



Fraud Triangle Analysis Detects Fraudulent Financial Statements Using A Fraud Score Model from 4 BUMN Bank 2012-2022

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ABSTRACT: This research delves into the intricacies of anti-fraud measures implemented in Indonesia's banking sector, specifically focusing on four state-owned banks (BUMN). Against the backdrop of financial challenges faced by entities like Krakatau Steel and Jiwasraya, the government and Financial Services Authority (OJK) introduced internal controls to rebuild public trust. However, concerns arose with the establishment of BUMN holding companies, leading to the consolidation of top executives and influencing public trust, this is an important factor in determining BUMN performance. Consequently, the OJK responded by reinforcing banking regulations to address these concerns and ensure a resilient financial sector. Utilizing SPSS Version 25, the study meticulously analyzed the impact of pressure, opportunity, and rationalization on financial statement fraud in state-owned banks from 2012 to 2022. Noteworthy findings revealed that conventional elements such as financial stability, external pressure, financial targets, the nature of the industry, and rationalization do not effectively detect financial statement fraud. Conversely, the study highlighted that ineffective monitoring holds the potential to identify such fraudulent activities. These insights contribute significantly to a comprehensive understanding of the dynamics surrounding financial statement fraud in Indonesia's state-owned banking sector. Furthermore, the research offers valuable input for the development of enhanced prevention and management strategies, underscoring the enduring influence of the fraud triangle in shaping the landscape of anti-fraud measures within the banking industry. Ultimately, this study serves as a critical resource for policymakers, regulators, and industry stakeholders seeking to fortify the resilience of Indonesia's banking sector against the threat of financial statement fraud.

Keywords: Fraud, Fraud Triangle, Financial Statement Fraud, Internal Control, Anti-Fraud



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INTRODUCTION

The Financial Services Authority (OJK) and the government constantly undertake internal controls, including audit processes, in an effort to decrease the incidence of fraud in banking,

particularly in state-owned banks (BUMN) in Indonesia. There are trust issues among the public concerning BUMN companies due to financial challenges faced by entities like Krakatau Steel and Jiwaskarya. The formation of BUMN holding companies has further raised trust concerns, especially when consolidating top BUMN executives, risking trust agreement violations. Strong public trust significantly influences BUMN performance. OJK has strengthened banking regulations to prevent fraud, acknowledging the crucial role of the banking sector in Indonesia's economy. Frontline prevention efforts involve commissioners, committees, risk management teams, and anti-fraud units in banks, with OJK acting as the second line of defense.

Fraud prevention regulations have been in place since 2011, complemented by POJK No. 39/POJK.03/2019 on Anti-Fraud Strategy Implementation. OJK also regulates key personnel qualifications in financial institutions, detailed in POJK No. 27/POJK.03/2016, covering shareholders, board members, and directors. Financial statements hold immense importance, guiding management decisions to enhance business performance and ensure sustainability. High-quality financial reports, meeting criteria like clarity, relevance, comparability, and reliability, are vital. SAS No. 99 (2002) states that fraud on financial statements involves intentional misrepresentations. Cases of financial statement fraud worldwide have raised questions about corporate operations and the reliability of published financial reports.

These fraudulent practices, known as "window dressing," have tarnished the image of accounting and auditing professions. Pressure arises when financial stability is threatened, markets are competitive, shareholders target high profits, and management faces performance risks. Positive correlations between pressure and fraud on financial statements are noted ([Sihombing & Rahardjo, 2014](#); [Siddiq et al., 2017](#)).

An opportunity arises when poor management leads to mismanagement issues ([Choo & Tan, 2007, as cited in Rustiarini & Novitasari, 2014](#)). Significant positive relationships exist between opportunity and financial statement fraud ([Aprilia and colleagues in 2017](#); [Putri and others in 2017](#)). Rationalization, individuals justifying their actions, often arises due to a lack of understanding of ethical standards or aggressive profit growth goals. Positive correlations between rationalization and financial statement fraud are found ([Nurbaiti, 2017](#); [Siddiq et al., 2017](#)). Effective fraud prevention requires skilled individuals; without expertise, opportunities for fraud decrease ([Zaini et al., 2015](#)).

In the realm of business, when a company maintains stability, it enhances its value in the eyes of stakeholders. According to SAS No. 99, managers encounter pressure to fake financial reports when financial stability and/or profitability are threatened by economic, industry, or operational factors confronting the business ([Skousen et al., 2009](#)). Studies by [Loebbecke et al. \(1989\)](#) and [Bell et al. \(1991\)](#) suggest that in cases where a company experiences below-average industry growth, management may manipulate financial reports to bolster the company's prospects ([Skousen et al., 2009](#)). Companies strive to improve their positive image by manipulating information about their assets. Manipulation within financial reports undertaken by management is often related to the company's asset growth ([Skousen et al., 2009](#)). [Persons \(1995\)](#) further stated that managers in fraudulent companies tend to be less competitive than managers in non-fraudulent companies

when it comes to utilizing company assets to generate income, providing an incentive for accounting fraud.

Detecting and eliminating fraudulent practices in financial statement reporting is crucial. Prior studies by [Mariati and Emmy Indrayani \(2019\)](#) and [Rachmawati and Marsono \(2014\)](#) investigated fraud detection in past financial reports, focusing on banking corporations listed on the Stock Exchange of Indonesia. The fraud triangle's elements of opportunity, pressure, and rationalization were all taken into account in both investigations.

Therefore, one measure of financial stability that is often utilized is the sales-to-total-assets ratio. A low turnover rate of company assets to generate income signifies financial instability, prompting management to resort to commit accounting fraud in order to increase sales. Studies carried out by [Persons \(1995\)](#) demonstrated that the lower a company's total asset turnover rate, the higher the tendency for the company to engage in financial statement fraud. Based on this description, the research hypothesis is formulated as follows:

H1: Financial stability can identify financial statement fraud.

One of the many external limitations that businesses face is the need to look for more debt or outside funding sources in order to stay competitive. This covers capital expenditures in addition to funds for research and development ([Skousen et al., 2009](#)). It is necessary for enterprises to be seen as capable of repaying loans from outside sources in order to be granted them. One way to gauge external pressure is to look at the leverage ratio, which is the ratio of total debt to total equity.

The leverage ratio compares the amount of money a company receives from its creditors to the amount it borrows to fuel its operations. Overuse of debt can put a business at risk by classifying it as having excessive leverage, implying that it is stuck with high debt levels and finds it difficult to reduce them. As a result, businesses need to find a balance between the amount of debt that is fair to take on and the sources from which it can be repaid.

According to [Persons \(1995\)](#), having more leverage might be associated with a lower capacity to get fresh resources through loans as well as a higher likelihood of credit agreement breaches. This assertion is corroborated by [Lou and Wang \(2009\)](#), who pointed out that businesses are more likely to identify severe fraud-related errors when they are under external pressure. The following is the formulation of the research hypothesis based on this description:

H2: Financial statement fraud can be identified by outside pressure.

Company managers have an obligation to execute to the best of their abilities in order to meet the predetermined financial goals. Return on Assets (ROA), which is the ratio of income to total assets, is a widely used operational performance metric that shows how well assets are employed ([Skousen et al., 2009](#)). When evaluating management performance, ROA is widely used, which has an impact on choices about incentives, pay raises, and other matters. Significant variations in ROA were

noted by [Summerrs and Sweeney \(1998\)](#) between fraudulent and non-fraudulent organisations ([Skousen et al., 2009](#)). Return on Assets is therefore utilised to stand in for the financial target variable.

ROA is a metric used to evaluate a company's management team's capacity to produce total earnings. According to [Dendawijaya \(2005\)](#), a company's position in asset utilisation and amount of profit are positively correlated with its ROA. According to [Widyastuti's 2009](#) study, businesses with substantial profits—as determined by profitability or return on assets—tend to be more likely than smaller businesses to use revenue management.

[Skousen et al.'s \(2009\)](#) research findings, however, did not corroborate claims that ROA had an impact on financial statement fraud. The purpose of this study is to prove that ROA reduces financial statement fraud. The following is the formulation of the research hypothesis based on this description:

H3: Financial targets are able to identify fraud in financial statements.

The characteristics of the industry reflect the best circumstances for businesses operating in that particular field. Certain accounts, such questionable accounts receivable and outdated inventory, have amounts in financial statements that the business estimates. According to [Summers and Sweeney \(1998\)](#), calculating uncollectible sums in both accounts requires subjective judgement. Additionally, they claimed that when managers want to falsify financial figures, they frequently concentrate on these accounts. Intentional mistakes in inventory valuation and uncollectible accounts receivable estimation give management a chance to commit fraud ([Ratmono et al., 2014](#)).

[Sihombing and Rahardjo's \(2014\)](#) research revealed that the ratio of a company's receivables to its total assets may be used to identify financial statement fraud. Other research, nevertheless, had different findings. For example, [Skousen et al. \(2009\)](#) found that the overall changes in accounts receivable were insufficient to identify financial statement fraud. This description leads to the following notion being put forth:

H4: Features of the industry can identify financial statement fraud.

According to [Gunarsih and Hartadi \(2002\)](#), the board of commissioners is thought to be very important, particularly when it comes to overseeing upper management. It is anticipated that the presence of independent commissioners will reduce fraudulent activities and improve the efficacy of corporate supervision. An independent commissioner's ability to function independently from shareholders, directors, management, or other internal parties allows them to supervise with more objectivity. Weak leadership is frequently the root cause of fraudulent activities, giving agents and managers the chance to participate in defensive revenue management ([Andayani, 2010](#)). Deceptive practices can be reduced with the use of efficient supervision systems. It is thought that independent commissioners improve the efficacy of corporate oversight. According to the [Forum for Corporate in Indonesia \(2003\)](#), they are in charge of making sure the company's strategies are carried out, supervising management as they operate the business, and maintaining accountability.

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This is consistent with Statement on Auditing Standards (SAS) No. 70, which states that in the absence of compensating measures such oversight by the board of commissioners or audit committees, some financial statement fraud may arise from management's dominance by individuals or a small group. As a result, the percentage of independent commissioners (IND) influences how effective supervision is.

Research by [Kusumawardhani \(2013\)](#) and [Lisa et al. \(2009\)](#) revealed how many independent commissioners are able to determine if financial statement fraud takes place in a business. According to [Skousen et al. \(2009\)](#), the findings showed that fraud is more prevalent in businesses with fewer board members. [Nevertheless, Skousen et al. \(2009\)](#) found no evidence to support the hypothesis that financial statement fraud is impacted by the percentage of independent commissioners. The following hypothesis is put out by this study in light of this description:

H5: Financial statement fraud can be identified by insufficient supervision.

According to [Zandstra \(2002\)](#), the board's moral and ethical failings were the main cause of Enron's demise. According to [Apostolou et al. \(2001\)](#), who looked at managerial traits and their impact in a controlled setting, managerial traits are just as significant as operational aspects, which means that ethics is a crucial element in the rationalisation process.

In order to hide falling performance, management manipulates revenue ([Stratopoulos et al., 2013](#)). Excessive focus on revenue forecasts and managerial attitudes on financial reporting have been linked to financial statement fraud, according to a number of studies ([Bell, 2000](#); [Loebbecke et al., 1989](#)). One popular technique used in financial statement fraud is earnings management. [Utomo \(2011\)](#), on the other hand, said that bonus plans encourage corporate directors to control profitability in order to optimise their payouts.

Director bonus schemes are factors in determining the amount of bonus given to directors based on yearly success seen in the company's earnings, according to [Suryatiningsih et al. \(2009\)](#). Bonuses are awarded during the Annual General Meeting (AGM) by the company's owner or shareholders. [Irpan \(2010\)](#) stated that director bonus plans work similarly to pay the board of directors salary according to their performance.

Two words are commonly used in bonus contracts: cap (the maximum profit level) and bogie (the minimum profit level required to get a bonus). Managers do not get bonuses if they perform below the bogey. Bonuses for managers will not be increased if profits exceed the threshold. Managers often try to minimise gains if net income is below the bogey or above the cap. Managers will only be motivated to raise the company's net income if net income is greater than the cap and the bogey. In order to maximise their incentive payments, managers are encouraged by bonus plans to manipulate earnings ([Utomo, 2011](#)). Because they would rather have bigger wages now, managers are therefore more likely to commit fraud by selecting accounting strategies that can move earnings from the future to the present. The following hypothesis is put out by this study in light of the previous description:

H6: Financial statement fraud can be identified via bonus methods.

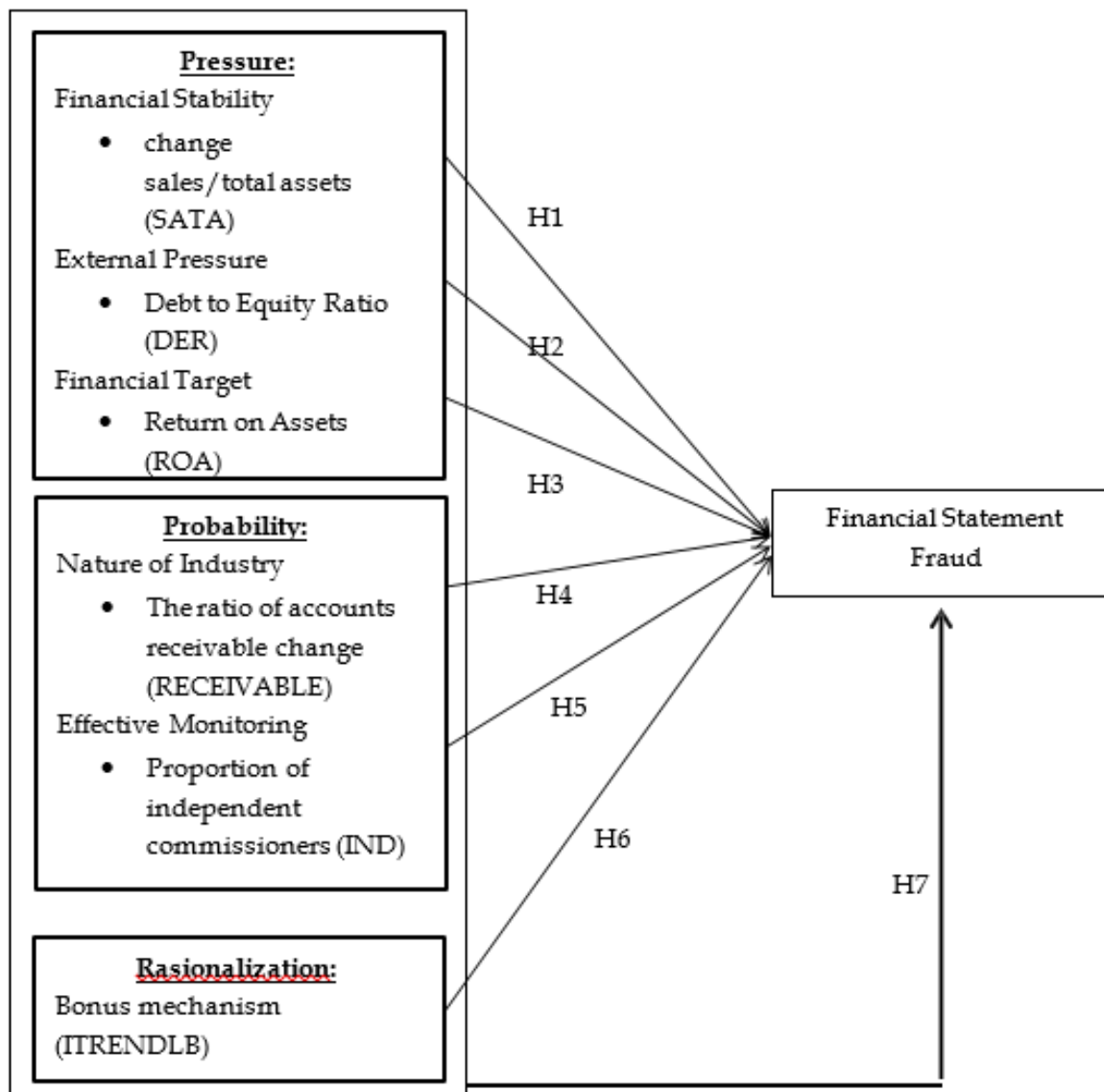


Figure 1. Theoretical Structure of Fraud Triangle

Source: Cressey Theory (1953) or SAS No.99.

METHOD

Using the fraud triangle, this study examines financial statement fraud at four owned-stated banks that are part of the IDX Index. The three-year trial period runs from 2012 to 2022. In order to gather data for this study, financial statement data from 2012 to 2022 is obtained from www.idx.co.id. Four owned-stated banks listed on the Indonesia Stock Exchange (IDX) that are projected to be susceptible in 2022 must be identified, and their presence in the IDX index from 2012 to 2022 must also be taken into consideration. These are the criterion for selecting the sample. The investigation is divided into two primary phases: sampling in the first phase and checking to

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see whether financial statements include any fraudulent activity in the second phase. Using the F-Score Model created by [Dechow \(2009\)](#), the hypothesis testing step looks at the variables impacting financial statement fraud based on the fraud triangle. One method used to identify financial statement fraud is the F-Score Model.

Model calculation:

$$\text{F - Score} = \text{Accrual Quality} + \text{Financial Performance}$$

$$\text{Accrual Quality} = \frac{(\Delta WC + \Delta NCO + \Delta FIN)}{ATS}$$

Where,

WC	:	(Current Assets – Current Liability)
NCO	:	(Total Assets – Current Assets – Investment and Advances) – (Total Liability – Current Liability – Long Term Debt)
FIN	:	Total Investment – Total Liabilities
ATS	:	(Beginning Total Assets + End Total Assets) / 2
WC	:	Working Capital
NCO	:	Non-current operating accrual
FIN	:	Financial Accrual
ATS	:	Average Total Assets

$$\text{Financial Performance} = \text{change in receivable} + \text{change in inventories} + \text{change in cash sales} + \text{change in earnings}$$

Where,

Change in Receivable	=	$\Delta \text{Receivable} / \text{Average Total Assets}$
Change in Inventory	=	$\Delta \text{Inventory} / \text{Average Total Assets}$
Change in Cash Sales	=	$[(\Delta \text{Sales} / \text{sales} (t) - (\Delta \text{Receivable} / \text{receivable} (t))]$
Change in Earnings	=	$[(\text{Earning} (t) / \text{Average Total Assets} (t)) - (\text{Earning} (t-1) / \text{Average Total Assets} (t-1))]$

Examining the variables that affect the likelihood of financial statement fraud is the next step. Classical assumption tests were carried out on the model prior to doing multiple linear regressions on it. The evaluation of heteroscedasticity, autocorrelation, multicollinearity, and normality is one of these tests. Furthermore, the Goodness of Fit measures the accuracy with which the regression function estimates the true value. According to [Ghozali \(2013\)](#), the coefficient of determination,

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statistical F value, and t-statistics value are strategically taken into account while determining the Goodness of Fit rating.

The following is an outline of the mathematical form that shows how the dependent and independent variables are related:

$$F_SCORE = \alpha + \beta_1 (SATA) + \beta_2 (DER) + \beta_3 (ROA) + \beta_4 (RECEIVABLE) + \beta_5 (IND) + \beta_6 (ITRENDLB) + \epsilon$$

Table 1. Variables in Operational Definition

No.	Notation	Variable	Proxy	Measurement
1.	SATA	Financial Stability	Total Assets Turnover	$SATA = \frac{\text{Total Sales}}{\text{Total Assets}}$
2.	DER	External Pressure	Debt to Equity Ratio	$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$
3.	ROA	Financial Target	Return on Assets	$ROA = \frac{\text{Net Income before extraordinary t}}{\text{Total Asset t}}$
4.	RECEIVABLE	Nature of Industry	Total Change of Acc. Receivable	$RECEIVABLE = \frac{\text{Receivable t} - \text{Receivable t - 1}}{\text{Sales t} - \text{Sales t - 1}}$
5.	IND	Effective Monitoring	Ratio of Independence Boards	$IND = \frac{\text{Num. of Independent Boards}}{\text{Total of Boards}}$
6.	ITRENDLB	Rationalization	Net Profit Trend Index	$ITRENDLIB = \frac{\text{Net Profit t}}{\text{Net Profit t - 1}}$

Source: Processed Data, 2023

RESULT AND DISCUSSION

The financial statements of state-owned banks—four of which were listed on the Indonesia Stock Exchange's IDX stock index between 2012 and 2022—make up the data examined in this study. The examination of the independent variable calculations produced the following findings, which are as follows: SATA represents financial stability; DER stands for external pressure; ROA stands for financial target; RECEIVABLE represents the nature of industry; IND stands for ineffective monitoring; and ITRENDLB represents rationalisation. Furthermore, the F-SCORE is used in the computation of the dependent variable, financial statement fraud.

Descriptive Analysis

The descriptive data outcomes are presented as follows:

Table 2. Descriptive Statistics Analysis Results

VARIABLE	N	Minimum	Maximum	Mean	Std. Deviation
F_SCORE	44	-45.79	9.45	-13.8913	11.86657
SATA	44	0.04	0.13	0.0687	0.02778
DER	44	4.75	16.08	7.5426	2.74651
ROA	44	0.00	0.03	0.0185	.00825
RECEIVABLE	44	-0.98	-0.49	-0.7582	.12535
IND	44	0.13	0.33	0.1951	.06303
ITRENDLB	44	0.07	7.66	1.3445	1.11286
Valid N (listwise)	44				

Source: Processed Data, 2023

Four state-owned banks included in the IDX index performed research throughout the study period, and the average financial statement fraud, as determined by the Fraud Score Model, was -13.8913. This indicates that the sampled companies in the study did not exhibit any fraudulent activities in reporting their financial statements, as the fraud score was below 1. This suggests that companies included in the IDX index during the observation period demonstrated good ethics and compliance with rules in presenting their financial reports. Notably, the lowest fraud score or normal risk was observed in BBTN in 2019 at -45.788, while relatively higher fraud was found in BBNI in 2019 at 9.455.

The turnover of assets (SATA) reflects the financial stability of a company. Efficient asset management leads to increased sales and profits, resulting in a high return on investment. The study's average total sales split by assets was 0.0687, which was higher than the 0.02778 standard deviation. This shows that the studied state-owned banks were able to produce sales that accounted for 0.0687 of their total assets on average. In 2021, BBNI had the lowest asset turnover (0.041), while in 2015, BBTN had the greatest asset turnover (0.127).

The leverage level, representing a company's ability to obtain funds from third parties for additional capital, had an average debt-to-equity ratio of 7.5426 in this study. This implies that the sampled companies were capable of repaying loans without constraints, as the equity held by the

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companies was sufficient to guarantee their debts. Throughout the study period, BBRI had the lowest leverage level at 4.7511 in 2021, while BBTN had the highest at 16.0786 in 2020.

Projected financial objectives, as determined by Return on Assets (ROA), show how well managers have performed in terms of awarding bonuses, raising salaries, and other benefits. The average ROA for all sampled companies in this study was 0.0185, indicating a less-than-optimal ability to generate profits through asset utilization, as the ROA values were below 2%. BBRI had the highest ROA at 0.034 in 2012, while BBTN had the lowest at 0.001 in 2019. The industry nature, represented by RECEIVABLE, describes the ideal condition of companies in that industry. The average industry nature value was -0.7582, suggesting that corporate receivables in the IDX index were highly conservative in determining credit policies. Notably, BBTN had the lowest industry nature value at -0.985 in 2012, while BBTN had the highest at -0.496 in 2020. Ineffective monitoring, reflected in the presence of independent commissioners, had an overall average value of 0.1951 or 19.51%. This indicates that all companies in the IDX index had independent commissioners, but the effectiveness was considered inadequate, with the percentage below 50%. The highest value was 0.333 in several years, including 2013, 2014, and 2016 for BBNI, while the lowest was 0.125 in multiple years, including 2018, 2019, 2020, 2021, and 2022 for BBRI. The study's bonus mechanism, which measured rationalisation, had an overall average value of 1.3445, meaning that the tested firms gave incentives to management or the board of directors equal to 1.34% of their net sales. BBTN had the highest bonus mechanism at 7.657 in 2020, while BBTN had the lowest at 0.075 in 2019.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-37.008	14.529		-2.547	0.015
	SATA	129.173	109.136	0.302	1.184	0.244
	DER	0.360	1.322	0.083	0.273	0.787
	ROA	272.341	245.939	0.189	1.107	0.275
	RECEIVABLE	-29.828	15.784	-0.315	-1.890	0.067
	IND	-100.416	27.770	-0.533	-3.616	0.001
	ITRENDLB	2.572	1.683	0.241	1.528	0.135

Source: Processed Data, 2023

Financial Stability does not detect Financial Statement Fraud,

The initial supposition that financial stability, as measured by the ratio of total assets to sales (SATA), might identify financial statement fraud was refuted. With a significance value of (0.244) > (0.05), the hypothesis testing findings showed that asset turnover is ineffective in identifying financial statement fraud in businesses included in the IDX index. The results of Zainudin and Hashim's (2016) study, which proposed that asset turnover might identify financial statement fraud, are in conflict with this outcome. When financial stability and/or profitability are threatened by economic uncertainty, managers may resort to dishonest behaviour. However, the study aligns

with [Person \(2011\)](#) and [Ratmono et al. \(2014\)](#), indicating that managers involved in fraud are typically less competitive in utilizing company assets to generate income.

Financial Statement Fraud is not detected by External Pressure,

The company's capacity to repay loans using equity-backed capital (DER) did not support the second hypothesis about external pressure. With a significance value of $(0.787) > (0.05)$, the hypothesis testing findings indicated that DER is unable to reliably identify financial statement fraud in businesses included in the IDX index. This result runs counter to the claims made by [Lisa et al. \(2013\)](#), [Rachmawati and Marsono \(2014\)](#), [Martantya and Daljono \(2014\)](#), and [Spathis \(2002\)](#) that financial statement fraud is unaffected by outside pressure. According to the study, the sampled organisations had the option to repay debt, which would lessen the pressure on management to commit financial statement deception.

Financial Statement Fraud is not detected by Financial Target,

The third theory, according to which financial statement fraud might be identified via Return on Assets (ROA), was disproved. With a significance value of $(0.275) > (0.05)$, the findings of the hypothesis testing indicated that ROA is ineffective at identifying financial statement fraud in firms included in the IDX index. This result is consistent with research by [Sihombing and Rahardjo \(2014\)](#), [Ratmono et al. \(2014\)](#), [Rachmawati and Marsono \(2014\)](#), and [Skousen et al. \(2009\)](#), which found that financial statement fraud cannot be detected by the projected financial target using ROA. According to the study, managers could believe that ROA objectives are attainable, which would lessen the possibility of financial reporting fraud.

Financial Statement Fraud is not detectable due to industry nature,

The fifth hypothesis, that RECEIVABLE can identify financial statement fraud, was not supported, with a significance value of (0.067) greater than (0.05) . However, the industry type variable was not very efficient in detecting financial statement fraud in businesses featured on the IDX index. This discovery is comparable to [Sihombing and Rahardjo's \(2014\)](#) argument that industry nature, as indicated by changes in accounts receivable to sales, may identify financial statement fraud. According to the study, high increases in accounts receivable may indicate financial instability; nevertheless, this variable alone is not a strong signal of dishonest reporting.

Financial Statement Fraud can be identified by ineffective monitoring,

The sixth hypothesis that IND can detect financial statement fraud was accepted, with a significance value of $(0.001) < (0.05)$. This finding aligns with [Kusumawardhani \(2013\)](#) and [Lisa et al. \(2009\)](#), stating that independent commissioners can detect financial statement fraud. However, the study presents a counterintuitive result, suggesting that a higher proportion of independent commissioners increases financial statement fraud. The explanation may lie in the suboptimal control function of independent commissioners, as strong control by majority shareholders hinders effective oversight.

Financial Statement Fraud is not detectable by rationalisation,

The seventh hypothesis that ITRENDLB can detect financial statement fraud was not supported, with a significance value of $(0.135) > (0.05)$. Rationalization, reflected in revenue management, is considered the initial step of financial statement fraud. However, the study suggests that the variable may not be highly effective in detecting fraud. The findings are consistent with [Tuanakotta \(2010\)](#), emphasizing the role of management compensation linked to net profit in motivating fraudulent financial reporting.

CONCLUSION

Based on the testing and data analysis in this study, it is concluded that the pressures within the banking environment do not significantly influence the level of financial statement fraud in the four state-owned banks during the research period. Despite being a potential trigger for fraudulent behaviour, pressure does not substantially impact these examined banks. The research findings reveal that the opportunity factor plays a more significant role in influencing the level of financial statement fraud in these banks. Opportunities for fraud, arising from weak internal control systems or regulatory gaps, increase the likelihood of fraud occurrence. Therefore, improving internal controls and regulatory oversight is crucial to reducing opportunities for fraud. Additionally, while the rationalization factor is challenging to measure internally, it significantly influences financial statement fraud. The presence of rationalization or justifications from fraud perpetrators can be a driving factor for fraud. Hence, an approach encompassing psychological and ethical aspects in the work environment can help reduce the tendency for rationalization and, consequently, decrease fraud. Real implications added: This underscores the importance of addressing opportunities for fraud through enhanced internal controls and regulatory measures while emphasizing the need for a holistic approach encompassing psychological and ethical factors to mitigate the influence of rationalization on financial statement fraud in Indonesia's state-owned banking sector.

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