INTERNATIONAL JOURNAL OF CREATIVE RESEARCH AND STUDIES

www.ijcrs.org ISSN-0249-4655

The Effect of Opportunity, Lack of Integrity, and Business Complexity on Fraudulent Financial Reporting

Sriwati & Etty Murwaningsari

Trisakti University, Indonesia

Harvono Umar

Perbanas Institute, Indonesia

Abstract

This research objective is to obtain empirical proof regarding the effect of opportunity, lack of integrity, and business complexity on fraudulent financial reporting (FFR). This research employs analysis of panel data regression as a data analysis technique. A total of 635 samples were employed in this study consisting of 127 manufacturing corporates registered on the IDX (Indonesia Stock Exchange) from 2015 until 2019. The research findings indicate that opportunity does not have a positive effect on FFR, lack of integrity has a positive effect on FFR, business complexity has a positive effect on FFR. The findings for the control variables show that in this study, debt to equity ratio (DER), capital turnover, and return on assets (ROA) have an effect on FFR. While the control variables of firm size and profitability have no effect on FFR.

Keywords: Lack of Integrity, Opportunity, Business Complexity, Fraudulent Financial Reporting

INTRODUCTION

Financial statements are a form of delivering information about the company to all stakeholders of financial statements. The condition of the corporate and the overall financial condition of the corporate can be described in the corporate's financial statements so that financial statements are often used as a basis for decision making by investors who are interested in the company (Pradhana & Murwaningsari, 2014). Therefore, integrity is needed in reporting financial statements. Financial reports with integrity are financial statements that present information correctly and honestly (Mayangsari, 2003).

Every user of financial statements certainly expects the company's financial statements to have integrity. However, there are several cases related to financial statements which show that there is still fraud contained in it, even though the financial statements have been audited. According to Wells (2011), opportunity is one of the factors that can trigger fraud. Cases of fraudulent financial reporting that continue to occur indicate that there is still an opportunity to perform frauds on the company's financial statements. Opportunities have an effect on

the possibility of fraudulent financial reporting (FFR) is the research finding conducted by Lou & Wang (2009). In addition, Christian et al. (2019a) also found that corporate fraud is affected by opportunity.

The corporate's financial statements are designed to help investors assess the corporate's management performance, the corporate's possibility to earn a profit, and predict future cash flows (Choi & Meek, 2011). There is a tendency that companies always want the condition of the company to look good and healthy so that it can attract investors. Therefore, management may manipulate the information in its financial statements to make the company look healthy. Management that manipulates the information contained in the financial reports shows that management lacks integrity. The results of study conducted by Umar & Br. Purba (2020) found that lack of integrity has a positive effect on fraudulence.

The economy of a country that continues to develop will also have an impact on corporation in that country. The corporation will get bigger and of course will try to expand its business to other business segments or to other countries. With the expansion of business to other business segments and countries, it will have an impact on increasing business complexity and on differences in accounting standards used. In the case of Enron, company management and accountants made various complex transactions to suit the desired accounting treatment (Crawford & Weirich, 2011). In addition, Aryati & Walansendouw (2013) also stated that companies that have many business segments will have a more complex structure than companies that only operate in one business segment.

Based on what has been described previously, it can be concluded that opportunity, lack of integrity, and business complexity are element that can trigger FFR. Therefore, the focus of this paper was to find out the effect of opportunity, lack of integrity, and business complexity on FFR. In this study there are also control variables, namely debt to equity ratio (DER), firm size, capital turnover, profitability, and return on assets (ROA). The research findings done by Zainudin & Hashim (2016), found that profitability has an effect on FFR. The research findings conducted by Roden et al. (2016) and Lou & Wang (2009), found that firm size has an effect on FFR. The results of research done by Omoye & Eragbhe (2014), Zainudin & Hashim (2016), and Dalnial et al. (2014), shows that the DER has an effect on FFR. The research findings conducted by Zainudin & Hashim (2016) and Murtanto & Sandra (2019), found that capital turnover has an effect on FFR. The results of research done by Murtanto & Sandra (2019) and Omoye & Eragbhe (2014), show that ROA has an effect on FFR.

LITERATURE REVIEW AND HYPOTHESES

Theory of Agency

Agency theory is used for explain the contractual relationship between agent and principal (Jensen & Meckling, 1976). The agent gains the trust of the principal to carry out the company's management activities. In general, agents who have more in-depth information about the company in its implementation can freely carry out various ways so that the information and financial reports provided to the principal show good results. This causes information asymmetry to arise. This condition can lead to fraud in the financial statements. The financial reports made should reflect the actual state of the company and do not contain misleading information. When companies have opportunities, lack of integrity, and have complex businesses, there is a tendency for companies to commit fraudulent financial reporting.

Signaling Theory

Akerlof (1970) argues that in the business world it is very difficult to differentiate between good and bad quality due to information asymmetry between buyers and sellers. Based on the opinion of Akerlof (1970) it can be generalized that a company will give a sign on the condition of its corporate to the public. This sign will be used by interested parties to make decisions. Complex companies can be a signal of the possibility of things being covered up in the corporate's financial statements so that the chance of FFR will get higher.

Opportunity and Fraudulent Financial Reporting

When someone has information that he and his position is a trusted position and no one will check, then that trust can be violated (Wells, 2011). Opportunity is one of a elements which trigger fraud, in addition of pressure and rationalization (Wells, 2011). Opportunity can be defined as a factor causing fraud due to low supervision in the corporate environment and the abuse of power (Fuad et al., 2020).

Management as those who manage the company had the opportunity to commit fraudulent financial statements. Financial statement fraud is carried out as an effort to make the corporate look better than it actually is. The higher the opportunity that management has, the higher the possibility of fraudulent financial reports. Research done by Lou & Wang (2009) shows that opportunity affects the possibility of fraudulent financial reports. The research findings done by Christian et al. (2019a), found that opportunity has a positive effect on corporate fraudulence. Yusof K. et al. (2015) found that opportunity is a risk factor for fraud in public companies in Malaysia. Hidajat (2020) found that opportunity is the biggest factor for fraud. In accordance on what has been described previously, the proposed hypothesis is:

 H_1 : Opportunity has a positive effect on FFR.

Lack of Integrity and Fraudulent Financial Reporting

Steve Albrecht, Keith Howe, and Marshall Romney developed a fraud scale, whose components consist of situational pressures, opportunities to commit and cover up fraud, and personal integrity (Wells, 2011). If opportunity is high and situational pressure is high, but on the other hand personal integrity is low, then the possibility of fraud is higher. Thus, integrity is a factor that can lessen the occurrence of fraudulent financial statements.

Earlier studies that examined fraudulent financial reporting discussed the effects of rationalization, pressure, opportunity, capability, arrogance, and collusion on financial statement fraud (Lou & Wang (2009); Christian et al. (2019a); Christian et al. (2019b); Sari & Nugroho (2020)). However, only a few have investigated the effect of a lack of integrity on fraudulent financial reporting. Many anti-fraud professionals believe that a lack of conscience to overcome temptation can lead to fraud (Wells, 2011). The occurrence of fraud can be caused because the perpetrators of fraud lose the main grip in thinking and behaving (Umar, 2016). The lack of management integrity in the making of financial statements will result in higher fraud in financial statements. Nasir et al. (2018) discover that companies that commit fraudulent financial statements perform real earnings management. The research findings done by Siahaan et al. (2019), found that integrity has a significant negative effect on fraudulence. In addition, research conducted by Umar & Br. Purba (2020) also shows that lack of integrity had a positive effect on fraudulence. In accordance on what has been described previously, the proposed hypothesis is:

*H*₂: Lack of integrity has a positive effect on FFR.

Business Complexity and Fraudulent Financial Reporting

Companies that have many business segments will have an impact on a more complex corporate structure (Aryati & Walansendouw, 2013). Companies that are increasingly complex can make it hard for users of financial reports to comprehend the information contained in it so that companies can use them to fulfill their own interests. According to Aryati & Walansendouw (2013), companies that expand their business to other business segments or other countries are more possible to perform earnings management since the level of company transparency has decreased due to translation and consolidation. Therefore, companies that are more complex will have the possibility to manipulate earnings higher than companies that are not complex. Indriastuti & Ifada (2011) find that business complexity had a positive effect on fraudulence. In accordance on what has been described previously, the proposed hypothesis is:

 H_3 : Business complexity has a positive effect on FFR.

RESEARCH FRAMEWORK

In accordance on the theory of research and previous research that has been described previously, it can be deduced that opportunity had a positive effect on FFR, lack of integrity had a positive effect on FFR, and business complexity had a positive effect on FFR. The control variables in this paper are firm size, capital turnover, DER, profitability, and ROA. The conceptual framework that can be made from the description above is as follows:

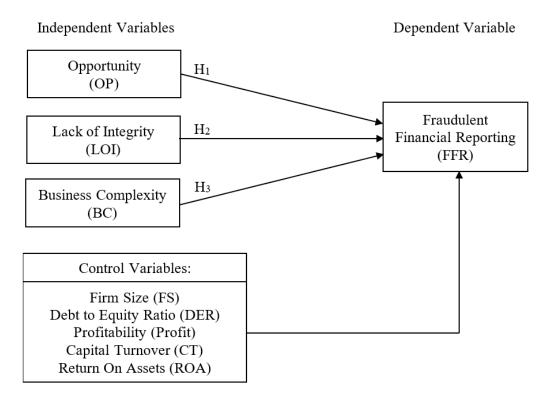


Figure 1. Conceptual Framework

RESEARCH METHODOLOGY

Population and Sample Selection Technique

The population used in this paper is manufacturing corporate registered on the IDX. The sampling in this paper was carried out by purposive sampling. The criteria employed in sampling in this paper were manufacturing corporate registered on the IDX since 2015, having a fiscal year ending on December 31, and having complete data according to the variables needed from 2015 to 2019. The results of the selection of research samples, based on the sampling criteria, obtained 127 companies that were used as samples. The observation period in this study is 2015-2019 which includes 5 observation periods. Thus the number of observational data contained in this study was 635 observational data.

Variable Measurement

The dependent variable used is FFR. The independent variables used are opportunity, lack of integrity, and business complexity. Control variables in this study are capital turnover, firm size, DER, profitability, and ROA.

The FFR variable will be measured using ratios that are expected to indicate fraudulence in the company's financial statements, as used by Beneish et al. (2013). The ratios used are as follows:

DSR = Days' sales in receivable, which is calculated by: (Receivables_t/Sales_t) divided by (Receivables_{t-1}/Sales_{t-1}) **GMI** = Gross margin index, which is calculated by: Gross Margint-1 divided by Gross Margint AQI = Asset quality index, which is calculated by: [1-(Property Plant Equipment_t+Current Assets_t)/Total Assets_t] divided by [1–(Property Plant Equipment_{t-1}+Current Assets_{t-1})/Total Assets_{t-1}] SGI = Sales growth index, which is calculated by: Salest divided by Salest-1 DEPI = Depreciation index, which is calculated by: Depreciation rate_{t-1} divided by Depreciation rate_t **SGAI** = Sales, general, and administrative (SGA) index, which is calculated by: (SGA_t/Sales_t) divided by (SGA_{t-1}/Sales_{t-1}) Accruals = (Income before extraordinary items-cash from operations) divided by total assets LEVI = Leverage index, which is calculated by: Leveraget divided by Leveraget-1

After calculating all the ratios, the calculation results will be entered into the following calculation:

```
M-Score = -4.84+0,920*(DSR)+0,528*(GMI)+0,404*(AQI)+0,892*(SGI)
+0,115*(DEPI)-0,172*(SGAI)+4,679*(Accruals)-0,327*(LEVI)
```

The opportunity variable in this study will be measured using the formula used by Murtanto & Sandra (2019) as follows:

In this paper, the results of these calculations will be multiplied by the number -1 so that the measurement of the opportunity variable can indicate the possibility of an opportunity to commit fraud.

The variable of lack of integrity in this study will be measured using real earnings management (REM). REM will be measured by abnormal operating cash flows, abnormal discretionary costs, and also abnormal production costs using the formulas as employed by Roychowdhury (2006) as follows:

```
\begin{split} & CFO_t/A_{t-1} = \alpha_0 + \alpha_1 * (1/A_{t-1}) + \beta_1 * (S_t/A_{t-1}) + \beta_2 * (\Delta S_t/A_{t-1}) + \epsilon_t \\ & DISEXP_t/A_{t-1} = \alpha_0 + \alpha_1 * (1/A_{t-1}) + \beta_1 * (S_{t-1}/A_{t-1}) + \epsilon_t \\ & PROD_t/A_{t-1} = \alpha_0 + \alpha_1 * (1/A_{t-1}) + \beta_1 * (S_t/A_{t-1}) + \beta_2 * (\Delta S_t/A_{t-1}) + \beta_3 * (\Delta S_{t-1}/A_{t-1}) + \epsilon_t \end{split}
```

Where CFO is cash flow from operation; DISEXP is R&D expenses plus advertising expenses and also SGA expenses; PROD is COGS plus changes in inventory; At-1 is total asset in period t-1; St is sale during period t; St-1 is sale during period t-1; Δ St is the current year's sale minus the previous year's sale; and Δ St-1 is the sale of year t-1 minus the sale of the previous year. The abnormal value is obtained from the result of subtraction between the actual value and the calculation results from the above equation. In this study, the measure of the lack of integrity variable is the sum of the abnormal values of the three equations above. According to Istianingsih (2016), so that the three equations have the same direction, the abnormal value of CFO and abnormal value of DISEXP will be multiplied by minus one (-1) first before being added to the abnormal value of PROD.

The measurement of the business complexity variable in this study will be measured using the Herfindahl Index. According to Aryati & Walansendouw (2013), the Herfindahl Index can be calculated by the following formula:

$HERF_{it} = \Sigma (SSale/Sales)^2$

Descriptions:

HERF_{it} = income based on Herfindahl Index

SSale = sales of each company segment

Sales = company's total sales

In this study, the results of these calculations will be multiplied by the number -1 so that the measurement of the business complexity variable can indicate the possibility of committing fraud.

The firm size variable will be calculated by using the ln of total assets, as used by Murwaningsari et al. (2015). The debt to equity ratio variable in this study will be measured using a formula like that used by Zainudin & Hashim (2016) which is calculated by dividing total debt by total equity. The capital turnover variable in this study will be measured using a formula like that used by Zainudin & Hashim (2016) which can be calculated by dividing revenue by total assets. The profitability variable in this study will be measured using a formula like that used by Zainudin & Hashim (2016) which can be calculated by dividing net profit by revenue. The return on assets variable in this study will be measured using a formula like that used by Murtanto & Sandra (2019) which can be calculated by dividing income before tax with average total assets.

Method of Data Analysis

Panel data regression analysis for multiple regression models is employed as a data analysis technique using a statistical data processing program, namely EViews. The multiple regression research model is as follows:

$$FFR_{it} = \alpha + \beta_1 OP_{it} + \beta_2 LOI_{it} + \beta_3 CB_{it} + \beta_4 FS_{it} + \beta_5 DER_{it} + \beta_6 Profit_{it} + \beta_7 CT_{it} + \beta_8 ROA_{it} + \epsilon_{it}$$

Where, FFR stands for fraudulent financial reporting; OP stands for opportunity; LOI stands for lack of integrity; CB stands for business complexity; FS stands for firm size; DER stands for debt to equity ratio; Profit stands for profitability; CT stands for capital turnover; and ROA stands for return on assets.

FINDINGS AND DISCUSSIONS

Descriptive Statistics

The descriptive statistics result of this paper are presented in Table 1 below:

Variable Maximum Standard Deviation Minimum Mean FFR -12.48847 13.13882 -2.247776 1.713128 OP 0.115399 -0.166667 -0.411118 -1 LOI -1.841324 1.302186 -9.10E-16 0.379323 CB -1 -0.191166 -0.696634 0.250550 FS 89,327,328,853 351,958,000,000,000 10,995,466,625,161.3 31,357,489,570,544.99 DER -10.18817 786.9311 2.934486 32.14753 **PROFIT** -5.800951 4.260516 0.025149 0.335874 CT0.702994 0.021874 8.429333 1.008417 ROA -0.350619 0.743982 0.061459 0.118466

Table 1. Descriptive Statistics

Descriptions:

FFR = Fraudulent Financial Reporting; OP = Opportunity; LOI = Lack of Integrity; CB = Business Complexity; FS = Firm Size; DER = Debt to equity ratio; Profit = Profitability; CT = Capital Turnover; ROA = Return on Assets

Source: Data processing

The fraudulent financial reporting (FFR) variable has a lowest value of -12,48847 and a highest value of 13,13882, this shows that fraudulent financial reporting during 2015 to 2019 ranged from -12,48847 to 13,13882. The average fraudulent financial reporting during 2015 to 2019 was -2.247776. The standard deviation of fraudulent financial reporting during 2015 to 2019 is 1.713128. The average financial reporting fraud is at -2.247776, meaning that on average the data used in this study is in the category of companies suspected of not committing FFR. This is because according to Beneish et al. (2013) a company is suspected of being a company that commits fraud if it has an M-Score value greater than -1.78.

The opportunity variable has a lowest value of -1 and a highest value of -0.166667, this shows that the opportunities during 2015 to 2019 range from -1 to -0.166667, which means that in this study there are companies that have the opportunity to commit FFR and also companies that have a small opportunity to commit FFR. The average opportunity during 2015 to 2019 is -0.411118. The standard deviation of opportunity during 2015 to 2019 is 0.115399.

The variable lack of integrity has a highest value of 1.302186 and a lowest value of -1.841324, this shows that the lack of integrity during 2015 to 2019 ranges from -1.841324 to 1.302186. The average lack of integrity during 2015 to 2019 was -9.10E-16. The standard deviation of the lack of integrity during 2015 to 2019 is 0.379323.

The business complexity variable has a lowest value of -1 and a highest value of -0.191166, this shows that business complexity during 2015 to 2019 ranges from -1 to -0.191166. The average business complexity during 2015 to 2019 is -0.696634. The standard deviation of business complexity from 2015 to 2019 is 0.250550. In general, the manufacturing companies in this study are quite complex companies.

The firm size variable has a lowest value of 89,327,328,853 and a highest value of 351,958,000,000,000,000, this shows that the firm size during 2015 to 2019 ranges from 89,327,328,853 to 351,958,000,000,000. The average firm size during 2015 to 2019 was 10,995,466,625,161.3. The standard deviation of firm size during 2015 to 2019 is 31,357,489.570,544.99. The bigger the total value of the corporate's assets, the bigger the corporate size. On average, the manufacturing companies in this study are classified as large companies.

The variable debt to equity ratio (DER) has a lowest value of -10.18817 and a highest value of 786.9311, this shows that the DER during 2015 to 2019 ranges from -10.18817 to 786.9311. The average DER during 2015 to 2019 was 2.934486. The standard deviation of the DER for 2015 to 2019 is 32,14753. In general, the companies in this study are companies that use debt to help their business activities.

The profitability variable has a lowest value of -5.800951 and a highest value of 4.260516, this shows that profitability during 2015 to 2019 ranges from -5.800951 to 4.260516. The average profitability during 2015 to 2019 was 0.025149. The standard deviation of profitability for 2015 to 2019 is 0.335874. There are corporates in this study that earn profits and there are corporates that experience losses. On average, the corporates in this study still earn a profit.

The capital turnover variable has a highest value of 8.429333 and a lowest value of 0.021874, this shows that capital turnover during 2015 to 2019 ranged from 0.021874 to 8.429333, which means that the companies sampled in this study have high capital turnover and there are also companies that have low capital turnover. The average capital turnover during 2015 to 2019 was 1.008417. The standard deviation of capital turnover during 2015 to 2019 is 0.702994.

The return on assets control variable has a highest value of 0.743982 and a lowest value of -0.350619, this shows that the return on assets during 2015 to 2019 ranged from -0.350619 to 0.743982. The average return on assets during 2015 to 2019 was 0.061459. The standard deviation of return on assets during 2015 to 2019 is 0.118466. Corporates that are sampled in this study are companies that earn profits and there are also companies that experience losses. On average, the companies in this study still earn a profit.

Hypothesis Testing

Before testing the hypothesis, the research model will first be tested to determine the appropriate research model. The research model test results are shown in Table 2.

Table 2. Research Model Test Results

Test	Results	Conclusion	
Chow test	Prob. = 0.0158	Fixed Effect Model	
Hausman test	Prob. = 0.0500	Fixed Effect Model	
Lagrange Multiplier test	Prob. = 0.1462	Common Effect Model	

Source: Data processing

The fixed effect model is the research model employed in this study in accordance on the conclusion shown in Table 2. The results of hypothesis testing using the fixed effect model for the multiple regression model in this paper are shown in Table 3.

Table 3. Hypothesis Testing Results

$FFR_{it} = \alpha + \beta_1 OP_{it} + \beta_2 LOI_{it} + \beta_3 CB_{it} + \beta_4 FS_{it} + \beta_5 DER_{it} + \beta_6 Profit_{it} + \beta_7 CT_{it} + \beta_8 ROA_{it} + \epsilon_{it}$					
Variable	Hypothesis	Predi	ction	Coefficient	Prob.
С		+/-		-17.27593	0.0896*
OP	H_1	+		-1.700989	0.0460**
LOI	H_2	+		2.050349	0.0001***
CB	H ₃	+	•	1.715374	0.0285**
FS				0.512360	0.1377
DER				-0.004491	0.0485**
PROFIT				0.298215	0.2498
CT				0.626389	0.0894*
ROA				3.834140	0.0027***
Adjusted R-squared			0.10473	2	
Prob(F-statistic)			0.000394***		

Descriptions:

FFR = Fraudulent Financial Reporting; OP = Opportunity; LOI = Lack of Integrity; CB = Business Complexity; FS = Firm Size; DER = Debt to equity ratio; Profit = Profitability; CT = Capital Turnover; ROA = Return on Assets

Source: Data processing

The Prob(F-statistic) value in Table 3 is 0.000394 which is smaller than 0.01 so that it can be deduced that this research model is fit so that it can be employed to predict the possibility of FFR. The coefficient of determination in Table 3 is 0.104732. This means that based on the coefficient of determination, the variables of opportunity, lack of integrity, business complexity, capital turnover, firm size, DER, profitability, and ROA in this research model are able to explain FFR by 10,4732%, while the remaining 89,5268% shall be clarified by other variables that were not included in this paper.

The first hypothesis in this paper is that opportunity had a positive effect on FFR. Refer to table 3, the value of the regression coefficient for the opportunity independent variable is -1.700989 and the probability value in the Prob. column is 0.0460. By comparing the significance level with the probability value in the Prob. column it can be deduced that the significance value of 0.0460 is less than α (five percent). However, because it has a negative regression coefficient, it can be deduced that opportunity does not have a positive effect on FFR. Thus, it can be deduced that the first hypothesis is rejected. The finding of this paper cannot prove that opportunity

^{***} Significant at the level of one percent; ** Significant at the level of five percent;

^{*} Significant at the level of ten percent.

had a positive effect on FFR. The finding of this paper support the study of Sari & Nugroho (2020), who found that opportunity had no effect on FFR. The finding of this paper is not in accordance with study conducted by Lou & Wang (2009), Christian et al. (2019a), and Yusof K. et al. (2015) which find that opportunity had a positive effect on FFR.

The second hypothesis in this study is the lack of integrity has a positive effect on FFR. Refer to table 3, the value of the regression coefficient for the independent variable lack of integrity is 2.050349 and the probability value in the Prob. column is 0.0001. By comparing the significance level with the probability value in the Prob. column it can be seen that the significance value 0.0001 is less than α (one percent). Thus it can be deduced that the second hypothesis is accepted, that means the lack of integrity had a positive effect on FFR. As a group of people, management who have responsibility for managing the company entrusted to them by the principal. When people who are recruited for positions in company management do not have integrity, it will be easy to make wrong decisions with the aim of presenting financial statements that look good compared to the actual conditions. On the other hand, if the company succeeds in hiring people who have high integrity, it is very unlikely that that person will commit fraud, especially related to FFR. Thus, the lack of management integrity can lead to FFR. The research finding of this paper support the research finding conducted by Umar & Br. Purba (2020) who found that lack of integrity has a positive effect on fraudulence. Therefore, the corporate have to build, strengthen, and implement a code of ethics, internal control, and supervision within the company for all company employees without exception so that all company employees have high integrity. The supervision that can be carried out by the company consists of feedforward controls which are controls that are carried out before an activity starts, concurrent controls which are controls that are carried out while an activity is in progress to make sure that all activities are carried out in accordance with the company's operational standards, and feedback controls which are controls that are carried out after an activity has been completed (Schermerhorn et al., 2014).

The third hypothesis in this paper is that business complexity has a positive effect on FFR. Refer to table 3, the value of the regression coefficient for the independent variable of business complexity is 1.715374 and the probability value is in the Prob. column is 0.0285. By comparing the significance level with the probability value in the Prob. column it can be seen that the significance value of 0.0285 is less than α (five percent). Thus, it can be deduced that the third hypothesis is accepted, its means that business complexity had a positive effect on FFR. Companies that are increasingly complex can increase the possibility of FFR. This may be due to financial statement users who have difficulty in understanding the information contained in the financial reports of complex corporate so that it can be used by companies to fulfill their own interests. The result findings of this research are similiar with research findings done by Indriastuti & Ifada (2011) who found that business complexity has a positive effect on fraudulence. Therefore, the corporate must pay more attention to the corporate's business activities by implementing adequate controls in order to minimize the possibility of FFR that may occur.

The test results for the control variables are shown in Table 3 above. Refer to table 3, it can be concluded that in this study, capital turnover, DER, and ROA have an effect on FFR. Meanwhile, firm size and profitability have no effect on FFR.

CONCLUSIONS

This study was conducted with the objective of obtaining empirical evidence regarding the effect of opportunity on fraudulent financial reporting (FFR), the effect of lack of integrity on FFR, and the effect of business complexity on FFR. The population employed in this paper is manufacturing corporate registered on the IDX. In this study, sampling was carried out by purposive sampling and acquired 127 companies as observation data in this study. The observation period in this study is 2015-2019 which includes 5 observation periods. Thus the amount of data contained in this research is 635 data.

The test results in this study indicate that the second hypothesis (H2) and the third hypothesis (H3) are accepted, while the first hypothesis (H1) is rejected, which means, opportunity doesn't have a positive effect on FFR, lack of integrity has a positive effect on FFR, and business complexity had a positive effect on FFR. The control variables in this paper are firm size, capital turnover, DER, profitability, and ROA. In this study, capital turnover, DER, and ROA have an effect on FFR. On the other hand, firm size and profitability have no effect on FFR. The results of this paper indicate that companies need to pay attention and apply integrity in carrying out each of their business activities and complex companies must also monitor their business activities more in order to minimize the possibility of FFR.

LIMITATION OF THE STUDY

The limitations in this paper are related to generalization because the sample used is a manufacturing corporate listed on the IDX. Another limitation is the small coefficient of determination in this study indicating that there are other variables suspected of having an effect on fraudulent financial reporting.

RECOMMENDATIONS FOR FURTHER STUDY

Suggestions for further research is that further researchers can add other variables such as pressure, rationalization, capability, arrogance, and collusion. Further researchers can also expand the research by using all corporate listed on the IDX or add more observation year. In addition, further researchers can also conduct research by comparing all company sectors listed on the IDX.

REFERENCES

- Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500.
- Aryati, T., & Walansendouw, Y. C. (2013). Analisis Pengaruh Diversifikasi Perusahaan terhadap Manajemen Laba. *Jurnal Akuntansi & Auditing*, 9(2), 244–260.
- Beneish, M. D., Lee, C. M. C., & Nichols, D. C. (2013). Earnings Manipulation and Expected Returns. *Financial Analysts Journal*, 69(2), 57–82.
- Choi, F. D. S., & Meek, G. K. (2011). *International Accounting* (7th ed.). New Jersey: Prentice Hall.
- Christian, N., Basri, Y. Z., & Arafah, W. (2019a). Analysis of Fraud Pentagon to Detecting Corporate Fraud in Indonesia. *International Journal of Economics, Business and Management Research*, 3(08), 1–13.
- Christian, N., Basri, Y. Z., & Arafah, W. (2019b). Analysis of Fraud Triangle, Fraud Diamond and Fraud Pentagon Theory to Detecting Corporate Fraud in Indonesia. *The International Journal of Business Management and Technology*, *3*(4), 1–6.
- Crawford, R. L., & Weirich, T. R. (2011). Fraud Guidance for Corporate Counsel Reviewing Financial

- Statements and Reports. *Journal of Financial Crime*, *18*(4), 347–360. https://doi.org/10.1108/13590791111173696
- Dalnial, H., Kamaluddin, A., Sanusi, Z. M., & Khairuddin, K. S. (2014). Accountability in Financial Reporting:

 Detecting Fraudulent Firms. *Procedia Social and Behavioral Sciences*, 145, 61–69. https://doi.org/10.1016/j.sbspro.2014.06.011
- Fuad, K., Lestari, A. B., & Handayani, R. T. (2020). Fraud Pentagon as a Measurement Tool for Detecting Financial Statements Fraud. *Advances in Economics, Business and Management Research*, 115, 85–88. https://doi.org/10.2991/aebmr.k.200127.017
- Hidajat, T. (2020). Rural Banks Fraud: A Story from Indonesia. *Journal of Financial Crime*, 27(3), 933–943. https://doi.org/10.1108/JFC-01-2020-0010
- Indriastuti, M., & Ifada, L. M. (2011). Pengaruh Kualitas Pelaksanaan Corporate Governance dan Kompleksitas Bank terhadap Fraud. *EKOBIS*, *12*(2), 168–176.
- Istianingsih, I. (2016). Deteksi Manajemen Laba Melalui Discretionary Revenue Dan Aktifitas Riil: Implikasi Penerapan Good Corporate Governance. *Forum Keuangan Dan Bisnis V*, 332–348.
- 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.
- 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. https://doi.org/10.19030/jber.v7i2.2262
- Mayangsari, S. (2003). Analisis Pengaruh Independensi, Kualitas Audit, serta Mekanisme Corporate Governance terhadap Integritas Laporan Keuangan. *Simposium Nasional Akuntansi VI*.
- Murtanto, & Sandra, D. (2019). Pengaruh Fraud Diamond Dalam Mendeteksi Tingkat Accounting Irregularities. *Jurnal Media Riset Akuntansi, Auditing & Informasi, 19*(2), 209–226.
- Murwaningsari, E., Utama, S., & Rossieta, H. (2015). The combined effects of financial derivatives and discretionary accruals on the value relevance of earnings and the book value of equity. *Gadjah Mada International Journal of Business*, 17(2), 179–198. https://doi.org/10.22146/gamaijb.6909
- Nasir, N. A. binti M., Ali, M. J., Razzaque, R. M. R., & Ahmed, K. (2018). Real Earnings Management and Financial Statement Fraud: Evidence from Malaysia. *International Journal of Accounting and Information Management*, 26(4), 508–526. https://doi.org/10.1108/IJAIM-03-2017-0039
- Omoye, A. S., & Eragbhe, E. (2014). Accounting Ratios and False Financial Statements Detection: Evidence from Nigerian Quoted Companies. *International Journal of Business and Social Science*, 5(7(1)), 206–215.
- Pradhana, E. P. M., & Murwaningsari, E. (2014). Pengaruh Market Power dan Corporate Governance Terhadap Future Earnings Response Coefficient pada Perusahaan Di Bursa Efek Indonesia. *E-Journal Akuntansi Trisakti*, *1*(1), 1–19.

- Roden, D. M., Cox, S. R., & Kim, J. Y. (2016). The Fraud Triangle as a Predictor of Corporate Fraud. *Academy of Accounting and Financial Studies Journal*, 20(1), 80–92. https://www.researchgate.net/profile/Dianne_Roden/publication/304036915_The_Fraud_Triangle_as_a_Predictor_of_Corporate_Fraud/links/57640d3408aeb4b997fef2e0/The-Fraud-Triangle-as-a-Predictor-of-Corporate-Fraud.pdf
- Roychowdhury, S. (2006). Earnings Management Through Real Activities Manipulation. *Journal of Accounting and Economics*, 42, 335–370. https://doi.org/10.1016/j.jacceco.2006.01.002
- Sari, S. P., & Nugroho, N. K. (2020). Financial Statements Fraud dengan Pendekatan Vousinas Fraud Hexagon Model: Tinjauan pada Perusahaan Terbuka di Indonesia. *1st Annual Conference of Ihtifaz*, 409–430. http://seminar.uad.ac.id/index.php/ihtifaz/article/download/3641/1023
- Schermerhorn, J. R., Davidson, P., Factor, A., Poole, D., Woods, P., Simon, A., & McBarron, E. (2014). *Management* (6th Asia-Pacific Edition). Australia: John Wiley & Sons Australia, Ltd. https://books.google.com/books?id=y6BmlwEACAAJ&pgis=1
- Siahaan, M., Umar, H., & Purba, R. B. (2019). Fraud Star Drives to Asset Misappropriation Moderated by Internal Controls. *Journal of Southwest Jiaotong University*, 54(4), 1–10. https://doi.org/10.35741/issn.0258-2724.54.4.24
- Umar, H. (2016). Corruption the Devil. Jakarta: Penerbit Universitas Trisakti.
- Umar, H., & Br. Purba, R. (2020). HU Model: Incorporation of Fraud Star in Detection of Corruption. *International Journal of Economics and Management Studies*, 7(12), 1–8. https://doi.org/10.14445/23939125/ijems-v7i12p101
- Wells, J. T. (2011). *Corporate fraud handbook: prevention and detection* (3rd ed.). New Jersey: John Wiley & Sons, Inc.
- Yusof K., M., A.H., A. K., & Simon, J. (2015). Fraudulent Financial Reporting: An Application of Fraud Models to Malaysian Public Listed Companies. *The Macrotheme Review*, 4(3), 126–145.
- Zainudin, E. F., & Hashim, H. A. (2016). Detecting Fraudulent Financial Reporting Using Financial Ratio. *Journal of Financial Reporting and Accounting*, 14(2), 266–278. https://doi.org/10.1108/JFRA-05-2015-0053