The Effect of Leverage, Profitability, Asset Composition, Liquidity, Capital Turnover, and Cash Flow on Fraudulent Financial Reporting

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ARTICLE INFO	ABSTRACT
	This study aimed to see if financial ratios and cash flow patterns affect fraudulent financial reporting. The Beneish M-Score and Altman Z-Score models are used in this study to classify companies that commit fraudulent financial reporting and those that do not commit fraudulent financial reporting. According to the findings of this study, leverage ratio, profitability, asset composition, liquidity, capital turnover, and cash flow pattern types 2,3,4, and 6 all impact fraudulent financial reporting. This study's implications include theoretical knowledge from signaling theory relevant to corporations' fraudulent financial reporting. These findings can be used as information material for investors to see the criteria for companies that do fraudulent financial reporting using financial ratios and cash flow patterns from operating, investing, and funding activities so that they can be considered in making investment decisions for investors and become a reference in further research.
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INTRODUCTION

Financial statements are supposed to reflect the company when the report is released. The management wishes to demonstrate the company's good performance and condition. Management is frequently motivated to take measures that harm the company to be considered good, including practicing fraud or dishonest financial reporting. Furthermore, the desire to fulfill certain accounting performance criteria, such as the desire for large profits, can motivate management to commit fraud (Zainudin and Hashim, 2016).

Tuanakotta (2013) defines fraud as any illegal conduct marked by deception, concealment, or breach of trust. Individuals or groups can commit fraud to get money, wealth, or services, to evade payment for service losses, or to secure personal and commercial benefits. Financial reporting fraud is one type of accounting fraud. Manipulation, falsification, or alteration of accounting records or supporting documents that are the source of data for the presentation of financial statements, (2) misrepresentation or omission of events from financial statements, transactions, or significant information, (3), as well as deliberate misapplication of accounting principles relating to the amount of classification and the manner of disclosure, are all examples of fraudulent financial reporting (Tuanakotta, 2013; Abelingga et al., 2021). Companies' fraudulent financial reporting is frequently intended for specific goals and is aggressive enough to mislead users of financial statements (Ettredge et al., 2010; Kamarudin et al., 2012; Zainudin & Hashim, 2016).

Meeting profit targets and industry targets are among the company's goals for misleading financial reporting. Many companies, both outside and in Indonesia, have engaged in deceptive financial reporting methods, such as the Enron case, which manipulated company profitability by posting gains of US $ 600 million even though the company suffered losses (BBC News, 2002). Several examples of fraud have also occurred in Indonesia. In 2010, the Capital Market and Financial Institutions Supervisory Agency (Bapepam-LK) discovered recording errors in the Bakrie Group's financial statements: PT Bakrie & Brothers, PT Bakrie Sumatera Plantations, PT Energi Mega Persada, and PT Benakat Petroleum Energy. (https://finance.detik.com, 2010) and the case of PT Garuda Indonesia, which reported a net profit of Rp 11.33 billion, where in the previous year, it suffered a loss of USD216.5 million (https://economy.okezone.com/2019).

Several prior researchers investigated fraudulent financial transactions using various theories, such as agency theory, signaling theory, fraud triangle (Cressey, 1953), pentagon theory (Howard, 2011), and fraud diamond (Kassem and Higson, 2012). The Beneish M-Score model was utilized in several previous studies to detect fraudulent financial reporting. Several previous studies findings have offered credible evidence (Dalnial et al., 2014; Nia, 2015; Zainudin &

Hashim, 2016; Arifin & Prasetyo, 2018 Pribadi et al., 2018; Emalia et al., 2020) that the variables of leverage, profitability, asset composition, liquidity, and capital turnover can be used as ratios to predict fraudulent financial reporting. However, several other studies do not (Zainudin & Hashim, 2016; Setiawati & Baningrum, 2018; Milasari & Ratmono, 2018; Widyanti & Nuryatno, 2018). This study attempts to re-examine the financial ratios utilized by earlier studies, but this time by incorporating the Beneish M-Score and Altman Z-Score models in predicting fraudulent financial reporting. The combination of the Altman Z-Score and Beneish M-Score models corresponds to Nia's (2015) research, which argues that avoiding bankruptcy is one of the company's motives for fraudulent financial reporting. The combination of fraudulent financial reporting prediction models is considered crucial because previous research has a relatively high level of prediction error in distinguishing companies that perform fraudulent financial reporting from those that do not. This study also includes cash flow patterns (Gentry et al., 1990; Gup et al., 1993; Alzoubi, 2019), where cash flow patterns can be related to the company's life cycle, and cash flow can be used to anticipate bankruptcy, predict bond ratings, and measure credit risk.

METHODS
Signaling Theory

The signal theory describes how a corporation should indicate to clients of financial statements. Management offers information through financial statements as a signal to lessen information asymmetry. Investors will use the information presented as an announcement to make investment decisions. Investors need more information on the integrity of the information and will first interpret information as either good or bad news.

Bhattacharya and Amy (2001) state that the company will always position itself as good to demonstrate its excellence through believable signals. In general, managers are encouraged to relay favorable information about the company's status to the wider community because doing so can persuade others to invest in the company. Managers must provide persuasive signals to investors supported by underlying data for investors to respond positively. Investors can make investing decisions based on the signals received, which are then reflected in stock price variations.

Because of information asymmetry, managers can influence the signals sent to investors, leading to fraudulent financial reporting. This signal can be seen in the company's financial ratios, which serve as a financial statement analysis tool by reflecting the company's performance and condition.

According to Subramanyam and Wild (2013), financial reports should be appropriately presented to avoid inaccuracies to deliver good signals to consumers of financial statements, allowing users to make suitable economic

decisions. As a result, financial reports must be presented in a relevant manner (relevance). Financial reports must provide information to affect the first primary decision on accounting information. Also, financial reports must be reliable (reliability), that is, the information presented by financial reports must be verifiable, honestly presented, and neutral in nature.

Cash Flow Information

According to Kordestani et al. (2011), it is critical to examine the ability of the combination of cash flows used to anticipate bankruptcy due to the cash flow statement because various management actions cannot considerably alter it. Therefore, the cash flow statement can help compare many aspects of a company's financial decisions. Although earnings information is significant, cash flow information is considered the most relevant.

The components of the second type of cash flow: the company earns negative operating cash flow from its activities and decides to sell its assets to offset these operating expenses. When the company is having problems getting external cash, it will resell its assets to reduce its reliance on external funding from the company. This action might lead to financial difficulties if the company's cash flow from operating activities decreases.

The third type of cash flow component describes the company's short-term financial troubles. In this state, the company is defined as a growing company, and to support its operational and investment operations, it will seek external finance to gain various successful investment options. In high-leverage conditions, the company will suffer financial challenges and responsibilities in the form of principal and interest on loans that must be returned.

The fourth category of cash flow composition implies financial difficulty. When the company generates cash flow from positive operating operations, however, it is insufficient to meet its funding activities and is still required to make an investment. The company may suffer financial difficulties. When a company's ability to generate positive operating cash flow is limited, it may sell company assets to pay a loan.

The fourth type of cash flow component shows the company's cash flow is in financial distress. The company may experience financial difficulties since its operating activities create positive cash flows but are insufficient to support its financing activities, and the company is still undergoing investments. Operating activities generate only a small amount of positive cash flow for the company. According to Shleifer and Vishny (1990), when a company decides to sell assets at a reduced price, it will suffer financial challenges.

The fifth type of cash flow composition demonstrates that the company is rising and performing well. The company offers several attractive investment alternatives. The company borrows extra capital through loans to fund its

investment needs because it has limited cash available to meet investment needs. Because the company has good financial health and easy financing, a portion of the funds is invested in profitable activities, ensuring that the company has significant operating cash flow in the future.

The sixth type of cash flow composition describes the company in the best possible state, with the cash flow composition being the ideal composition that the company should have. According to Gentry et al. (1990), a company's financial health aims to generate positive operating cash flow to offset cash withdrawals. Companies can handle cash inflows from financing activities to settle loan principal and interest and make various lucrative investment decisions.

The seventh type of cash flow composition is a rather uncommon type of cash flow. On the other hand, this form of cash flow shows that the company is having financial troubles. The corporation has operational challenges and difficulty making dividend payments, repaying company loans, and making financial investments. The company will face financial challenges if the investment outcomes do not create cash inflows from operating activities, causing the company to struggle to obtain cash.

The seventh type of cash flow is an uncommon sort of cash flow. This cash flow, however, shows that the corporation is experiencing financial troubles. The company's operations are suffering, and it is difficult to generate funds to pay dividends and repay business fixed investment loans. When the company's investment results are insufficient to generate cash inflows from operating activities, making it difficult to obtain cash, the company will suffer financial challenges.

The seventh type of cash flow composition is another type that infrequently occurs in a company. The corporation has sufficient cash created through operating, investment, and financing cash flows in this sort of cash flow. The corporation may make future development efforts and large investments to repay future loans to reduce external funding or loans.

Previous Studies and Hypothesis Formulation
Leverage Ratio and Fraudulent Financial Reporting
The leverage ratio is a ratio that measures a company's ability to pay off debts with assets and equity that it owns when they are due. Companies with elevated leverage are likelier to fail (Zainudin & Hashim, 2016). They are more likely to break loan contracts (Dalnial et al, 2014) and have trouble accessing further money through debt, which motivates them to engage in fraudulent financial reporting (Nia, 2015, Zainudin & Hashim, 2016 Pribadi et al, 2018). Previous research (Nia, 2015; Zainudin & Hashim, 2016; Adi et al., 2018; Dwi Maryadi et al, 2020; Emalia et al, 2020) has shown that enterprises with high levels

of leverage are more likely to engage in fraudulent financial reporting. Hence the proposed hypothesis is:

H1: **Leverage has a positive impact on fraudulent financial reporting**

Profitability Ration and Fraudulent Financial Reporting

In terms of fraudulent financial reporting, the study's findings show that when the financial target reflected in the company's profitability level is low, the company is more likely to commit fraud because low profitability indicates that it cannot generate more profit from its sales. Companies that earn fewer profits are incentivized to overestimate their income or understate their expenses (Zainudin and Hashim, 2016). Numerous prior research (Ettredge et al., 2010; Indarto and Ghozali, 2016; Setiawati and Baningrum, 2018; Arifin & Prasetyo, 2018; Adi et al., 2018; Emalia et al., 2020) demonstrate that companies with poor financial targets (profitability) will be incentivized to conduct financial reporting fraud. Because company owners employ financial target metrics to assess manager performance, a fall in financial targets will influence the income that managers will receive. Financial targets that still need to be met urge managers to employ a variety of tactics to meet the financial targets that have been set. It encourages managers to engage in fraudulent financial reporting if they cannot be met. The following hypotheses have been offered based on past research:

H2: **Profitability ratio has a negative effect on fraudulent financial reporting**

Asset Composition Ratio and Fraudulent Financial Reporting

According to Dalnial et al. (2014), the company's most frequently utilized assets to carry out fraudulent financial reporting include receivables and inventory, which are part of current assets. Corporations most frequently manipulate current assets (Spathis, 2002). According to Nia (2015), an excessively high receivable-to-revenue ratio value can indicate to consumers of financial statements that the company will misstate the accounts receivable by decreasing the value of these receivables. Companies commit fraud because they have enormous receivables from their operational efforts to produce income, causing management to record incorrect accounts receivable. According to Arifin and Prasetyo (2018), the fraud triangle is related to the conflict of interest between company owners and managers, particularly in assessing current assets and the options managers have to manipulate the value of receivables and inventory. The company owner desires that the value of current assets be large enough to be valued favorably by creditors. In contrast, the management hopes that by raising the value of current assets, the company will be seen to have high performance since it can bring added value to the company. According to the preceding explanation, the hypothesis offered is:

H3: **Asset composition ratio has a negative effect on fraudulent financial reporting**

Liquidity Ratio and Fraudulent Financial Reporting

According to Dalnial et al. (2014) and Nia (2015), companies that commit fraud do so because they have a low level of liquidity and cannot pay off their short-term obligations. According to the findings of Dalnial et al. (2014), working capital is considerably different between companies that engage in fraudulent financial reporting and those that do not. As a result, companies that have restricted liquidity are less likely to meet their financial obligations, prompting them to engage in fraudulent financial reporting. According to Arifin and Prasetyo (2018), the firm's liquidity reflects its level of security in repaying its short-term debt; the greater this ratio, the smaller the danger of the company failing to repay its short-term loan. According to agency theory, there are differences in the interests of company owners and managers in terms of company liquidity. Company owners want a good level of liquidity to gain creditors' trust.

In contrast, managers try to increase company liquidity to be seen as successful in maintaining company liquidity. Companies with low liquidity levels attempt to improve their performance by boosting corporate liquidity to parties with a stake in the company, such as creditors, in their credit decisions. Therefore, the proposed hypothesis is as follows:

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

Capital Turnover and Fraudulent Financial Reporting

This ratio assesses the efficiency with which assets are used to generate revenue. A high ratio number shows that the company is more efficient in managing its assets. This ratio also assesses the company's management's capacity to compete. Numerous prior research (Dalnial et al., 2014; Zainudin and Hashim, 2016) demonstrate that the capital turnover ratio has a detrimental impact on fraudulent financial reporting. According to Nia (2015) and Pribadi et al. (2018), the capital turnover of companies that commit fraudulent financial reporting is significantly different from the capital turnover of companies that do not commit fraudulent financial reporting. According to Arifin and Prasetyo (2018), the conflict between corporate owners and management stems from the efficient use of assets. Business owners demand efficient asset management for the company to compete, whereas managers want success if they can raise sales of corporate assets. The presence of increasingly harsh business competition conditions and insufficient managerial competency puts pressure on managers to manage assets efficiently. The proposed hypothesis is based on this explanation:

H5: Capital turnover ratio has a negative effect on fraudulent financial reporting

Cash Flow Patterns and Fraudulent Financial Reporting

According to Gentry et al. (1990), cash flow information is the most basic information in measuring a company's financial health and estimating its potential value. Because cash flow information can be used to anticipate bankruptcy, bond ratings, and credit/loan risk, one of the motivators for corporations to engage in fraudulent financial reporting is when they encounter financial troubles (Nia, 2015). This claim is supported by Jantadej (2006), who claims that cash flow information is more valuable than earnings information in gauging company performance. A company's cash flow pattern can be linked to its life cycle (Alzoubi, 2019). According to previous research (S. Hastuti and Hutama, 2010; Rezvani et al., 2013; Prasetio et al., 2016; Hastuti et al., 2017; Abiahu et al., 2019), there are significant differences between stock prices and earnings quality at the growth, mature, and decline stages of a company's life cycle. The proposed hypothesis is based on prior research:

H6: Cash flow patterns have a positive effect on fraudulent financial reporting

Sampling

Purposive sampling and a technique based on judgment (judgment sampling) are used, a non-random sample selection in which information is collected depending on particular considerations (Sekaran, 2006). This study's population comprises non-financial enterprises listed on the Indonesia Stock Exchange (IDX) from 2010 to 2019. Companies in the sample were those that met the following criteria throughout the period: (1) published financial reports from 2010 to 2019, (2) presented financial reports in Rupiah currency to ensure a homogeneous data sample in the study, and (3) had comprehensive data from 2010 to 2019 for all variables.

Dependent Variable

Fraudulent financial reporting is the dependent variable. In this study, the fraud variable is a categorical variable assigned a value of 1 if the company is classified as committing fraudulent financial reporting and a value of 0 if the company does not commit fraudulent financial reporting. A combination of Beneish M-Score and Altman Z-Score model was used to categorize companies that commit accounting fraud. Beneish M-Score is as follows:

M-Score = -4,84 + 0,920DSRI + 0,528GMI + 0,404AQI + 0,892SGI +0,115DEPI – 0,172SGAI – 0,327LVGI + 4,697TATA

The Z-Score formula is presented as follows (Altman, 1968) :

Z-Score = 1,2 X1+ 1,4 X2 + 3,3 X3 + 0,06 X4 + 1,0 X5

Description:

X1 = Working Capital / Total assets

X2 = Retained Earnings / Total assets

X3 = Earnings Before Interest and Taxes / Total Assets
X4 = Market Value of Equity / Book Value of Total Liabilities
X5 = Sales / Total Assets

Based on the combined Beneish M-Score and Altman Z-Score models, the company is classified as committing fraud if the Beneish M-Score value is lower than -2.22 and Altman Z-Score is lower than 1.81. On the other hand, companies are classified as companies that do not commit fraud if the Beneish M-Score value is less than -2.22 and Altman Z-Score is more than 2.99.

Hypothetical Testing

This study used binary logistic regression analysis to evaluate the hypothesis (Ghozali, 2016). The second hypothesis was tested using logistic regression analysis. The logistic regression model that was employed in this investigation is as follows:

P(FFR) =   1/ {1+ exp [- β1LEV + β2PROF + β3AC1 + β4AC2 + β5 LIQ + β6CAPT + β7CFP2 + β8CFP3 + β9CFP4 + β10CFP5 + β11CFP6 + β12CFP7

Description:

P(FFR)	:	A categorical variable is worth 1 if there is a probability that the company is committing fraudulent financial reporting and 0 otherwise.
Exp	:	Exponential Function.
LEV	:	The leverage ratio is the ratio of total debt to total assets.
PROF	:	The profitability ratio is the ratio between net income and revenue.
AC1	:	The first asset composition is the ratio between accounts receivable and revenue.
AC2	:	The second asset composition is the ratio between inventory to total assets.
LIQ	:	The liquidity ratio is the ratio between net profit to total revenue.
CFP2	:	The dummy variable is given a value of "1" if the company's cash flow pattern is (+,-,-) and 0 if it does not meet the above criteria.
CFP3		The dummy variable is given a value of "1" if the company's cash flow pattern is (+,-,-) and a value of 0 if it does not meet the above criteria.
CFP4		The dummy variable is given a value of "1" if the company's cash flow pattern is (+,-,-) and a value of 0 if it does not meet the above criteria.
CFP5		The dummy variable is given a value of "1" if the company's cash flow pattern is (-,+,+) and 0 if it does not meet the above criteria.

CFP6		The dummy variable is given a value of "1" if the company's cash flow pattern is (-,-,+) and a value of 0 if it does not meet the above criteria.
CFP7		The dummy variable is assigned a value of "1" if the company's cash flow pattern is (-,+,-) and is given a value of 0 if it does not meet the above criteria.

RESULT AND DISCUSSION

Data Normality

The normality test is used to determine whether or not the two variables in the regression model, namely the independent variable and the dependent variable, have a normal distribution (Ghozali, 2016). The Kolmogorov-Smirnov test was employed to assess normality by examining the Asymp. Sig (2-tailed) with a confidence of 0.05. The research data is said to be normally distributed if the Asymp. Sig (2-tailed) value is greater than 0.05 and not normally distributed if the Asymp. Sig (2-tailed) value is less than 0.05. Table 1 displays the normality test results.

Table 1.
Normality Test Result

Variable	Statistical Test	Asymp. Sig. (2-tailed)	Description
FRAUD	0.382	0.000	Non-Normal Data
LEV2	0.156	0.000	Non-Normal Data
PROF	0.432	0.000	Non-Normal Data
AC2	0.109	0.000	Non-Normal Data
AC3	0.108	0.000	Non-Normal Data
LIQ	0.103	0.000	Non-Normal Data
CAPT	0.138	0.000	Non-Normal Data
CFP2	0.353	0.000	Non-Normal Data
CFP3	0.538	0.000	Non-Normal Data
CFP4	0.489	0.000	Non-Normal Data
CFP5	0.538	0.000	Non-Normal Data
CFP6	0.517	0.000	Non-Normal Data
CFP7	0.535	0.000	Non-Normal Data

Source: Processed secondary data, 2021

All variables in this study are not normally distributed, as shown in table 1 for data normality testing. The normality test in logistic regression must be performed to determine whether the study data is normal or not. According to Ghozali (2016), logistic regression does not require normality assumptions on its independent variables, while data screening for outliers can still be done.

Overall Fit Model

The first stage in determining whether a logistic regression model is appropriate is to examine the model's overall fit or feasibility. The logistic regression model is satisfactory if there is no discrepancy between the observed data and the data produced from the predicted results. The Chi-square technique was employed to examine for the absence of discrepancies between predictions and observations using the Hosmer-Lameshow test. The findings of the Hosmer-Lameshow test are shown in Table 2.

Table 2.
Hosmer and Lemeshow Test Results

Chi-square	df	Sig.
7.644	8	0.469

Source: Processed secondary data, 2021

Testing the prediction model's likeness to observations yielded a chi-square score of 7.664 with a significance of 0.469> 0.05. A significance score larger than 0.05 indicates no difference between the logistic regression model's estimated data and the observation data. This result signifies that the model is correct and no modifications are required.

To illustrate the accuracy of the logistic regression model with observational data, a classification table can be provided in the form of a cross-tabulation table between the prediction results and the observation results. Table 3 shows the cross-tabulation to confirm no significant difference between the observation and prediction data.

Table 3.
Classification Results

Observed		Predicted		
		FRAUD		Percentage Correct
		NON FRAUD	FRAUD	
FRAUD	NON FRAUD	120	5	96.0
	FRAUD	6	167	96.5
Overall Percentage				96.3

Source: Processed secondary data, 2021

The total categorization table in the table above is 96.3%. The test findings demonstrate that of the 173 observations classified as companies that perform fraudulent financial reporting, 167 observations, or 96.6%, can be accurately predicted by this logistic regression model. In comparison, six observations are predicted as companies that do not conduct fraudulent financial reporting. This demonstrates that there is still a type I error in this study using the Altman model. Furthermore, of the 125 observations classified as companies that do not engage in fraudulent financial reporting, 167 observations, or 96%, can be correctly

predicted by this logistic regression model. The remaining five observations are classified as companies that engage in fraudulent financial reporting. This data demonstrates that the Altman model in this research model contains a type II error.

Determination Coefficient

The coefficient of determination determines how much influence the combination of independent variables has on the dependent variable (Ghozali, 2016). Cox and Snell's R square is a measure that attempts to emulate the R square measure in multiple regression, but it has a maximum value of less than one and is difficult to interpret. The coefficient of determination test results is shown in Table 4.

Table 4.
Determination Coefficient

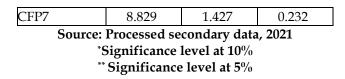| -2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
55.408a	0.699	0.932

Source: Processed secondary data, 2021

With the Beneish M-Score and Altman Z-Score fraudulent prediction model, Nagelkerke's R square value is 0.932. This number demonstrates that the independent variables in this study had an effect of 93.2% on the dependent variable, with the remainder explained by additional variables not included in the regression.

Regression Test Results

In this study, hypothesis testing was performed using logistic regression. The hypothesis is accepted if the significant level is at 10% and 5%. Table 5 shows the test results.

Table 5.
Logistic Regression Results

Variable	Coefficient	Wald	Sig.
LEV	6.134	8.297	0.004**
PROF	-14.822	22.778	0.000**
AC1	12.431	5.035	0.025**
AC2	15.214	13.608	0.000**
LIQ	-5.637	3.353	0.067*
CAPT	-13.273	22.806	0.000**
CFP2	7.051	14.935	0.000**
CFP3	10.956	14.725	0.000**
CFP4	8.750	16.702	0.000**
CFP5	8.119	0.551	0.458
CFP6	16.379	5.200	0.023**

CFP7	8.829	1.427	0.232

Hypothesis Testing Results
Leverage Ratio and Fraudulent Financial Reporting

The leverage variable test results show a positive coefficient value with a significance of less than 5%. These findings suggest that the higher the leverage ratio, the more likely the company will engage in fraudulent financial reporting. As a result, the first hypothesis is accepted. According to agency theory, fraudulent financial reporting in a company where the company owner pressures managers to obtain additional capital from debt and fulfill the loan contract agreement (debt covenant hypothesis) will encourage managers to commit fraud to appear to have good performance.

A high leverage ratio indicates to users of financial statements that the company fails to pay off its debts using its assets and is likely to encounter financial distress in the future. Companies with a higher leverage ratio indicate that the company is experiencing a decrease in revenues due to the increased total debt owned by the company, which will result in increased company expenses, potentially leading to unethical management behavior by committing fraudulent financial reporting. This study supports the findings of several prior researchers (Nia, 2015; Zainudin & Hashim, 2016; Milasari & Ratmono, 2018; Widyanti & Nuryatno, 2018; Arifin & Prasetyo, 2018).

Profitability Ratio and Fraudulent Financial Reporting

The profitability ratio from the logistic regression results has a coefficient with a negative direction and significance of 5%. The negative and significant regression coefficient demonstrates that the lower a company's degree of profitability, the more likely it is to perpetrate fraudulent financial reporting. The results of the tests indicate that the second hypothesis is accepted. Low financial targets managers achieve will impact company owners' welfare, so managers will strive to improve performance. Suppose managers are unable to increase their performance targets. In that case, managers will manipulate in the form of fraudulent financial reporting, and the level of profitability will determine the compensation and bonuses that managers will receive. The findings of this study are consistent with the arguments and findings of various prior studies (Ettredge et al., 2010; Indarto and Ghozali, 2016; Setiawati & Baningrum, 2018; Arifin and Prasetyo, 2018; Adi et al., 2018; Emalia et al., 2020).

Asset Composition Ratio and Fraudulent Financial Reporting

The logistic regression results of the asset composition variable for AC1 (ratio of receivables to sales) and AC2 (ratio of inventories to total assets) indicate a positive regression coefficient with a significance level of 5%. The asset composition variable's positive and significant regression coefficient on the chance of fraudulent financial reporting implies that the higher the value of the asset composition, the more likely the company is to engage in fraudulent financial reporting. The test results support the third hypothesis. This demonstrates that both accounts receivable and inventory can be utilized by businesses to perform fraudulent financial reporting. Businesses can overestimate trade receivables before sales transactions are acquired (Zainudin and Hashim, 2016) or through inventory accounts where the inventory value is overstated due to the company failing to register outmoded inventory (Nia, 2015). Businesses with a high inventory to total asset ratio can also indicate to report users that the company will conduct fraud by falsifying its financial accounts. This is because a high inventory to total asset ratio implies that the company has a high ending inventory, which suggests that it has a low ability to sell its goods, resulting in low profitability. This study supports the findings of previous research (Dalnial et al., 2014; Nia, 2015; Zainudin and Hashim, 2016).

Liquidity Ratios and Fraudulent Financial Reporting

The test findings for the liquidity variable show a negative regression coefficient with a 10% significance level. The fourth hypothesis is accepted based on the test results. Acceptance of this fourth hypothesis shows that the lower the company's liquidity level, the more likely the company is to perpetrate fraudulent financial reporting. Companies with a low degree of liquidity are less likely to be able to pay off financial obligations. Managers would distort financial accounts to avoid a loss of creditor faith and to demonstrate strong performance from managers. This study's findings are consistent with several earlier research studies (Dalnial et al., 2014; Nia, 2015; Arifin and Prasetyo, 2018).

Fraudulent Financial Reporting and Capital Turnover Ratio

The regression coefficient of the capital turnover ratio is skewed in the negative direction, with a significance level of less than 5%. This demonstrates that the lower the company's capital turnover, the more likely it is to engage in fraudulent financial reporting. The fifth hypothesis is accepted based on the regression results. According to (Nia, 2015), a low capital turnover ratio can indicate that companies that commit fraud are less competitive than non-fraud companies in using company assets to generate revenue, resulting in low company revenues, which has an impact on decreasing profits and does not rule out the possibility that it will experience financial distress in the future. This circumstance might motivate management to engage in fraudulent financial reporting, particularly on the company's income statement, by boosting phony income, such as fictitious

sales involving fictitious clients, to meet the profit objective. This study's findings are consistent with several previous research studies (Dalnial et al., 2014; Nia, 2015; Zainudin and Hashim, 2016; Arifin & Prasetyo, 2018; Pribadi et al., 2018).

Cash Flow Patterns and Fraudulent Financial Reporting

The results of hypothesis testing show that the second type of cash flow pattern (CFP2), the third type of cash flow pattern (CFP3), the fourth type of cash flow pattern (CFP4), and the sixth type of cash flow pattern (CFP6) have positive regression coefficients and are significant at the 5% level, so the sixth hypothesis is accepted for the above type of cash flow pattern. However, the fifth and seventh types of cash flow patterns are insignificant, so the seventh hypothesis for this cash flow pattern is rejected. Companies in the second type of cash flow pattern (CFP2) are categorized as companies in the growing stage (Gup et al., 1993) and prone to undertake fraudulent financial reporting through the selection of accounting procedures or policies. However, it is accomplished through transactions. This is supported by research (Prasetio et al., 2016), which shows that companies tend to practice actual earnings management at the mature stage. In the third type of cash flow pattern (CFP3), companies are divided into decline stages companies that generate positive cash flow and opt to sell company assets to pay the corporate debt or buy back company shares (Gup et al., 1993).

As a result, companies at this stage of fraudulent financial reporting use categorization shifting or accrual earnings management to avoid reporting losses on the income statement. Companies are grouped into the final growth stage in the fourth kind of cash flow pattern (CFP4). At this point, companies still require significant external finance in the form of loans or the issuance of shares to maintain significant investment. Companies at this stage tend to generate inconsistent income (Abiahu et al., 2019). Hence, companies will shift categorization to retain core earnings, so that manager performance does not look negative.

Companies in the sixth type of cash flow pattern must create sufficient operating cash flow. They are classified into the final life cycle stage when the company has faced financial difficulties, and the company manager can no longer engage in fraudulent financial reporting. Companies in the start-up group (Gup et al., 1993) are classed as companies in the sixth type of cash flow pattern (Abiahu et al., 2019), where companies at this stage generate negative operational cash flow and tend to make a lot of investments to develop growth prospects. At this point, companies frequently engage in fraudulent financial reporting through accrual earnings management (Prasetio et al., 2016; Abiahu et al., 2019). Companies classified as being in financial distress are included in the seventh category of cash flow pattern. As a result, this company cannot engage in fraudulent financial reporting.

CONCLUSION

According to the test results, (1) the leverage ratio has a positive effect on fraudulent financial reporting, (2) the profitability ratio has a negative effect on fraudulent financial reporting, (3) the asset composition ratio has a positive effect on fraudulent financial reporting, (4) the liquidity ratio has a negative effect on fraudulent financial reporting, (5) the capital turnover ratio has a negative effect on fraudulent financial reporting, and (6) the company life cycle with cash flow patterns of types 2, 3, 4, and 6 has a positive probability of influence on fraudulent financial reporting. The findings add to the signaling theory's explanation of the benefits of financial statements (financial position, income statement, and cash flow) in anticipating fraudulent financial reporting. This research is also expected to be useful for investors and creditors because the combined Beneish M-Score and Altman Z-Score models can be used as a model in predicting fraudulent financial reporting, making it a consideration in decision-making for investors to be more cautious when investing and creditors to be cautious when providing loans. Further research results can be utilized as a reference for future research to confirm the fraudulent financial reporting prediction model and establish the best appropriate prediction model.

According to this study's findings, there is still type I and type II errors in classifying companies that are classified as undertaking fraudulent financial reporting and companies that are not. Thus, it is hoped that future research will include other financial ratios.

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