THE DETECTING FRAUD FINANCIAL STATEMENT ON MINING COMPANIES IN INDONESIA

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Abstrct. Tujuan penelitian ini adalah untuk menguji pengaruh fraud triangle dalam menjelaskan fenomena kecurangan laporan keuangan. Penelitian ini terdiri atas lima (5) variabel yaitu Financial Stability yang diproksikan dengan ACHANGE, External Pressure yang diproksikan dengan Leverage, Nature of Industry yang diproksikan dengan Receivable, Ineffective Monitoring yang diproksikan dengan BDOUT, dan Change in Auditor. Dari hasil analisis regresi logistik didapatkan 22 perusahaan melakukan kecurangan dan 17 perusahaan tidak melakukan kecurangan dari tahun 2018 hingga 2020, dan variabel stabilitas keuangan dan variabel industri kecurangan menunjukkan adanya accounting tampering.Namun variabel tekanan eksternal, pengawasan yang tidak efektif dan pergantian auditor tidak berpengaruh gangguan akuntansi. Hasil ini mendukung teori fraud triangle dalam menjelaskan fenomena financial statement fraud.

Kata Kunci : *Fraud* Triangle, Financial Statement Fraud.

Introduction

Company runs a business with various problems, one of which is problems in its financial statements. Meanwhile, according to Statement of Financial Accounting Concept (SFAC) No. 1, the main element in assessing the performance or accountability of the company's management is profit information so that the company tries to present the financial statements as well as possible so that investors are interested in investing their capital. The decline in company performance is caused by the emergence of several factors including difficulties in competing with other companies so that there are opportunities used by management or internal company employees to commit fraud by manipulating financial statements.

Fraud.is a deliberate act to deceive, deceive and manipulate in ways that are dishonest in taking or eliminating money, property, legal rights belonging to others, either because of an action or a fatal impact (Reskino and Fakhri, 2016). Fraud includes illegal acts that are intentionally carried out, then hidden, and obtain benefits by converting them into cash and/or other valuables. With regard to financial reporting, fraud can be interpreted as an act that is intentionally carried out and results in material misstatements in financial reporting (Generally Accepted Auditing Standard – GAAS, 2006 in Inayati, 2019).

Graph 1. Graph fraud by frequency of occurrence in Asia-Pacific

Source: ACFE Report to The Nations, 2020

Based on the graph above released by ACFE (Association of Certified Fraud Examiners) Report to The Nations 2020 regarding fraud that occurred in Asia Pacific is divided into three types, namely asset abuse misappropriation), corruption (corruption), and (financial statement fraud). In Figure 1.1 it can be concluded that the most common cases in 2020 were the misuse of assets (assets misappropriation) was 74% with the resulting loss of $112,000, corruption (corruption) was 51% with the resulting loss of $239,000, and the lowest percentage was occupied by financial statement fraud of 14% with the resulting loss of $3,000. .000. This figure explains that there are few cases of financial statement fraud , but these cases are very
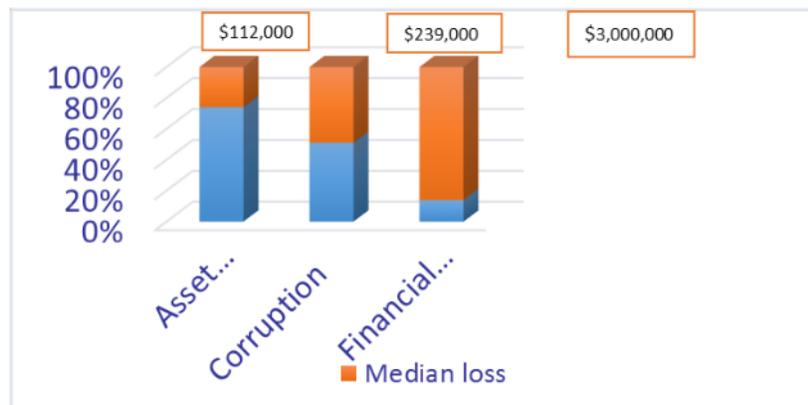
detrimental to the state.

In general, fraud or fraud will always occur when there is no prevention and detection. Therefore, there are several ways to detect fraud, such as the fraud triangle and fraud. In this study (Skousen et al., 2009) found three conditions in the form of a framework to identify factors that influence fraudulent actions, namely pressure , opportunity , and rationalization , known as the fraud triangle. On the other hand, research by Wolfe and Hermanson (2004) adds three conditions found by Cressey (1953) these four conditions are called cheating because of their ability diamonds (Muhammad and Murtanto, 2016).

According to SAS No., there are four types of pressure that can lead to fraud in financial statements. The types of pressure are financial stability, external pressure, personal financial needs, and economic goals. Opportunities that can result from financial statement fraud fall into three categories. The types of opportunities are industry types, ineffective oversight, and organizational structure. Rationalization is the third part of the fraudulent triangle that is difficult to measure (Skousen et al., 2009). In a fraud investigation in the financial statements of Yesiariani and Rahayu (2015), Annisya (2016) and Aprilia (2017), they found that various pressures on one of the proxies seeking financial stability reduced the degree of fraud in the financial statements. I found it to have an impact. However, this is in contrast to the research of Sarpta (2018), Mekasari (2018), Reskino and Anshori (2019) which shows that the variable pressure with one of the financial stability proxies has no effect on the level of fraud in financial statements.

The research of Sihombing and Rahardjo (2014), Aryanti (2017), and Nadia Putri (2019) in their research on fraud in financial statements found that opportunity variable with one of the nature of industry proxies affects the level of fraud in financial statements. Muhammad and Murtanto (2016), Oktarigusta (2017), and Handayani (2018) and Pratanti (2019) in their research on fraud in financial statements Septriani with of . significant to the level of fraud in the financial statements.

Research conducted by Aryanti (2016), Risanti (2018), and Sari (2019) regarding fraud in financial statements found that the rationalization variable has an influence on the level of fraud in financial statements. However, the results of this study are not in line with research (Skousen et al., 2009), Minaryan (2017), and Jessica (2019) regarding fraud in financial statements. They found that the rationalization variable did not have a significant effect on the level of fraud in financial statements. This research uses the mining sector as the research subject. This study aims to determine how financial stability, financial targets, external pressure, nature of industry, ineffective monitoring, change in auditors, change of board of directors on financial statement fraud in mining companies listed on the Indonesia Stock Exchange in 2018-2020.

Literature Review
Theory Agency

A relationship is a contract agreed upon by both parties that allows one or more principals to appoint another person to act on behalf of the principal and allow the agent to make the best decisions for the principal. is. Principals assume that agents can do their best for the benefit of the principal. But in reality, the parties have a relationship designed to maximize their satisfaction, where the principal has no reason to always believe that the agent is acting for his benefit. .. Information imbalances (information asymmetry) often occur in agency relationships where there is a conflict of interest between the principal and the agent, known as a conflict of interest. Conflicts of interest arise from differences in interests, where the individual wants the agent to do what he or she wants to do, while the agent wants to do something to maximize his or her utility. (Sarptra, 2018).

Conflicts of interest put the company on behalf of the company under various pressures to find ways to improve the company's performance so that the principal is valued (rationalized). If management has broad access (skills) and opportunities to increase profits, the door to fraud will be more open. The higher the return on investment (in the form of dividends) generated by the principal, the higher the agent's compensation. (Sihombing & Rahardjo, 2014).

Fraud

It is against the law and contains elements of intent, intent, deception, concealment, and abuse of trust (illegal interests) in the form of money, goods, or other property. (Tuanakotta, 2013: 28).

Theory Fraud Triangle

Figure 1.2
Fraud Triangle
Source: https://www.textmining.nu/

In subsequent developments this hypothesis is better known as the fraud triangle or fraud triangle, as shown in Figure 1.2 above. The first angle of the triangle is called pressure. The corner of both, opportunity. The third angle, rationalization (Tuanakotta, 2018).

The pressure faced by a person to commit fraud can come from within the person or pressure from the environment. Financial pressure, pressure due to bad habits, and pressure from the work environment. In this study, the condition from the point of view of pressure uses the view of financial stability and external pressure.

a) Financial Stability (Financial Stability) is a condition that describes the company's financial condition in an unstable condition. Financial Stability is proxied by the rate of change in the company's total assets (ACCHANGE). ACHANGE can be calculated by the following formula:

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

Description:
Total Assets = Total assets in year i (current year)
Total Assets = Total assets in the year before i

b) External Pressure (External Pressure) is a condition where management experiences excessive pressure to meet the requirements or expectations of third parties. External Pressure can be proxied by Leverage The higher the level of the Leverage, the higher the possibility of fraudulent financial statements (Sari, 2019). Leverage can be calculated by the formula as follows:

$$LEVERAGE = \frac{\text{Total Debt}}{\text{Total Asset}}$$

Opportunity is the second aspect that drives fraud. As quoted from Tuanakota (2010; 211), Cressey argues, there are two components of the perception of this opportunity. First, general information, which is knowledge that a position containing trust is violated without consequences. Second, the technical skills or skills needed to carry out the crime. Skouse et al stated that according to SAS No. 99 there are 3 general conditions that occur in fraudulent acts, namely the nature of industry, ineffective monitoring, and organizational structure. In this study, the nature of industry and ineffective monitoring are used in detecting fraudulent actions from the point of view of opportunity.

a) Nature of Industry, the management will focus on accounts receivable and inventory when committing fraud because accounts receivable require estimation and assessment in determining allowance for losses on receivables. Because in this account there are several methods that management can use to maximize profits. The measurement uses the ratio of changes in accounts receivable. Nature of industry is proxied by RECEIVABLE and can be calculated by formula.

$$RECEIVABLE = \frac{Receivables_t}{Sales_t} - \frac{Receivables_{t-1}}{Sales_{t-1}}$$

Description: Receivables $_t$ = Receivables in year t (current period)
Receivables $_{t-1}$ = Receivables in the period before year t
Sales $_t$ = Sales in year i (current period)
Sales $_{t-1}$ = Sales in the period before i

b) Monitoring Ineffective is a condition when the company does not have an effective supervisory unit in monitoring the company's performance. The role of independent commissioners is very necessary because they can be trusted in increasing the effectiveness of supervision to overcome conflicts of interest that often occur within the company, therefore the more the number of independent commissioners, the more effective the supervision of the company and reduce the level of risk of fraud in the financial statements. Ineffective monitoring is proxied by BDOUT which can be calculated by formula.

$$BDOUT = \frac{Total\ Independent\ Board\ of\ Commissioners}{Total\ Board\ of\ Commissioners}$$

Rationalization is an important element in the occurrence of fraud, where perpetrators seek justification for their actions. The rationalization factor is described by an audit opinion. An audit opinion is an auditor's statement regarding the fairness of the financial statements of the audited entity. According to SPAP (Public Accountant Professional Standards), there are five types of audit opinions, including: Unqualified Opinion, Unqualified Opinion with Explanatory Paragraphs (Modified Unqualified Opinion), Adverse Opinion, and a Disclaimer of Opinion (Septi, 2019). Rationalization in its measurement can use the change in auditor. Change in Auditor shows whether there is an effect of changing or changing external auditors in a company that can be an indication of fraud. Change in Auditor can variable of dummy 1 if there is a change in the external auditor during 2017-2019 and dummy 0 if there is no change in the external auditor during 2017-2019.

Financial Statement Fraud

Financial Statement Fraud is a deliberate misrepresentation or concealment in a number or disclosure in financial statements with the aim of deceiving users of financial statements (Sarpta, 2018). Financial statement fraud can be measured using the fraud score model where this model is the sum of two variables, namely the quality of accruals and financial performance. The following M-Score:

$$MScore = -4.84 + 0.920\,DSRI + 0.528\,GMI + 0.404\,AQI + 0.892\,SGI + 0.115\,DEPI - 0.172\,SGAI$$
$$- 0.327\,LVGI + 4.697\,TATA$$

Where the M-Score uses a dummy as follows:

0 = value Beneish M-Score <-2.22 means that the company is not indicated to commit fraudulent financial reporting or is classified as a non-manipulator.

1 = Beneish M-Score > -2.22 means that the company is indicated to have committed fraudulent financial reporting or is classified as a manipulator.

M-Score can be measured using the financial ratio as follows:

$$Days\ Sales\ in\ Receivable\ Index = \frac{(Account\ Receivable_t/Sales_t)}{(Account\ Receivable_{t-1}/Sales_{t-1})}$$

The Days Sales in Receivable Index is used to measure whether income and receivables are in balance for two consecutive years.

$$Gross\ Margin\ Index = \frac{[(Sales_{t-1} - COGS_{t-1}/Sales_{t-1})]}{[(Sales_t - COGS_t)Sales_t]}$$

Gross Margin Index is used to compare gross profit in year t and in the previous year (t-1).

$$Asset\ Quality\ Index = \frac{[(1 - (Current\ Asset_t + PPE_t)/Total\ Asset_t]}{[(1 - (Current\ Asset_{t-1} + PPE_{t-1})/Total\ Asset_{t-1})]}$$

Asset Quality Index is used to comparing non-current assets other than fixed assets with the company's total assets in year (t) and the previous year.

$$Sales\ Growth\ Index = \frac{Sales_t}{Sales_{t-1}}$$

Sales Growth Index is used to compare sales in two periods. If SGI < 1 then there is a significant increase in sales. means the possibility of overstatement in earnings

$$Depreciation\ Index = \frac{[Depreciation_{t-1}/(PPE_{t-1} + Depreciation_{t-1})]}{[Depreciation_t/(PPE_t + Depreciation_t)]}$$

Depreciation Index is used to compare depreciation expense on fixed assets before depreciation between periods

$$\text{Sales General and Administrative Expenses Index} = \frac{\text{SG\&A Expenses}_t/\text{Sales}_t}{\text{SG\&A Expenses}_{t-1}/\text{Sales}_{t-1}}$$

Sales General and Administrative Expenses Index is used to compare the selling, administrative and general expenses of sales between two period.

$$\text{Leverage Index} = \frac{[(\text{Current Liabilities}_t + \text{Long Term Debt}_t)/\text{Total Assets}_t]}{[(\text{Current Liabilities}_{t-1} + \text{Long Term Debt}_{t-1})/\text{Total Assets}_{t-1}]}$$

Leverage Index is used to measure the ratio of the level of debt owned by the company to total assets from year to year.

$$\text{Total Accruals to Total Assets} = \frac{(\text{Net Income From Continuing Operations}_t + \text{Cash Flow Operation}_t)}{\text{Total Assets}_t}$$

Total Accruals to Total Assets is used to measure the ratio of total accruals to total assets. Where total accruals are calculated as changes in working capital accounts other than cash and tax receivables minus depreciation.

Research Framework The

Design of the framework aims to make it easier to understand the concept of research and the direction of the relationship of the independent variable to the dependent variable. This study uses five independent variables and one dependent variable. The theoretical framework used in this study shows a description of the independent proxy variables, namely financial stability, external pressure, nature of industry, ineffective monitoring, change in auditors. Affecting the dependent variable, namely financial statement fraud. The theoretical framework that can be formed is as seen below:
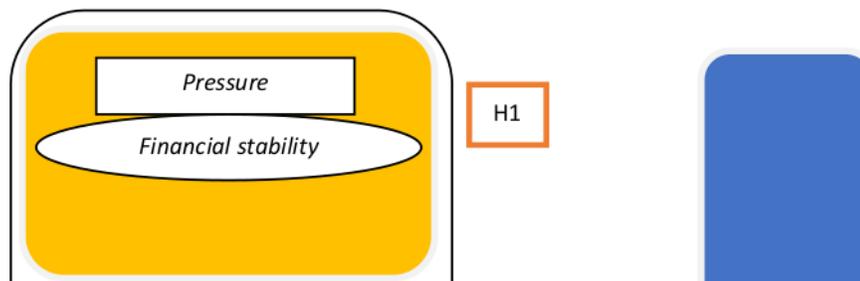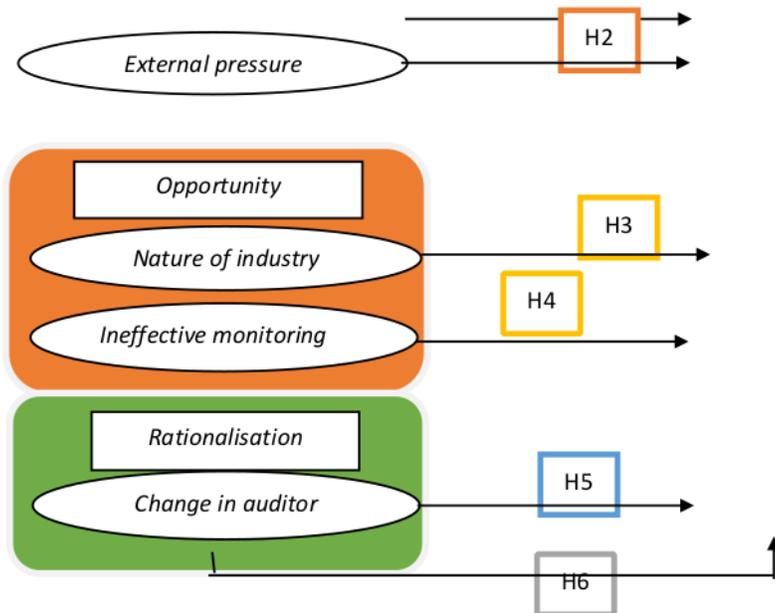
Method

The subject of this survey is the financial statements of mining sector companies listed on the Indonesia Stock Exchange from 2018 to 2020. The subject of this survey was listed on the Indonesia Stock Exchange, issued financial reports for the 2018-2020 fiscal year, and obtained a soft copy of the issuer's financial statements from the Indonesia Stock Exchange www.idx.co. All mining sector companies. id and each website. society. The sampling method used in this study is the target sampling method. The sample of this survey is 13 mining sector companies listed on the Indonesia Stock Exchange from 2018 to 2020. The nature of the data obtained from this study is quantitative. The data source for this study consists of secondary data.

The data analysis technique used in this study is a quantitative analysis technique using logistic regression analysis with the help of SPSS version 20. The data processing techniques used in this study include descriptive statistics, overall model fit, goodness fit model, the accuracy of the regression model, the logistic regression model formed, and the coefficient of determination, partial and simultaneous hypothesis testing.

The dependent variable of this study is the fraud financial statement. While the independent variables in this study are financial stability (ACHANGE), external pressure (LEVERAGE), nature of industry (RECEIVABLE), ineffective monitoring (BDOUT), change in auditor (AUDCHANGE).

Result and Discussion
Assessing the Feasibility of the Regression Model (Goodness of Fit)

This test can be seen in the significant value in the Hosmer and Lemeshow Goodness of Fit Test where the model is said to be able to predict the observation value if the statistical value on the Hosmer and Lemeshow Test <0.05. The results of the Hosmer and Lemeshow Goodness of Fit Test from this study are as follows:

Hosmer and Lemeshow Test

Ste p	Chi-square	df	Sig.
1	12,498	8	,130

Source: SPSS Output Version 20.0, 2022

Based on the table above, it shows that the statistical value of the Hosmer and Lemeshow Test is 12,498 with a significant profitability value of 0.130. Thus, the statistical value of Hosmer and Lemeshow Test 0.130 > 0.05, the profitability value, so it can be concluded that H_0 is accepted, which means that the regression model shows no difference between the logistic regression estimation data and the logistic regression observation data.

Assessing the Accuracy of the Regression Model

In assessing the accuracy of the regression model, it can be described by a classification table that shows the predictive power of the regression model to predict the dependent variable as follows:

Classification Table[a,b]

Observed			Predicted		
			MSCORE		Percentage Correct
			Non Manipulator	Manipulator	
Step 0	MSCORE	Non manipulator	0	17	,0
		Manipulator	0	22	100.0
	Overall Percentage				56.4

Source: SPSS Output Version 20.0, 2022

From the results shown in the table above, the percentage for the prediction accuracy of the overall regression model is 56.4%.

Assessing the Overall Model

In this study in assessing the overall model, we can use the value of Log Likehood and Cox and Snell's R Square. The results of the -2LL test are as follows:

Iteration History[a,b,c]

Iteration		-2 Log likelihood	Coefficients
			Constant
Step 0	1	53,423	,256
	2	53,423	,258
	3	53,423	,258

Source: SPSS Output Version 20.0, 2022

The table above is the -2LL table at the beginning (Block Number = 0) which only includes constants, showing the value 53.423. After entering the independent variables into the model, the final -2LL table shows the following results:

Iteration History[a,b,c,d]

Iteration		-2 Log likelihood	Coefficients					
			Constant	X1	X2	X3	X4	X5
Step 1	1	36,843	2,889	-7,461	1,976	-,846	-8,266	,575
	2	34,682	3,307	-11,242	3,629	-1,175	-10,609	,596
	3	34,449	3,419	-13,016	4,377	-1,307	-11,433	,580
	4	34,444	3,433	-13,318	4,489	-1,328	-11,540	,576
	5	34,444	3,433	-13,325	4,492	-1,328	-11,542	,576
	6	34,444	3,433	-13,325	4,492	-1,328	-11,542	,576

Source: SPSS Output Version 20.0, 2022

The table above is a table of -2LL at the end (Block Number =1). After entering the independent variable into the research model, the value shown is 34,444 then the value of -2LL has decreased by 18,978 (53.423-34,444). This shows that the regression model is said to be feasible or in other words the hypothesized model fits the data or the results can be verified through the following table:

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	18,978	5	,002
	Block	18,978	5	,002
	Model	18,978	5	,002

Source: SPSS Output Version 20.0, 2022

Based on the Square value of 18.978 table shows the Chi-with a significance value of 0.002 With a significance value of 0.002, it can also prove that the value is <0.05 which indicates that the overall regression model is declared feasible.

Logistics Regression Model Formed

The dependent variable in this logistic regression model is the probability of the company's decision to practice financial statement fraud. The results of hypothesis testing from this study can be explained in the following table:

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	X1	-13,325	4,712	7,997	1	,005	,000	,000	,017
	X2	4,492	2,995	2,249	1	,134	89,267	,252	31649,904
	X3	-1,328	,558	5,656	1	,017	,265	,089	,792

		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
	X4	-11,542	6,691	2,976	1	,085	,000	,000	4,816
	X5	,576	1,181	,238	1	,626	1,778	,176	17,991
	Constant	3,433	2,584	1,766	1	,184	30,971		

Source: SPSS Output Version 20.0, 2022

The test results on the logistic regression coefficients produce the following regression models:

FRAUD = 3.433 – 13,325 ACHANGE + 4.492 LEVERAGE – 1.328 RECEIVABLE –11,542 BDOUT + 0.576 AUDCHANGE + e

Coefficient of Determination

The output results of the coefficient of determination can be described in the following table:

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	34,444[a]	,385	,517

Source: SPSS Output Version 20.0, 2022

Based on the table above, it can be concluded that the results of the logistic regression analysis as a whole show the Cox & Snell R Square of 0.385 or 38,5%. The Nagelkerke R Square in this study was 0.517 or 51.7%.

Partial Hypothesis Testing The

following is a summary of the Variable of Equation output regarding the partial effect of the independent variable on the dependent variable:

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	X1	-13,325	4,712	7,997	1	,005	,000	,000	,017
	X2	4,492	2,995	2,249	1	,134	89,267	,252	31649,904
	X3	-1,328	,558	5,656	1	,017	,265	,089	,792
	X4	-11,542	6,691	2,976	1	,085	,000	,000	4,816
	X5	,576	1,181	,238	1	,626	1,778	,176	17,991
	Constant	3,433	2,584	1,766	1	,184	30,971		

Source: SPSS Output Version 20.0, 2022

Based on the output results in the table above, it can be concluded that financial stability has a negative effect on financial statement fraud, external pressure has no effect on financial statement fraud, nature of industry has a negative effect on financial statement fraud, ineffective monitoring has no effect on financial statement fraud, and change in auditors does not affect the financial statement fraud.

Simultaneous Hypothesis Testing

Following is a summary of the output regarding the simultaneous effect of independent variables on the dependent variable:

Omnibus Tests of Model Coefficients				
		Chi-square	df	Sig.
	Step	18,978	5	,002
Step 1	Block	18,978	5	,002
	Model	18,978	5	,002

Source: SPSS Output Version 20.0, 2022

it can be concluded that the significance value is $0.002 < 0.05$, this means that H_0 rejected and H_1 accepted. So it can be concluded that financial stability, external pressure, nature of industry, infective monitoring, change in auditors have a simultaneous effect on financial statement fraud.

Conclusion (C) and Recommendation (S)

In this study it can be concluded that:
1. Partially financial stability has a negative effect on financial statement fraud,
2. Partially external pressure has no effect on financial statement fraud,
3. Partially nature of industry has a negative effect on financial statement fraud,
4. Partially infective monitoring does not effect on financial statement fraud,
5. Partially change in auditor has no effect on financial statement fraud.
6. Variables financial stability, external pressure, nature of industry, infective monitoring, change in auditor have a simultaneous effect on financial statement fraud.

Users of financial statements should pay attention to financial stability and nature of the industry as a fraud detector in financial statements, because these ratios have been proven to be used as indicators of financial statement fraud in this study. Future researchers are expected to be able to increase the time period of the financial statements under study and add to the research sector so that it is not limited to only one sector and the results obtained are able to reflect the actual conditions and be able to use other variables to analyze fraud in financial statements.

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