

# Factors Influencing in the Fraudulent Financial Reporting

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#### **Abstract**

Fraudulent practice in financial report has resulted in the decrease of reliablity in financial report, causing losses for investors and creditors. The population used in this study are all listed on the Indonesia Stock Exchange (BEI) throughout 2010-2016. The sampling method used is purposive sampling. The number of samples used is 52 companies, consisting of 26 fraud companies obtained from the database of sanctioned misstatement of financial reporting issued by OJK during 2010-2016 period and 26 non-fruad companies with the same size determined under OJK regulation No. POJK.04 about Statement of Registration in the Public Offering and Capital Addition by Granting Right of Priority Effect by Companies with Small Scale Assets or Companies with Medium Scale Assets. This study used logistic regression analysis to examine the research hypothesis. The results of this study indicate that financial leverage and asset composition ratio have positive effect on the possibility of fraudulent financial reporting. Meanwhile, the profitability, liquidity, capital turnover, and receivable turnover ratio have negative effect on the possibility of fraudulent financial reporting.

**Keywords**: financial leverage ratio; profitabilty ratio; asset composition ratio; liquidity ratio; capital turnover tatio; receivable turnover ratio; fraudulent financial reporting

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#### INTRODUCTION

Fraud has become a scandal in financial reporting. Evidently, many large companies were dragged into fraud cases such as SK Global, Vivendi, Enron, Parmalat, Adelphia, Cendant, WorldCom, and Royal Ahold (Albrecht, et al., 2008). Companies are caught up in the situation of business globalization which has triggered intense business competition. As a result, companies are looking for any way to keep their business operating properly and even become winners in global business competition. One of the ways is to commit financial reporting fraud.

Many factors influence the occurrence of fraudulent financial reporting, such as conflicts of interest between principal and agent, pressure, opportunities, and rationalization. The conflict of interest and the three conditions cause problems that are explained in the agency theory and fraud triangle theory.

Agency theory by Jensen and Meckling (1976), the emergence of conflict of interest and information asymmetry between the principal (owner) and the agent (manager) causes fraudulent financial reporting. The cause of the conflict of interest is the principal wants a high return while

the agent wants a large compensation for his performance. In addition, Cressey's fraud triangle theory (1954), excessive pressure and the existence of opportunities can encourage management to involve themselves in fraud. According to Cressy (1954), there are always three things that always arise in fraud, namely pressure, opportunity, and rationalization. These three conditions are factors that can be indicators of fraud.

The many cases of fraudulent financial reporting have a negative impact on the reliability of financial statements and the company's financial performance (Rezaee, 2005). On the other hand, the reliability of financial statements and corporate financial performance are guides for investors in making economic decisions. As a result, financial statement information becomes misleading. Fraudulent financial statement is an act of manipulating financial information not only in nominal terms but also in disclosures (Arens et al., 2012). Act of manipulating financial reports involves many parties, such as owners and managers. Such actions occur due to a conflict of interests of each party. The impact is that the company's survival is threatened and the company's external parties become distrustful to the company.

The case of accounting fraud has led to an assumption that company management is involved in financial report manipulation. This is supported by the findings of Rezaee (2005) which shows that top management is usually involved in falsifying financial statements and these actions have an impact on the results and financial performance of the company. On the other hand, Pricewaterhouse Cooper (PwC) that conducted the Global Economic Crime Survey in 2016 involving seven regions (Africa, Western Europe, North America, Eastern Europe, Asia Pacific, Latin America and the Middle East) also reported an increase in accounting fraud by 36 percent since 2014 (Zainudin & Hashim, 2016). The case of fraud has caused huge losses and became business failures in global economic records. As a result, fraud cases have received a lot of attention from stakeholders, such as the government, auditors, and the community (Kaseem & Higson in Zainudin & Hashim, 2016).

Fraud is not easy to disclose and its detection requires knowledge about the nature of fraud and how it can be done clandestinely (Kaseem & Higson, 2012). In addition, fraudulent financial reporting has threatened the reliability of financial statements, financial performance, and sustainability of the company. Although fraudulent financial reporting has a negative impact, fraud remains one of the ways taken by the company in surviving and competing in the global business world. Even scandal of fraudulent cases of large companies like Enron did not make business people aware of the importance of clean financial reports and free from fraud. Based on the explanation above, this research is conducted to find out the factors that influence fraudulent financial reporting in order to reduce the adverse effects on these frauds. Because, the adverse impact of fraudulent financial reporting can lead to a large risk of business failure. In addition, this research is conducted to provide information to companies that the importance of financial statements that are clean from fraud. One of the proposals from previous research is to use financial ratio analysis methods or techniques in order to find fraudulent practices in financial statements (Zainudin & Hashim, 2016). This shows that there is an influence between financial ratios and fraudulent financial reporting.

Research on fraud has been carried out by several previous researchers. Persons (1995) proves that leverage, profitability, asset composition, liquidity, capital turnover, company size, and financial position as a whole have an effect on fraudulent financial reporting. Spathis (2002) proves that financial ratio variables such as leverage, capital turnover, net profit margin, receivables from sales, ROA, liquidity, gross profit from assets, inventory turnover ratio, and financial distress influence on fraudulent financial reporting.

## Theoretical Thinking Framework And Hypothesis Formulation

Fraudulent financial reporting can occur due to the appearance of a conflict of interest and information asymmetry between the principal (owner) and the agent (manager). A conflict of interest occurs when the principal wants a high return while the agent wants a large compensation

for his performance. This condition illustrates that the information possessed by the agent is more than the principal is. This is due to agents who make company financial statements for their performance for a certain period. This results in information asymmetry. Information asymmetry that occurs allows the agent to hide information from the principal (Hanifa & Laksito, 2015). In addition, there are three human nature assumptions that can be the driving factors for fraudulent financial reporting. Therefore, agency theory is used as an introduction to logic and supporting hypotheses in finding the factors that influence fraudulent financial reporting.

Financial ratio analysis has been considered as one of the effective methods in evaluating fraud (Zainudin & Hashim, 2016). By analyzing financial ratios, financial statement users can assess the financial position of a company so that they can estimate the performance of the company from one period to the next period. Based on this, financial ratios serve as guidelines for management, investors, creditors, and other parties in making economic decisions. However, financial ratios can also be a trigger for management to commit fraud if the company's financial ratios deteriorate. As a result, the company's survival is threatened. This is in line with the fraud triangle theory by Cressey (1954) which states that trust violators or embezzlers, in this case management, consider themselves experiencing financial problems that are non-shareable and they have the opportunity and understand that the problem can be resolved silently. Therefore, fraud triangle theory is used as an introduction to logic and supporting hypotheses in finding factors that influence on fraudulent financial reporting.

## Financial Leverage Has Influence on Financial Reporting Fraud

Debt is an alternative source of financing for companies besides using their own capital. In addition, debt can be a booster for company performance. Even debt can make a company's growth becomes faster than just relying on its own capital. However, if the company's debt is too large, the company will experience difficulties in paying off the debt. As a result, the financial condition of the company becomes unhealthy, so it risks being bankrupt.

Companies that have high leverage may risk going bankrupt if they cannot pay off their debts (Spathis, 2002; Zainudin & Hashim, 2016). In line with the study conducted by Altman (1968) which states that bad solvency is considered as a factor that can lead to bankruptcy for a company. On the other hand, a large amount of debt can increase the likelihood of fraudulent financial reporting because it shifts the risk from the owner of the capital and the manager to the owner of the debt (Sptahis, 2002; Zainudin & Hashim, 2016). This condition illustrates that the company is having difficulty paying off its debt. As a result, creditors are reluctant to provide loans because of the possibility of a high risk of default. Therefore, company management may manipulate its financial statements in order to fulfil certain debt agreements (Zainudin & Hashim, 2016).

The statement above is in line with the agency theory and fraud triangle theory in which the management is demanded by the owner to seek additional capital and creditors to meet the debt agreement given so that management experiences pressure. Meanwhile, management is said to be successful if it is able to provide the best performance. This indicates a conflict of interest between the owner, creditor, and manager. As a result, company management may manipulate its financial statements if there is a need to fulfil certain debt agreements (Zainudin & Hashim, 2016). On the other hand, management is required to give the best performance in accordance with the expectations of third parties, one of which is creditors (Norbarani, 2012). This encourages management to manipulate financial statements so as to produce a good financial appearance of the company.

## H1: Financial leverage has a positive effect on fraudulent financial reporting

### Profitability Has Influence on Financial Reporting Fraud

Companies with low profitability will certainly not be looked at by investors because they are unable to provide high dividends. This condition encourages management to manipulate the profitability of the company. According to Kreutzland & Wallace (1996) in Zainudin & Hashim

(2016), Low-profit companies can encourage management to overestimate sales or expenses, giving rise to significant errors in their financial statements. This is done by managers in order to fulfill management objectives.

One of the management objectives is to maximize the welfare of shareholders. For company managers, increasing the level of shareholder welfare is an important indicator of managerial success (Zainudin & Hashim, 2016). Given the importance of shareholder welfare, management is expected to be able to maintain or increase the level of profitability. If the expectation is not met by actual performance, then it encourages the emergence of fraudulent practices in financial statements (Zainudin & Hashim, 2016). Besides, Zainudin & Hashim (2016) also explained that company executives might manipulate profitability ratios that result in fraudulent reporting in financial statements.

The explanation above is in line with the agency theory and fraud triangle theory where there is a conflict of interest between the owner and management related to financial performance. The owner wants an increase in profits to be looked at by investors so they give financial targets while managers want to be seen as successful because they can improve the welfare of shareholders. The financial targets given by the owner create pressure for managers so they commit fraud (Norbarani, 2012). This is in accordance with the study of Ettredge et al. (2010) which indicates that managers manipulate their financial statements in order to meet certain accounting targets. Low profitability encourages management to involve themselves in fraud with the aim of meeting the expectations of owners and investors. Because, one of the measures of managerial success is the welfare of shareholders which is marked by an increase in profit. Therefore, management is expected to be able to maintain or increase the level of profitability.

## H2: Profitability has a negative effect on fraudulent financial reporting

## Asset Composition Has Influence on Fraudulent Financial Reporting

A company has assets consisting of current assets and non-current assets. Tests carried out by Persons (1995) for companies that are indicated to practice fraud showing that company's current assets mostly consist of receivables and inventories. The value of these accounts is determined by management. Determination of the value of inventory and accounts receivable depends on the subjectivity of manager in estimating the value of obsolete inventory accounts and uncollectible accounts (Zainudin & Hashim, 2016).

Previous research conducted by Fanning & Cogger (1998) considers the ratio of receivables to sales in examining the variable of assets composition. Both accounts are tested because they are vulnerable to be manipulated by management. other than that, Zainudin & Hashim (2016) indicate that management may manipulate accounts receivable by recording sales before acquisition. On the other hand, inventory manipulation occurs when the company decides not to record obsolete inventory (Somayyeh, 2015).

The explanation above relates to agency theory and fraud triangle theory where there is a conflict of interest between the owner and management related to the value of corporate current assets and opportunities for management to manipulate accounts receivable and inventory. The owner wants the value of current assets to be large so that it is looked at by creditors while the manager wants to be considered successful because he is able to give added value to the company's current assets. Receivables and inventories are accounts that are very difficult to be audited because subjective estimates of management are involved in determining the value of receivables (Somayyeh, 2015). As a result, the low current asset value triggers management to commit fraud. On the other hand, Norbarani (2012) found that there is ineffective supervision by the audit committee and the board of directors regarding the financial reporting process that triggers fraud. Therefore, this creates an opportunity for management to manipulate the company's financial statements.

## H3: Asset composition has a negative effect on fraudulent financial statement

## Liquidity Has Influence on Fraudulent Financial Statement

In general, the higher the value of the liquidity ratio, the greater the margin of safety or security limits the company has in closing short-term debt (Zainudin & Hashim, 2016). Moreover, the greater the ratio also shows that the risk of failure in paying off the company's short-term debt is lower. On the other hand, companies with low working capital on asset ratios indicate that the company cannot fulfill its obligations (Somayyeh, 2015; Zainudin & Hashim 2016). Low liquidity can trigger managers to commit fraudulent financial reporting practices (Omoye & Eragbhe, 2014). This condition is in accordance with the research conducted by Kreutzfeldt & Wallace (1986) found companies that have indicated liquidity problems have a lot of fraud compared to companies without liquidity problems.

The statement above relates to agency theory and fraud triangle theory where there is a conflict of interest between the owner and management related to the condition of the company's liquidity. The owner wants a good liquidity condition to be looked at by creditors while management wants to be seen as successful if it is able to maintain the company's liquidity. On the other hand, companies with low liquidity are required to give the best performance by external parties. External parties such as creditors analyze and consider liquidity ratios in giving credit decisions to companies. In line with the study by Cheng et al. (2013) which states that creditors may be interested in the company's ability to pay off the amount of debt currently using cash. As a result, management experiences pressure so they commit fraud. On the other hand, the company's ability to pay off its debt shows that the company has financial strength because it is able to generate sufficient cash flow to meet its obligations (Cheng et al., 2013).

## H4: Liquidity has a negative effect on fraudulent financial reporting

## Capital Turnover Has Influence on Fraudulent Financial Reporting

Capital turnover ratio describes the strength of a company's assets in generating sales (Zainudin & Hashim, 2016). According to Persons in Zainudin & Hashim (2016), fraud company management may lack the ability to empower assets in generating sales compared to non-fraud company management. Because, capital turnover can show how efficient the use of assets owned by the company in generating certain sales volumes. Besides that, the capital turnover ratio also has other functions. The capital turnover ratio can measure management's ability to deal with competitive situations (Zainudin & Hashim, 2016).

Tight business competition encourages companies to have strong competitiveness. The amount of competitiveness that the company has can be illustrated by the capital turnover ratio. Thus, if the capital turnover ratio is low, the company will find it difficult to survive in intense competition. The low capital turnover ratio is also characterized by the inability of companies to compete might encourage managers to engage in fraudulent financial reporting (Somayyeh, 2015).

The statement above relates to agency theory and fraud triangle theory where there is a conflict of interest between the owner and management regarding the efficiency of the use of assets. The owner wants efficient asset management so that the business can compete while management wants to be successful if it is able to increase the sale of the company's assets. Increasingly tight business competition conditions and low management competencies create pressure for management in terms of asset management efficiently. In line with the study by Zainudin & Hashim (2016) which found that management is required to use company assets as well as possible in order to compete competitively. If the capital turnover rate is low, it shows that management manages company assets inefficiently. As a result, management involves itself in fraudulent financial reporting to deal with this pressure.

## H5: Capital turnover negatively affects fraudulent financial reporting

## Accounts Receivable Turnover Has Influence on Fraud of Financial Reporting

The accounts receivable turnover ratio describes the efficiency of a company in changing its receivables into cash for a certain period (Horne & Wachowicz, 2008). According to Horne &

Wachowicz (2008), the higher the value of this ratio, the company is able to collect receivables from the sale of credit to customers. This illustrates that companies have good debt management capabilities so that receivables can be collected from customers based on a mutually agreed period of time (Abbas, 2017). On the other hand, good debt management can also minimize the risk of bad debts.

A high accounts receivable turnover ratio indicates that the company can collect receivables from customers in a timely manner (Horne & Wachowicz, 2008). As a result, cash flow of a company increases. The high value of the accounts receivable turnover ratio results in an increase in the cash flow of operating activities. The greater the cash flow that is owned, the more the company is able to pay off its obligations in accordance with the time determined by the creditor. On the other hand, the high value of the accounts receivable turnover ratio can also make it easier for companies to use money that has been successfully collected in obtaining higher profits (Abbas, 2017).

The statement above relates to the agency theory and fraud triangle theory where there is a conflict of interest between the owner and management regarding the condition of the company's receivables. The owner wants efficient management of accounts receivable so that the company immediately gets back money for sales and as much as possible avoids the risk of uncollectible accounts receivable failure. On the other hand, managers want to be said successful if they are able to manage the company's receivables properly. However, management's inability to manage receivables creates pressure on management. In line with the study by Gorczynska (2011), management is required by companies to manage their receivables efficiently. Efficient accounts receivable management describes how productive these accounts are used to generate profits. The amount of cash collected will then be reused for subsequent credit sales. If the amount of cash collected is small, the company will find it difficult to operate properly so that it will disrupt the survival of the company.

H6: Account receivable turnover negatively affects fraudulent financial reporting

### **METHOD**

## Fraudulent Financial Reporting

Fraudulent financial reporting is a deliberate misstatement or elimination of amount or disclosure that aims to deceive users (Arens et al., 2012). Fraudulent financial reporting arises from the encouragement to management to achieve the targets that the company determines so that they manipulate financial statements. That is in accordance with the study of Ettredge et al. (2010) which found evidence that managers manipulate their financial statements to meet certain accounting targets. As a result, the aggressiveness of corporate financial reporting has increased sharply. This is in line with the statement by Patelli & Pedrini (2015) which shows that the role of top management correlates with the aggressiveness of financial reporting. Financial reporting fraud can be measured using dummy variables measured by categorizing research samples, 1 for companies that commit fraud and 0 for companies that do not commit fraud.

## **Company Leverage**

Financial leverage is a level at which investors or businesses use borrowed money (Zainudin & Hashim, 2016). Financial leverage can show the amount of debt used to finance a company's operations rather than using its own assets or capital. In this study, financial leverage is stated in the symbols of LEV1 and LEV2 measured by the formula:

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LEV1 = "Total Liabilities" /"Total Asset"
LEV2 = "Total Liabilities" /"Total Equities"
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## **Profitability**

Profitability is a ratio that can be used as a valuation technique to assess a company's ability to generate profits (Somayyeh, 2015). This ratio is a measure of managerial success in order to maximize shareholder profits. Besides that, profitability can also describe the survival of the company in the future. In this study, profitability is stated in the PROF symbol and measured by

the formula:

PROF ="Net Profit After Tax" /Sales

## **Asset Composition**

Persons (1995) found that corporate current assets consist mostly of receivables and inventories. These findings were obtained through testing of companies that indicated fraudulent financial reporting. Based on the testing by Persons (1995), this study pays attention to current assets, accounts receivable, and inventory as a formula in measuring the composition of asset variable. In this study, the composition of assets is stated in the symbols of AC1, AC2, and AC3 and measured by the formula:

AC1 ="Current Asset" /"Total Asset" AC2 ="Sales" AC3 ="Inventory" /"Total Asset"

## Liquidity

Liquidity is a ratio used to measure a company's ability to pay off debts that will soon be due (Zainudin & Hashim, 2016). That is, the company has the ability to pay off its short-term obligations in accordance with the time limit set by the creditor with its current assets. The performance evaluation carried out by the management aims to optimize the company's financial capability in paying off its obligations in the future. In this study, liquidity is stated in the symbols of LIQ1, LIQ2, and LIQ3 and is measured by the formula:

LIQ1 ="Work Capital" /"Total Asset" LIQ2 ="Current Asset" /"Current Liabilities" LIQ3 ="Current Asset - Inventory" /"Current Liabilities"

### **Capital Turnover**

Capital turnover ratio describes the strength of a company's assets in generating sales (Zainudin & Hashim, 2016). Capital turnover can show how efficient the use of assets owned by the company in generating certain sales volumes. Besides that, the capital turnover ratio can measure management's ability to deal with competitive situations (Zainudin & Hashim, 2016). In this study, capital turnover is stated in the CAPT symbol and measured by the formula:

CAPT = "Sales" /"Total Asset"

#### Accounts Receivable Turnover

The accounts receivable turnover ratio describes the efficiency of a company in changing its receivables into cash for a certain period (Horne & Wachowicz, 2008). Account receivable turnover can show how productive accounts receivable the company has in generating profits. In addition, accounts receivable turnover can also be a measure for the quality of the company's receivables where the company can manage its receivables properly. That is, the company is able to collect receivables from the sale of credit to customers within a time limit has been determined (Horne & Wachowicz, 2008). In this study, accounts receivable turnover is stated in the AR symbol and measured by the formula:

AR = "Sales" /"Receivables"

### Sample Determination

The population of this study is 458 companies which are non-financial companies listed on the Indonesia Stock Exchange (IDX) in the period 2010-2016. Given the purpose of this study is to look for factors that influence fraudulent financial reporting, the sample of this study uses a matching system or pair samples of fraud and non-fraud firms with the same company size category. In addition, the researchers also formulate sample criteria in order to meet the research objectives. These criteria include:

- 1. The samples of fraud companies are non-financial companies that got sanctions by OJK and listed on the Indonesia Stock Exchange (IDX) during the period 2010-2016.
- 2. The samples of non-fraud companies is non-financial companies that had the category of company size which was the same as fraud companies and are in the same sub-sector during the period 2010-2016.

- 3. At least there are two companies in the same sub-sector so that it can be a comparison between fraud companies and non-fraud companies
- 4. Determination of company size categories based on the regulations of the Financial Services Authority No. POJK.04 about Registration Statement in the context of Public Offering and Capital Addition by Providing Pre-emptive Rights by Companies with Small-Scale Assets or Companies with Middle-Scale Assets.
- 5. Fraud and non-fraud companies issued audited financial statements for the period 2010-2016.
- 6. The companies reported financial statements in rupiah.
- 7. The companies did not experience delisting and during the study period.

Based on the first criteria, the researchers use a database of sanctions for the presentation of financial statements issued by OJK in determining fraud companies. As a result, from the study population of 458 companies during the period 2010-2016, only 48 fraud companies were found. Of the total 48 fraud companies, 2 fraud companies were eliminated because they were not listed on the Indonesia Stock Exchange. Furthermore, elimination was carried out on 9 fraud companies that were delisted in the study period. Then, there were not found the same size category of companies between samples of fraud companies with non-fraud companies as many as 3 samples so that elimination was done. In addition, it is found only one company in the other agricultural sub-sector so that the sample could not be paired. Finally, there are 5 data outliers that have extreme values on fraud samples and 2 data outliers on non-fraud samples. As a result, 7 data on each fraud and non-fraud sample need to be eliminated from the study sample. Thus, 26 fraud companies and 26 non-fraud companies were used as samples in this study. The following are the processes and criteria for determining the research sample.

Table 1. Research Object

No	Criteria	Number of Sample			
1	Fraud companies that were sanctioned by OJK in 2010-2016 (OJK database version)	48			
2	Fraud companies that are not listed on the Indonesia Stock Exchange	(2)			
3	Delisting fraud company	(9)			
4	There is no same company size category found between the sample of fraud companies and non-fraud companies.	(3)			
5	There is only one company in the other agricultural sub-sector	(1)			
6	Number of fraud companies	33			
7	Number of non-fraud companies	33			
8	Data outliers	(7)			
9	Elimination of sample pairs due to outlier data	(7)			
	Number of Research Sample	52			

Source: Tabulation data processing 2018

### **Analysis Method**

Logistic regression analysis was used to examine the research hypothesis. The following is the equation model:

FFR = b0 + b1(LEV1) + b2(LEV2) + b3(PROF) + b4(AC1) + b5(AC2) + b6(AC3) + b7(LIQ1) + b8(LIQ2) + b9(LIQ3) + b10(CAPT) + b11(AR) where

FFR = Dummy variable which is given score 1 if the company commits fraud; 0 if the company does not commit fraud

LEV1 = Total Liabilities / Total Equity

LEV2 = Total Liabilities / Total Assets

PROF = Net Profit / Sales

AC1 = Current Assets / Total Assets

AC2 = Receivables / Sales

AC3 = Inventory / Total Assets

LIQ1 = Working Capital / Total Assets

LIQ2 = Current Assets / Current Liabilities

LIQ3 = (Current Assets - Inventory) / Current Liabilities

CAPT = Sales / Total Assets

AR = Credit / Receivable Sales

#### **RESULTS AND DISCUSSIONS**

## **Description of Variables**

Descriptions of the dependent variables which are categorical explained through the results of frequency distribution analysis. The test results can be seen in the following table:

**Table 2.** Frequency Distribution

Variable Name	Category	The Aim of Category	Frequency	Precentage
Fraud of Financial	1	Companies that commit fraud	26	50%
Reporting	0	Companies that do not commit fraud	26	50%
Total			52	100%

Source: Data processing SPSS 2018

Based on the table, it is known that the number of research samples is 52 companies. Financial reporting fraud is a dependent variable, where the variable is categorical. Category 1 shows the companies that commit fraud, while category 2 shows the companies that do not commit fraud. Of the 52 sample companies, there are 26 companies or 50% categorized as fraudcompanies. While the remaining 26 companies or 50% are categorized as non-fraud companies.

The description of the independent variables is explained through the results of descriptive statistical analysis which provides an overview of the research data based on the minimum, maximum, average, and standard deviations of each variable. The results of the descriptive statistical test can be seen in the following Table 3.

**Table 3.** Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
LEV1	52	0.047	2.545	0.88033	0.686345
LEV2	52	0.045	0.798	0.40392	0.195779
PROF	52	-0.709	0.596	0.08508	0.276052
AC1	52	0.086	0.805	0.38768	0.207230
AC2	52	0.022	1.174	0.28089	0.282514
AC3	52	0.001	0.358	0.09930	0.103131
LIQ1	52	-0.163	0.760	0.16753	0.210112
LIQ2	52	0.174	8.242	2.51305	2.348826
LIQ3	52	0.155	7.978	2.03001	2.254041
CAPT	52	0.020	1.385	0.46938	0.417908
AR	52	0.111	20.546	6.42048	5.154609

Source: Data processing SPSS 2018

## **Hypothesis Testing**

The test results of the logistic regression hypothesis can be seen in table 6. If the results of the coefficient test are less than 5 percent, then the hypothesis is accepted and if more than 5 percent, then the hypothesis is rejected.

**Table 4** Hypothesis Test Results

Hypothesis	Statements	В	Sig.	Conclusions
H1	Financial leverage has a positive effect on fraudulent financial reporting		LEV1: 0.037 LEV2: 0.021	Accepted
H2	Profitability has a Negative effect on fraudulent fi- nancial reporting	PROF: -20.747	PROF: 0.024	Accepted
Н3	The composition of assets has a negative effect on fraudulent financial reporting	AC2: 11.748	AC1: 0.037 AC2: 0.016 AC3: 0.411	Rejected
H4	Liquidity has a negative effect on fraudulent financial reporting	LIQ1: -39.294 LIQ2: -39.785 LIQ3: -9.284	LIQ1: 0.033 LIQ2: 0.050 LIQ3: 0.027	Accepted
Н5	Capital turnover has a negative effect on fraudulent financial reporting	CAPT: -13.051	CAPT: 0.013	Accepted
Н6	Account receivable turnover negatively affects fraudulent financial reporting	AR: -2.445	AR: 0.048	Accepted

The results of the logistic regression test in table 6 are the basis for determining whether the research hypothesis is accepted or rejected. The first independent variable is financial leverage. The significance value of this variable is smaller than 0.05 and has beta coefficient values of 8.567 and 41.140, meaning financial leverage ratio has a positive effect on fraudulent financial reporting. In conclusion, the greater the financial leverage ratio of a company, the higher the fraudulent financial reporting. Based on the discussion, the first hypothesis is accepted.

The second independent variable is profitability. The significance value of this variable is smaller than 0.05 and has a beta coefficient value of -20.747 which means that the profitability ratio has a negative effect on fraudulent financial reporting. In conclusion, the smaller the profitability ratio of a company, the higher the fraudulent financial reporting. Based on the discussion, the second hypothesis is accepted.

The third independent variable is the composition of assets. The significance value of this variable with measurements of AC1 and AC2 is smaller than 0.05 while AC3 is greater than 0.05 so it is not significant. AC1 and AC2 have beta coefficient values of 19.567 and 11.748, meaning that the asset composition ratio has a positive effect on fraudulent financial reporting. In conclusion, the greater the asset composition ratio of a company, the higher the fraudulent financial reporting. Based on the discussion, the third hypothesis is rejected.

The fourth independent variable is liquidity. The significance value of this variable is smaller than 0.05 and has beta coefficient values of -39.294, -39.785, and -9.284 which means that the liquidity ratio has a negative effect on fraudulent financial reporting. In conclusion, the smaller the liquidity ratio of a company, the higher the fraudulent financial reporting. Based on the discussion, the fourth hypothesis is accepted.

The fifth independent variable is capital turnover. The significance value of this variable is smaller than 0.05 and has a beta coefficient of -13.051, which means that the capital turnover ratio has a negative effect on fraudulent financial reporting. In conclusion, the smaller the capital turnover ratio of a company, the higher the fraudulent financial reporting. Based on the discussion, the fifth hypothesis is accepted.

The sixth independent variable is accounts receivable turnover. The significance value of this variable is smaller than 0.05 and has a beta coefficient of -2.445, which means that the accounts receivable turnover ratio has a negative effect on fraudulent financial reporting. In conclusion, the smaller the receivable turnover ratio of company, the higher the fraudulent financial reporting. Based on the discussion, the sixth hypothesis is accepted.

### **RESULTS AND DISCUSSION**

Based on the results of the descriptive statistics, the financial leverage variable with measurements of LEV1 and LEV2 have an average value of 0.88033 and 0.40392 indicating that the companies have financial leverage of 88.03% and 40.39%. From these results, it can be said that in general the companies used as samples in this study are companies that have high financial leverage. High financial leverage shows that the possibility of fraudulent financial reporting is big. These results support the study by Persons (1995), Spathis (2002), Kaminski et al. (2004), and Kirkos et al. (2007), which found that the measurement of LEV1 has a positive effect on fraudulent financial reporting. While the measurement of LEV2 has a positive effect on fraudulent financial reporting supported by research of Fanning & Cogger (1998), Kirkos et al. (2007), Dani et al. (2013), and Dalnial et al. (2014).

Business development carried out by the companies requires substantial costs. Fast financing obtained from debt. However, debt is given if the companies are able to fulfill the debt agreement given by the creditors. This condition encourages management to find ways to obtain additional capital through debt for the development of the company's business. A high debt structure causes a condition of bad company leverage, allowing fraud in financial reporting (Zainudin & Hashim, 2016). Conversely, a low debt structure reflects the companies' ability to pay off long-term debt so the possibility of fraudulent financial reporting is small.

Profitability variable has an average value of 0.08508 indicating that the companies have a profitability of 8.51%. From the result, it can be said that in general the companies used as samples in this study are companies that have low profitability. Low profitability indicates that the possibility of fraudulent financial reporting is high. This result supports research by Fimanaya & Syafruddin (2014) and Ozcan (2016) which show that profitability has a negative effect on the possibility of fraudulent financial reporting.

The companies that have low profitability allow management to commit fraud. In line with the study by Persons (1995), a low level of profitability might encourage management to include income accounts that are larger than the burden of expenses. In addition, the companies with a low profitability are assumed to make mistakes more often than companies with a high profitability (Kreutzfeldt & Wallace, 1986). Conversely, the companies that have a high profitability tend not to commit fraudulent financial reporting because their accounting targets are achieved.

The asset composition variable with AC1 and AC2 measurements each have an average value of 0.38768 and 0.28089 indicating that the companies have an asset composition of 38.77% and 28.09%. From the result, it can be said that in general the companies used as samples in this study are companies that have a high asset composition. High asset composition indicates that the possibility of fraudulent financial reporting is high. This result supports research by Persons (1995), Kaminski et al. (2004), and Somayyeh (2015) which prove that AC1 measurement has a positive effect on the possibility of fraudulent financial reporting. Whereas for AC2 measurements, the result of this study supports the studies by Fanning & Cogger (1998) and Dalnial et al. (2014) which prove that AC2 measurement has a positive effect on the possibility of financial reporting fraud.

The result also supports the fraud triangle theory, the greater the opportunity, the greater the fraud occurs. The occurrence of this opportunity due to current assets consisting of accounts receivable and inventory which are vulnerable to be manipulated by management. Determination of the value of inventory and receivables accounts depending on the subjectivity of managers in estimating the value of obsolete inventory accounts and uncollectible accounts (Persons, 1995; Zainudin & Hashim, 2016).

Liquidity variable with measurements of LIQ1, LIQ2, and LIQ3 each have an average value of 0.16753, 2.51305, and 2.03001 indicating that the companies has liquidity of 16.75%, 251.31%, and 203%. From the result, it can be said that in general the companies used as samples of this study are the companies that have high liquidity. High liquidity indicates that the possibility of fraudulent financial reporting is small. This result supports the research by Ozcan (2016) which shows that liquidity has a negative effect on the possibility of fraudulent financial reporting. The companies that have low liquidity allow management to commit fraud. Kreutzfeldt & Wallace (1986) explained that companies with liquidity problems are indicated to have more fraud compared to companies without liquidity problems. This is in line with the condition of fraud triangle theory, namely there is pressure experienced by management in order to provide a safety limit for short-term debt repayments for creditors. Conversely, the companies that have high liquidity tend not to commit fraudulent financial reporting because they are able to pay off their short-term debt.

The capital turnover variable has an average value of 0.46938 indicating that the companies have a capital turnover of 46.94%. From the result, it can be said that in general the companies used as samples of this study are the companies that have high capital turnover. High capital turnover indicates that the possibility of fraudulent financial reporting is small. The result of this study is in line with fraud triangle theory and the results of previous studies conducted by Fimanaya & Syafruddin (2014) and Ozcan (2016) which show that the capital turnover ratio negatively influences on the possibility of financial reporting fraud. The condition of fraud triangle theory shows that there is pressure experienced by management in facing business competition. Management is required by the owner to manage assets efficiently. While management does not have these competencies. As a result, management manipulates the capital turnover ratio. Conversely, the companies that have high capital turnover tend not to commit fraudulent financial reporting because they can increase sales volume through a good asset management.

The receivable turnover variable has an average value of 6.42048 indicating that the companies have a capital turnover of 642.05%. From the result, it can be said that in general the companies used as samples of this study are the companies that have high accounts receivable turnover. High accounts receivable turnover indicates that the possibility of fraudulent financial reporting is small. This result is in line with the fraud triangle theory and the results of previous studies conducted by Ozcan (2016) which show that the accounts receivable turnover ratio has a negative effect on the possibility of financial reporting fraud. The demand for managing receivables efficiently creates pressure for management. This condition fulfills the fraud triangle theory, namely pressure. On the other hand, management does not have this competency. As a result, management manipulates the capital turnover ratio. This is in line with the findings of Loebbecke et al. (1989) who found that a number of frauds in their research sample turned out to involve accounts receivable as one of the opportunities utilized by managers. Conversely, the companies that have high accounts receivable turnover tend not to commit fraudulent financial reporting because they are able to convert their receivables into cash.

## **CONCLUSIONS**

This study proves that financial ratios such as financial leverage, profitability, asset composition, liquidity, capital turnover, and receivable turnover have an influence on the possibility of fraudulent financial reporting.

Financial leverage ratio has a positive effect on the occurrence of fraudulent financial

reporting. This statement is supported by fraud triangle theory in which management experiences pressure from external parties. This condition occurs when a company has a large debt, but needs funds to finance its operations or carry out business development. As a result, the management commit fraud in order to fulfill certain debt agreements so that it obtains additional capital to carry out the financing.

Profitability ratio has a negative effect on the occurrence of fraudulent financial reporting. The statement is supported by fraud triangle theory in which management experiences internal pressure. This condition occurs when a company has a low profitability ratio. On the other hand, the company has certain financial targets such as increasing profits per year in giving the best performance in front of investors. As a result, management is required to meet the target. This causes excessive pressure on management so they involves themselves in fraudulent financial reporting.

The ratio of asset composition has a positive effect on the occurrence of fraudulent financial reporting. This statement is supported by fraud triangle theory where management has an opportunity to commit fraud. The composition of assets consists of current assets that the company has mostly consist of inventories and receivables. A large amount of inventory cannot be an indicator of fraud. Because, inventory in the companies engaged in property and real estate such as residential homes, hotel buildings, shop houses, shopping centers, and other buildings have a relatively long obsolescence. This will make it difficult for managers to practice fraud. While the large amount of accounts receivable allows the risk of uncollectible accounts

The liquidity ratio has a negative effect on the occurrence of fraudulent financial reporting. This statement is supported by fraud triangle theory where management gets pressure from external parties. This happens when the company is in an unstable financial condition so that it is unable to pay off its short-term debt. As a result, the company does not have sufficient cash flow so it fails to pay off its short-term debt. On the other hand, investors and creditors consider the liquidity ratio as a safety limit that the company has in closing its short-term debt. This can trigger management to involve themselves in fraudulent financial reporting.

Capital turnover ratio has a negative effect on the occurrence of fraudulent financial reporting. The statement is supported by fraud triangle theory where management experiences internal pressure. This condition occurs when companies find it difficult to compete competitively in terms of sales. This shows that management has a poor performance in managing company assets in generating sales. As a result, companies will find it difficult to survive in increasingly fierce business competition, making it possible for management to commit financial reporting fraud.

The accounts receivable turnover ratio has a negative effect on the occurrence of fraudulent financial reporting. The statement is supported by fraud triangle theory, where managers experience internal pressure. This condition occurs when companies are required to have a good liquidity ratio. Cash which is the result of the accounts receivable turnover ratio is an indicator of the corporate liquidity level. As a result, managers manipulate the accounts receivable turnover ratio.

### Limitations

This study has limitations, among others, the number of fraud companies samples is relatively small and limited because it is difficult to be find so that it only sourced from the database of sanctions of the financial statement presentation issued by the FSA, the model for predicting financial reporting fraud in the form of financial ratios that cannot be ascertain correct in categorizing fraud companies, the model does not compare financial ratios before and after the fraud year in order to find the accuracy of the prediction model, and the model has not included all the variables that can increase accuracy in predicting fraud. Furthermore, these limitations are expected to be a material improvement for future research.

## Suggestions

Suggestions for further research should consider to add financial ratio variable that can be used in evaluating possible fraudulent financial reporting, add measurements in the form of non-financial ratios as indicators of fraud, and add other statistical tests that can measure the accuracy of models in predicting fraud in financial reporting.

#### REFERENCES

- Abbas, D. S. "Pengaruh Current Ratio, Account Receivable Turnover, Inventory Turnover, Total Asset Turnover dan Debt To Equity terhadap Return on Asset". Skripsi pada Program Sarjana Ekonomi, Universitas Muhammadiyah, Tangerang, 2017, p. 57.
- Albrecht, W. S., Albrecht, C., & Albrecht, C. C. (2008). Current Trends in Fraud and its Detection. Information Security Journal: A Global Perspective, 17 (1), 2–12.
- Altman, E. I. (1968). Financial Ratios, Discriminant Analysis and The Prediction of Corporate Bankruptcy. The Journal of Finance, 23 (4), 589–609.
- Arens, A. A., Elder, R. J., & Beasley, M. S. (2012). Auditing and Assurance Service: An Integrated Approach (14th ed.). Upper Saddle River: Prentice Hall.
- Ettredge, M., Scholz, S., Smith, K. R., & Sun, L. (2010). How do restatements begin? Evidence of earnings management preceding restated financial reports. Journal of Business Finance and Accounting, 37 (3–4), 332–355.
- Fanning, K. M., & Cogger, K. O. (1998). Neural network detection of management fraud using published financial data. International Journal of Intelligent Systems in Accounting, Finance & Management, 7 (1), 21–41.
- Hanifa, S. I., & Laksito, H. (2015). Pengaruh Fraud Indicators terhadap Fraudulent Financial Statement: Studi Empiris pada Perusahaan yang Listed di Bursa Efek Indonesia (BEI) Tahun 2008-2013, 4, 1–15.
- Horne, J. C. Van, & Wachowicz, J. M. (2008). Financial Management (13th ed.). Harlow: Prentice Hall.
- Jensen, M. C., & W. H. Meckling. (1976). Theory of the Firm: Managerial Behaviour Agency Cost and Ownership Structure. Journal of Financial Economic, 3(4), 305–360.
- Kassem, R., & Higson, A. (2012). The New Fraud Triangle Model. Journal of Emerging Trends in Economics and Management Sciences, 3 (3), 191–195.
- Kreutzfeldt, R. W., & Wallace, W. a. (1986). Error Characteristics in Audit Populations: Their Profile and Relationship to Environmental Factors. Auditing: A Journal of Practice & Theory.
- Norbarani, L. "Pendeteksian Kecurangan Laporan Keuangan dengan Analisis Fraud Triangle yang Diadopsi dalam SAS No. 99". Skripsi pada Program Sarjana Ekonomi, Universitas Diponegoro, Semarang, 2012, hlm. 17-21.
- 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), 206–215.
- Patelli, L., & Pedrini, M. (2015). Is Tone at the Top Associated with Financial Reporting Aggressiveness? Journal of Business Ethics, 126 (1), 3–19.
- Persons, O. S. (1995). Using financial statement data to identify factors associated with Fraudulent Financial Reporting. Journal of Applied Business Research, 11 (3), 38.
- Rezaee, Z. (2005). Causes, consequences, and deterence of financial statement fraud. Critical Perspectives on Accounting, 16 (3), 277–298.
- Somayyeh, H. N. (2015). Financial ratios between fraudulent and non-fraudulent firms: Evidence from Tehran Stock Exchange. Journal of Accounting and Taxation, 7(3), 38–44.
- Spathis, C. T. (2002). Detecting false financial statements using published data: some evidence from Greece. Managerial Auditing Journal, 17(4), 179–191.
- Zainudin, E. F., & Hashim, H. A. (2016). Detecting fraudulent financial reporting using financial ratio. Journal of Financial Reporting and Accounting, 14(2), 266–278.