obtained

Table 5. Lagrange Multiplier Model 1 . Test Results

	Var	SD = sqrt(Var)
<i>Fscore</i>	0.2076011	0.4556327
E	0.2074074	0.45542
U	0	0
Test : Var(u) = 0		
	Chibar2 (01)	0.00
	Prob > chibar2	1.0000

Source: Processed data (2021)

Table 5. Lagrange Multiplier Model 2 . Test Results

	Var	SD = sqrt(Var)
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<i>Fscore</i>	0.1390524	0.3728974
<i>e</i>	0.1333033	0.3651072
<i>U</i>	0	0
Test : Var(u) = 0		
	Chibar2 (01)	0.00
	Prob > chibar2	1.0000

Source: Processed data (2021)

Table 5 above shows the value of the lagrange multiplier test in the regression model I presents the value of Prob > chibar2 of 1.0000. Likewise with regression model 2 in table 6, the value presented Prob > chibar2 also shows the number 1.0000. Because both models show a value greater than  $(\alpha) = 0.05$ , then based on the lagrange multiplier test

models 1 and 2 choose the common effect model as the best. The last test that needs to be done is the Hausman test, this test is used to determine the best model with H0 for the random effect model and H1 for the fixed effect model.

Table 7. Hausman Test Results Model 1

Chi2	Pros > Chi2
36.29	0.0000

Source: Processed data (2021)

Table 8. Hausman Test Results Model 2

Chi2	Pros > Chi2
29.29	0.0003

Source: Processed data (2021)

Based on the data presented in table 7, it can be seen that the value of Prob>Chi2 in model 1 is 0.0000. Likewise with regression model 2 in table 8, the value presented Prob>Chi2 also shows the number 1.0000. Because both models show a small value of  $(\alpha) = 0.05$ , then based on the Hausman test models 1 and 2 choose the fixed effect model as the most appropriate model. However, based on consideration of the results of the model test, the researcher chose the random effects model as the appropriate model. The decision is based on the significance value and the best fit data value in this model.

**Classic assumption test**

In the regression model, to find out the error has been normally distributed, it is necessary to test for normality. This is necessary so that the research results become more accurate. If a model is said to be abnormal, then the results are not useful (Ghozali, 2018). This research uses the value of skewness and kurtosis to measure the level of normality of the data used. The condition of a model is said to be normal if the value of the skewness is in the range of -3 to 3 and the maximum kurtosis value is 10.

Table 9. Normality Test Results

<i>Variable</i>	<i>Skewness</i>	<i>Kurtosis</i>
-----------------	-----------------	-----------------

<i>Fscore</i>	-0.5238	5.7245
<i>Change</i>	1.8413	9.5837
<i>Bdout</i>	1.5371	7.0534
<i>Auchange</i>	1.8142	4.2915
<i>Inst</i>	-1.1226	3.0903
<i>change*inst</i>	1.7370	8.8781
<i>Bdout*inst</i>	0.5992	4.9824
<i>Auchange*inst</i>	2.3864	7.0285
<i>Lev</i>	2.1930	9.6271

Source: Processed data (2021)

The normality of the data in this test is set out in table 9. Based on the data presented in the table, it can be concluded that all variables have met the standard of normality.

The next test is the multicollinearity test, multicollinearity is one component of the classical assumption test. In a regression

model, multicollinearity is used to determine whether there is a relationship between the independent variables. The requirements for a model are said to be not affected by multicollinearity if the value of the maximum VIF is 10 and the minimum 1/VIF value is 0.1

Table 9. Multicollinearity Test Results

<i>Variable</i>	<i>Model 1</i>		<i>Model 2</i>	
	<i>VIF</i>	<i>1/VIF</i>	<i>VIF</i>	<i>1/VIF</i>
<i>change</i>	1.10	0.9065	4.74	0.2110
<i>Bdout</i>	2.14	0.4665	7.19	0.1389
<i>Auchange</i>	1.19	0.8394	6.59	0.1517
<i>Inst</i>			6.59	0.1516
<i>change*inst</i>			4.61	0.2168
<i>Bdout*inst</i>			1.44	0.6948
<i>Auchange*inst</i>			6.45	0.1550
<i>Lev</i>	1.85	0.5417	3.27	0.3060
<i>Mean VIF</i>	1.57		5.11	

Source: Processed data (2021)

The multicollinearity of the data in this test is set out in table 10. Based on the data presented in the table, it can be concluded that all variables used are not affected by multicollinearity symptoms.

The third test of the classical assumption is the heteroscedasticity test, heteroscedasticity is a component where the

variance in the error of an observation is not the same as that of other observations. In this research, heteroscedasticity testing was carried out using hettest with the STATA 12 application. There were two hypotheses built in this test, H0 for the t-homoscedasticity model and H1 for the heteroscedasticity model

Table 11. Heteroscedasticity Test Results

	<b>Chi2</b>	<b>Prob</b>
Model 1	164.18	0.0000
Model 2	41.41	0.0000

Source: Processed data (2021)

The results of the heteroscedasticity test in this research are presented in table 11. Based on the data presented in the table, it can

be seen that model 1 and model 2 have a probability value of 0.0000. This value is lower than alpha (0.05), so H1 is accepted and the

model can be said to be affected by heteroscedasticity. Because this research uses a random effect model, the problem of heteroscedasticity can be resolved

The last test of the classical assumption is the autocorrelation test. Autocorrelation is one of the elements that need to be avoided. A model can be said to be affected by autocorrelation if it is found that data linkages

between periods are found. There are 2 hypotheses formed in this test, namely H0 for models affected by autocorrelation, and H1 for models not affected by autocorrelation. The autocorrelation test in this research was carried out using xtserial on the STATA 12 software which is presented as follows:

Table 12. Autocorrelation Test Results

Model	F	F Result	Prob
Model 1	1,127	4,682	0.0323
Model 2	1,127	3,483	0.0643

Source: Processed data (2021)

Based on the data presented in table 12, it can be seen that model 1 has a probability value of 0.0323. This value is lower than alpha (0.05), so H1 is accepted and the model can be said to be affected by autocorrelation. Meanwhile, regression model 2 has a probability value of 0.0643. This value is higher than alpha (0.05), so H0 is accepted and the model can be said to be free of autocorrelation. This research uses a random effect model, for model 1 affected by

autocorrelation can be resolved with General Least Square (GLS).

**Hypothesis testing**

In this study, hypothesis testing was carried out on 2 regression models that had been formed. Model 1 contains equations without moderating interaction variables, while model 2 regression model equations uses moderating interaction variables.

Table 13. Random Effect Model Test Results

Variable	Model 1		Model 2	
	Coefficient	P> z	Coefficient	P> z
Change	0.2153	0.032*	-0.2463	0.205
Bdout	0.0194	0.912	0.1229	0.772
Auchange	0.0078	0.884	0.0708	0.483
Inst	-0.1364	0.047*	-0.0751	0.733
Change*Inst			0.4386	0.039*
Bdout*Inst			-0.1341	0.793
Auchange*Inst			-0.0695	0.612
Leverage	-0.1387	0.000*	-0.2879	0.000*
Cons_	0.0213	0.198	0.1043	0.748
F-Value	26.63		49.26	
Sig.	0.0001		0.0000	
R Square	0.0500		0.0892	
N	512		512	

Note: \* 5% significance level

Source: Processed data (2021)

**Coefficient of Determination Test (R<sup>2</sup>)**

The R2 test was carried out to measure the level of influence that was present between the unit variables, both independent variables,

moderate variables, and control variables on the dependent variable. Based on the values listed in table 13, it can be seen that the R2 value presented in model 1 is 0.0500 or 5.00%.

This shows that the fraud triangle variables, namely financial stability (Achange), ineffective monitoring (Bdout), KAP switching (Auchange), institutional ownership (Inst) and External Pressure (Lev) have the ability to explain fraudulent financial statements (Fscore) of 5,00%.

Table 13 also presents the R<sup>2</sup> value in model 2, which is 0.0892 or 8.92%. This shows that the variables of financial stability, supervisory ineffectiveness, KAP switching, institutional ownership and external pressure, as well as the interaction of financial stability moderation, monitoring ineffectiveness, and KAP switching have the ability to explain financial statement fraud, which is 8.92%.

### T Partial Test

There are 2 hypotheses built in this test, H0 is accepted if P>|z| greater than alpha (a=0.05). On the other hand, H0 will be rejected if the value of P>|z| lower than 5%. If H0 is accepted, then the selected independent variable is unable to interpret the dependent variable so that there is no influence present from the two variables

### Model 1

$$F \text{ Score} = 0,0213 + 0,2153 \text{ ACHANGE} \\ + 0,0194 \text{ BDOUT} \\ + 0,0078 \text{ AUCHANGE} \\ - 0,1364 \text{ INST} \\ - 0,1387984 \text{ LEV} + e$$

### Model 2

$$F \text{ Score} = 0,1043 - 0,2463 \text{ ACHANGE} \\ + 0,1229 \text{ BDOUT} \\ + 0,0708 \text{ AUCHANGE} \\ - 0,0751 \text{ INST} \\ + 0,4386 \text{ ACHANGE} * \text{ INST} \\ - 0,1341 \text{ BDOUT} * \text{ INST} \\ - 0,0695 \text{ AUCHANGE} * \text{ INST} \\ - 0,2879 \text{ LEV} + e$$

### Pressure as a Variable to Detect Fraudulent Financial Statements

Based on the results of hypothesis testing, it can be said that the pressure proxied by changes in assets has an effect on fraudulent financial statements. It can be seen from table 13 which shows a significance value of 0.032 or lower than 5% alpha ( $\alpha = 0.05$ ) so that. Hypothesis 1 is accepted. The coefficient of the variable presented is 0.2153742 indicating the positive direction of the hypothesis. That way, it can be said that the high level of financial stability seen from extreme asset changes can indicate the occurrence of fraudulent financial reporting practices.

This is in line with research Tiffani & Marfuah (2015), Hafizah & Respati (2016), Indarto & Ghozali (2016), Fitri et al. (2019), and Mardianto & Tiono (2019). Several previous studies reveal that the financial stability of a company is an attraction for investors to entrust their funds. Unstable financial conditions in an entity will pressure managers to manipulate financial statements in order to stabilize financial conditions. Managers will manipulate asset values because these accounts are the center of investors' attention to financial statements. Asset values that experience extreme changes, even exceeding 100% in the financial statements, are an indication of financial statement fraud.

In agency theory, shareholders want a stable asset value. That way, managers will feel pressure because of the demands of the owners of capital. Pressure is an incentive for someone to commit fraud. Skousen et al (2009) in Sari & Fitriastuti (2017) stated that economic motives, both incentives and penalties, always appear in companies that commit fraud, such as profit targets, maintaining financial stability, bonus reduction, poor performance evaluation, or even dismissal.

### Opportunities as a Variable to Detect Fraudulent Financial Statements

Based on the results of hypothesis testing, the independent variable Monitoring Ineffectiveness (Bdout) shows a coefficient value of 0.0194038 and a significance value of 0.912 or higher than alpha 5% ( $\alpha = 0.05$ ).

These results indicate that the variable is not significant, so H2 is rejected. So it can be said that ineffective monitoring cannot be indicated as a trigger for financial statement fraud.

This research is in line with research from Indarto & Ghozali (2016), Fajri, (2018), Situngkir & Triyanto (2020), Larasati et al. (2020), and Ramdany et al. (2021). Agency theory states that there is a relationship between the agent and the principal in which each party has a contradictory interest. The difference in interests causes management to need to be monitored so as not to take actions that prioritize their personal interests. One form of monitoring that can be carried out is through an independent board of commissioners. The contribution of the independent board of commissioners is believed to increase the effectiveness of monitoring (Larasati et al., 2020).

Several previous researchers believed that the presence of independent commissioners in the sample companies was only a requirement to comply with OJK regulations number 57 / POJK.04/2017 in an effort to display good governance in the company. The fact is that the independent commissioners do not use their opportunities to carry out the management supervisory function properly so that the independent commissioners cannot control the possibility of fraudulent financial reporting practices by management

### **Rationalization as a Variable to Detect Fraudulent Financial Statements**

In this study, testing was carried out using the Random Effect Model. The result is that the independent variable KAP Change (Achange) shows a coefficient value of 0.0078524, from this value it appears a negative direction where the occurrence of KAP switching can indicate fraudulent financial reporting practices by management. However, this was ruled out by a significance value of  $0.884 > 5\%$  ( $\alpha = 0.05$ ), these results indicate that the variable is not significant. Thus H3 is rejected. So it can be said that the rationalization proxied by the change of KAP cannot be indicated as a trigger for fraudulent

financial statements. This is reinforced by one of the samples of companies that were proven to have cheated on financial statements but did not change the KAP during the period, namely PT Tiga Pilar Sejahtera.

The results of this research are in line with research from Indarto & Ghozali, (2016), Rahma & Suryani (2019), Situngkir & Triyanto (2020), and Ramdany et al., (2021). In the agency theory, management as the agent has the responsibility to fulfill the interests of the owner of capital as the principal. Management as an agent in this relationship has broader information than the principal. The existence of this information asymmetry is feared to be used by management to manipulate financial statements (Scott, 2015). Lou & Wang (2009) considered the KAP change as a strategy the company did to cover up its past fraud. So if the company uses the same KAP in the following year, it is feared that fraud can be detected.

But some previous researchers believed that the change of KAP by the company was not a rationalization attitude carried out by managers to cover up fraudulent financial statement practices. The change in external auditors is more directed to the fulfillment of OJK regulation No. 13 of 2017 regarding the limitation of the period of providing audit services by KAP. In addition, the results of this study were obtained because the sample companies rarely changed KAP until the end of the period.

### **Institutional Ownership Moderates Pressure as a Variable in Detecting Fraudulent Financial Statements**

Based on hypothesis testing conducted with STATA 12, the interaction variable of Financial Stability and Institutional Ownership (Achange\*inst) shows a coefficient value of 0.4286887 and a significance value of 0.039. A significance value lower than the 5% significance level indicates a significant moderating role of ownership, so H4 is accepted. Thus, it can be said that the presence of institutional ownership is able to moderate the relationship between financial stability and financial statement fraud. The coefficient value

shows a positive direction indicating that the presence of institutional ownership can trigger financial statement fraud

The results of this research are in contrast to research from Petta & Tarigan, (2017), they believe that the presence of institutional investors is able to increase oversight of the company's performance. This is certainly considered effective in stabilizing financial conditions so that the practice of fraudulent financial statements can be controlled. In addition, other researchers, namely Dewi & Atiningsih (2019) assume that the decisions of institutional investors will generally carry out stricter monitoring, especially those related to funding. Thus, financial statement fraud can be more overcome

### **Institutional Ownership Moderates Opportunities in Detecting Fraudulent Financial Statements**

Testing the interaction variables of Ineffective Supervision and Institutional Ownership ( $B_{dout} * inst$ ) in this study displays a coefficient value of -0.1341652. This value indicates the direction of the moderating role of institutional ownership which weakens the relationship between supervisory ineffectiveness and institutional ownership. However, a significance value of  $0.793 > 5\%$  ( $\alpha = 0.05$ ) indicates an insignificant interaction variable, so Hypothesis 5 is rejected.

The results of this study are contrary to agency theory where the presence of institutional investors should be able to suppress the difference in information between management and investors. In addition, the presence of institutional investors can maximize monitoring of the company so that good corporate governance can run effectively so that fraudulent practices in the presentation of financial statements can be avoided (Riandani & Rahmawati, 2019). According to Burns et al. (2010), the concentration of ownership by these institutions offsets this effect, indicating that concentrated ownership encourages greater monitoring and reduces incentives for firms to misreport.

The results of this research are in line with research from Pamungkas et al. (2018) which states that the presence of institutional investors has not been able to moderate the company's ineffectiveness against fraudulent financial statements. The reason for this insignificant research result is that the sample companies tend to be owned by investors with fluctuating amounts. The portion of institutional ownership that often changes makes investors unable to control the occurrence of fraudulent financial statements. Thus, institutional ownership is unable to moderate the relationship between supervisory ineffectiveness and institutional ownership

### **Institutional Ownership Moderates Rationalization in Detecting Fraudulent Financial Statements**

In this research, the interaction variable between KAP Substitution and Institutional Ownership ( $A_{uchanges} * inst$ ) shows a coefficient value of -0.0695405. From this value, it can actually show a negative direction where the presence of institutional ownership is able to weaken the relationship between KAP switching and financial reporting fraud. However, the P-value presented in table 13 shows a value of  $0.612 > 5\%$  alpha ( $\alpha = 0.05$ ), the significance value does not support the research assumptions so that the final hypothesis in this study is rejected. Thus, it can be said that the presence of institutional ownership has not been able to moderate the relationship between KAP switching and financial statement fraud.

The above results are in line with research conducted by Diana (2018) which results in an insignificant relationship between institutional ownership. The presence of institutional investors only plays a role in overseeing financial performance, but does not have a role to take part in determining the Public Accounting Firm as an independent auditor. So that this certainly will not have an impact on the practice of fraudulent financial statements. The basis that strengthens the results of this study is that the monitoring and control carried out by institutional ownership does not only focus on KAP switching, but

more comprehensive supervision and control carried out by institutional ownership is associated with fraudulent financial statements.

## CONCLUSION

This research aims to empirically examine financial stability, ineffective supervision, and KAP switching as proxy elements of the fraud triangle for fraudulent financial statements in manufacturing companies listed on the Indonesia Stock Exchange for the 2017-2020 period. Based on the test results in the discussion, it can be concluded: of the three elements of fraud, only the element of pressure which is proxied by financial stability is able to have a significant effect on the practice of fraudulent financial statements. Meanwhile, the other two elements, namely opportunities proxied by less effective supervision and rationalization proxied by KAP switching, do not show a significant effect on the level of financial statement fraud.

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## REFERENCES

- Abbas, A. (2017). Earnings Fraud and Financial Stability. *Asia Pacific Fraud Journal*, 2(1), 117.
- Achmad, T. (2018). Pengaruh Kualitas Audit dan Auditor Switching terhadap Kecurangan Pelaporan Keuangan Kepemilikan Institusional sebagai Variabel Moderating. *Jurnal Akuntansi Dan Bisnis*, 18(2), 110–125.
- Alsinglawi, O., Mahmoud, H., & Saleh, I. (2021). Predicting Fraudulent Financial Statements Using Fraud Detection Models. *Academy of Strategic Management*, 20(3), 1–17.
- Association of Certified Fraud Examiners (ACFE) Indonesia. (2019). Survei Fraud Indonesia 2019. In *Indonesia Chapter #111* (Vol. 53, Issue 9).
- Burns, N., Kedia, S., & Lipson, M. (2010). Institutional Ownership and Monitoring: Evidence from Financial Misreporting. *Journal of Corporate Finance*, 16(4), 443–455.
- Dechow, P. M., Hutton, A. P., Kim, J. H., & Sloan, R. G. (2012). Detecting Earnings Management: A New Approach. *Journal of Accounting Research*, 50(2), 275–334.
- Dewi, S. P. M., & Atiningsih, S. (2019). Peran Struktur Modal dalam Memediasi Pengaruh Strategi Diversifikasi, Kepemilikan Institusional, dan Kebijakan Dividen terhadap Kinerja Keuangan (Studi Empiris pada Perusahaan Industri yang Terdaftar di BEI Tahun 2013 – 2017) The Role of Capital Struc. *Prosiding Mahasiswa Seminar Nasional Unimus*, 2, 488–498.
- Diana. (2018). Faktor-Faktor Yang Mempengaruhi Auditor Switching Pada Perusahaan Non Keuangan. *Jurnal Bisnis Dan Akuntansi*, 20(2), 141–148.
- Eisenhardt, K. M. (1989). Agency Theory: An Assessment and Review. *Academy of Management Review*, 14(1), 57–74.
- Fajri, S. N. (2018). The Effect of Financial Stability, External Pressure, Personal Financial Need, Financial Targets, Ineffective Monitoring and Audit Quality on Detecting Fraud Financial Statement in Perspective of Fraud Triangle. *Jurnal Ilmiah Ekonomi Bisnis*, 23(2), 194–202.
- Fitri, F. A., Syukur, M., & Justisa, G. (2019). Do the Fraud Triangle Components Motivate Fraud in Indonesia? *Australasian Accounting, Business and Finance Journal*, 13(4), 63–72.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 25* (9th ed.). Universitas Diponegoro.
- Hafizah, N., & Respati, N. W. (2016). Faktor-Faktor yang Mempengaruhi Laporan Keuangan Dengan Analisis Fraud Triangle. *Jurnal Reviu Akuntansi*, 6(1), 811–822.
- Hermawati, L., & Murtanto. (2019). The Influence of Fraud Triangle upon the Existence of Financial Statement Fraud. *Indonesian Management and Accounting Research*, 18(02), 155–185.
- Hugo, J. (2019). Efektivitas Model Beneish M-Score dan Model F-Score dalam Mendeteksi Kecurangan Laporan Keuangan. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 3(1), 165.
- Indarto, S. L., & Ghozali, I. (2016). Fraud Diamond: Detection Analysis on the Fraudulent Financial Reporting. *Risk Governance & Control: Financial Markets &*

- Institutions*, 6(4), 116–123.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360.
- Larasati, T., Wijayanti, A., & Maulana, A. (2020). Keahlian Keuangan Komite Audit Dalam Memoderasi Pengaruh Fraud Triangle Terhadap Kecurangan Laporan Keuangan. *Jurnal Syntax Transformation*, 1(8), 541–553.
- Lin, C. C., Chiu, A. A., Huang, S. Y., & Yen, D. C. (2015). Detecting the financial statement fraud: The analysis of the differences between data mining techniques and experts' judgments. *Knowledge-Based Systems*, 89, 459–470.
- Lou, Y.-I., & Wang, M.-L. (2009). Fraud Risk Factor of the Fraud Triangle Assessing the Likelihood of Fraudulent Financial Reporting. *Journal of Business & Economics Research (JBER)*, 7(2), 61–78.
- Mardianto, & Tiono, C. (2019). Analisis Pengaruh Fraud Triangle Dalam Mendeteksi Kecurangan Laporan Keuangan. *Jurnal Benefita*, 4(1), 87–103.
- Pamungkas, I. D., Ghozali, I., & Achmad, T. (2018). A pilot study of corporate governance and accounting fraud: The fraud diamond model. *Journal of Business and Retail Management Research*, 12(2), 253–261.
- Panji, A. (2015, July 20). Palsukan Laporan Keuangan, Toshiba akan Dihukum Pemerintah. *CNN Indonesia*. <https://www.cnnindonesia.com/teknologi/20150720101106-185-67228/palsukan-laporan-keuangan-toshiba-akan-dihukum-pemerintah>
- Petta, B. C., & Tarigan, J. (2017). Pengaruh Kepemilikan Institusional Terhadap Kinerja Keuangan Melalui Struktur Modal Sebagai Variabel Intervening Pada Perusahaan Manufaktur Yang Terdaftar Dalam Bursa Efek Indonesia ( Bei ). *Business Accounting Review*, 5(2), 625–636.
- Rahma W.R, D. V., & Suryani, E. (2019). Pengaruh Faktor-Faktor Fraud Triangle Terhadap Financial Statement Fraud. *Jurnal ASET (Akuntansi Riset)*, 11(2), 301–314.
- Ramdany, Harmenawati, R., & Samukri. (2021). Measuring the Level of Fraud on Financial Statements: Model of Fraud Triangle. *Jurnal Ekobis: Ekonomi, Bisnis & Manajemen*, 11(1), 133–149.
- Riandani, M. A., & Rahmawati, E. (2019). Pengaruh Fraud Pentagon, Kepemilikan Institusional dan Asimetris Informasi Terhadap Kecurangan Laporan Keuangan (Studi Empiris pada Perusahaan Perbankan yang Terdaftar Di Bursa Efek Indonesia Tahun 2015-2017). *Reviu Akuntansi Dan Bisnis Indonesia*, 3(2), 179–189.
- Santiso, C. (2016, October 12). 3 Ways for Institutional Investors to Fight Corruption | World Economic Forum. World Economic Forum. <https://www.weforum.org/agenda/2016/10/3-ways-for-institutional-investors-to-fight-corruption/>
- Sari, D. M., & Fitriastuti, T. (2017). *Dasar Akuntansi : Pemahaman Konsep dan Praktek*. Mulawarman University Press . [http://digilib.umpalopo.ac.id:8080/jspui/bitstream/123456789/78/1/DhinaMustikaSdanTrianaFitriastuti-2017-DasarAkuntansi\\_pemahamankonsepdanpraktek.pdf](http://digilib.umpalopo.ac.id:8080/jspui/bitstream/123456789/78/1/DhinaMustikaSdanTrianaFitriastuti-2017-DasarAkuntansi_pemahamankonsepdanpraktek.pdf)
- Scott, W. R. (2015). *Financial Accounting Theory* (M. Farrell & K. McGill (eds.); 7th ed.). Pearson.
- Situngkir, N. C., & Triyanto, D. N. (2020). Detecting Fraudulent Financial Reporting Using Fraud Score Model and Fraud Pentagon Theory: Empirical Study of Companies Listed in the LQ 45 Index. *The Indonesian Journal of Accounting Research*, 23(3), 373–410.
- Skousen, C. J., Smith, K. R., & Wright, C. J. (2009). Detecting and Predicting Financial Statement Fraud: The Effectiveness of The Fraud Triangle and SAS No. 99. *Corporate Governance and Firm Performance*, 32(3), 250–269.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Tarjo, & Herawati, N. (2015). Application of Beneish M-Score Models and Data Mining to Detect Financial Fraud. *Procedia - Social and Behavioral Sciences*, 211(September), 924–930. <https://doi.org/10.1016/j.sbspro.2015.11.122>
- Tiffani, L., & Marfuah. (2015). Deteksi Financial Statement Fraud dengan Analisis Fraud Triangle pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia. *Jurnal Akuntansi Dan Auditing Indonesia*, 19(2), 112–125.
- Wahyuni, & Budiwitjaksono, G. S. (2017). Fraud Triangle Sebagai Pendeteksi Kecurangan Laporan Keuangan. *Jurnal Akuntansi*, 21(1),



47–61.  
Zureigat, Q. M. (2011). The Effect of Ownership  
Structure on Audit Quality: Evidence from

Jordan. *International Journal of Business and  
Social Science*, 2(10), 38–46.