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PENTAGON FRAUD MODELLING: HOW IT AFFECTS FINANCIAL STATEMENT

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Abstract
This study examined conceptually the detection of financial statement fraud using Banking fraud in Indonesia Stock Exchange (BEI) Companies Listed on the Indonesia Stock Exchange (BEI) during 2017-2021 in a total of 200 samples from 40 companies using EViews analysis. The methodology adopted in this study is quantitative research in which relevant and extant literature related to elements in Pentagon fraud model is reviewed about financial statement fraud. Financial stability does not affect financial statements in a significant linear fashion, and financial targets and external parties that seek to suppress have a significant negative impact on financial statements and do not show significance on other variables, being the result of this study. Current fraud insights are an important factor, both for managers in managing finances and for regulators/policymakers in preventing structured and reliable financial statement fraud.

Keywords: Fraud Pentagon, Financial Target, Prevention, Financial Statement, External Pressure, And Financial Stability.

1. Introduction

The company has documents that contain information and record traces related to the dependencies and holdings established in the financial statements. Financial statements are a form of the responsibility of corporate agents towards interested groups (stakeholders). The data contained in the financial statements is used as a form of communication between agents and stakeholders. The financial statements contain about the performance of the company's management and show the condition of the company during one period of business. The report is also used as a financial aspect that can drive the company's future sustainability (Ruchiatna et al., 2020). Especially for companies that go public, should publish reports as a form of communication and communication to stakeholders including management, employees, investors, creditors, suppliers, customers, and governments (Novitasari & Chairi, 2018).

The reliability of the data in the financial statements is important for the preparation of financial statements so as not to mislead users and cause material problems. Every company wants to publish the financial statements that best describe the company's operations to get a good picture of the different parties that use it. Fraud is an intentional act committed to causing harm to a particular party. Based on research by the Association of Certified Fraud Examiners (ACFE, 2016), financial reporting fraud causes over 75% financial loss ($975,000), 15% ($200,000) corruption, and 10% ($125,000) misuse of assets. This makes financial reporting fraud the type of fraud that causes the most financial losses compared to corruption and misappropriation of assets.

The most affected by fraud is the financial and banking industry with 41.4%. ACFE (2018) said in its Report to The Nations that the financial and banking industry ranks first among organizations harmed by fraud. On the other hand, in the Indonesia Fraud Survey

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2016, the financial and banking industry took second place among organizations harmed by fraud (ACFE, 2019). In Indonesia, the banking industry is regulated in such a way that financial statement fraud does not occur, although preventive measures still allow fraud to occur in financial statements if it is not detected as early as possible. At least two major cases involving the banking industry, such as the Bank Century case involving the misappropriation of rescue funds by Bank Indonesia and the Citibank Indonesia case related to money laundering, were also found to be fraudulent financial reporting. Therefore, research on the banking sector makes it possible to explore more further.

2. Theoretical Background

The owner of the company cannot carry out the functions and management of the company on his own due to time, labor, and ability constraints. Therefore, it is necessary to distinguish between the owner of the company and the management of the company. Agency theory is a theory that explains the existence of a contractual relationship between the shareholder (principal) and management (agent) in which the principal delegates decision-making authority to the agent and the agent must be responsible to the principal for their performance (Jensen & Meckling, 1976).

The conflict of interest that occurs between the principal and the agent creates an attitude of mistrust because the agent will act in his interest and not maximize the principal's interests. This is what gives the agent a great opportunity to commit fraud. Cheating occurs because of human nature: self-interest, limited thinking about the future (bounded rationality), and always avoiding risk (risk averse). Self-interest relates to pressure factors, ability, and arrogance. Risk aversion is related to opportunity factors and rationalization (Aprilia, 2017).

Fraud is the deliberate act of causing harm to a particular party. Black's Law Dictionary conceptualizes fraud as something that people think is done by someone trying to profit from others in the wrong way or by imposing an unexpected, cunning, devious, hidden truth can be done (ACFE, 2016). According to the American Institute of Certified Public Accountants (1998), financial statement fraud is an act or intentional omission that results in material misstatements in financial statements. Furthermore, according to the Australian Auditing Standards, financial statement fraud is the omission or misrepresentation of amounts of financial statements or the deliberate disclosure of information with the intention of misleading users of financial statements (Brennan and McGrath, 2007).

The Association of Certified Fraud Examiners (ACFE) classifies fraud into three groups: Financial Statement Fraud, Asset Misappropriation, and Corruption. The Fraud Triangle is a concept that explains the factors behind fraudulent activity. The concept of a fraud triangle comes from the American Institute of Certified Public Accountants (AICPA) Statement on Auditing Standards (SAS) No. 99, which amends SAS No. 82, "Considerations of Fraud in Auditing Financial Statements," to provide examples of fraud and risk factors. I'm right here. SAS No. 99 links fraud risk factors to fraud triangles, based on a 1953 study by Donald Cressey of the AICPA (2002). The study concluded that fraud usually has three characteristics. The deception triangle consists of three conditions that are usually present in deception: pressure, rationalization, and opportunity.

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Figure 1. Fraud Pentagon, Sources: Crowe (2011)

High assets of a company are also assessed as indicating the prospects of a company. Thus, the condition becomes an attraction for investors, creditors, and decision-makers (Sariutami & Nurbaiti, 2016). When the value of changes in the objects and possessions that are owned changes very noticeably, the value of the probability of the manipulation becomes higher and perpendicular.

3. Methods

This research uses quantitative research methods with a deductive, objective and scientific nature, in which all data are obtained in the form of numerical results from measurements and statistical analysis as a means of analyzing the answers to a problem. Sugiyono (2014), the quantitative method is based on the philosophy of positivism, which is used to study a specific population or sample. In the objects used in this study, researchers measured the degree of influence of variables contained in the Fraud Pentagon Theory used against potential fraud of financial statements in companies in the Banking sector. The sampling procedure used in this study was by purposive sampling technique, by using this technique researchers collected samples with certain considerations. The sample of the study included 200 banking companies listed in the BEI during 2017-2021.

4. Results and Discussion

In this study, researchers will use the Eviews12 software to apply the analysis methods used. The consideration of using this software over other software is due to the presence of an advantage. The advantage of EViews software is its feature that can help researchers in processing panel data, where the panel data is a combination of cross-section and time series data (Rahim et al., 2018). The cross-section data used by the researcher is data derived from the Financial Statements of all banking sector companies listed on the Indonesia Stock Exchange (BEI) and corresponds to the sample criteria from 2017 to 2021.

Descriptive statistical analysis is performed for descriptive statistical analysis performed using EViews software, in the mention of variables namely FS for Financial Stability, FT for Financial Targets, EXP for External Pressure, INM for Ineffective Monitoring, ACHANGE for Change in Auditors, DCHANGE for Change of Directors, and PCEO for CEO Politicians as shown below.

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Table 2. Descriptive Statistic Result

		FS	FT	EXP	INM
Mean	-0.538961	0.144951	0.003972	0.795049	0.595448
Median	-0.576541	0.090917	0.005342	0.830133	0.600000
Maximum	8.218929	4.650298	0.115487	1.077501	1.000000
Minimum	-9.820167	-0.956676	-0.180541	0.050409	0.250000
Std. Dev.	1.044001	0.390352	0.029653	0.143940	0.129381
Probability	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	-107.7922	28.99026	0.794471	159.0097	119.0895
Sum Sq. Dev.	216.8976	30.32262	0.174976	4.123049	3.331132
Observations	200	200	200	200	200

The financial statement fraud variable (Y) has a mean (mean) Y of -0.54. This suggests that overall, Y values tend to be around negative numbers, Median Y is -0.58. The median approximating the mean indicates that the Y distribution is fairly symmetric. The maximum value of Y is 8.22, while the minimum value is -9.82. This large range indicates the presence of extreme values in the Y data. The standard deviation Y is 1.04. This indicates a fairly significant degree of variation or dispersion in the data Y. The Financial stability variable (X1) has an average yield of X1 of 0.14. This suggests that overall, X1 values tend to be around low positive numbers. Median X1 is 0.09.

A median lower than the mean indicates the presence of a right-leaning tail of the distribution on X1. The maximum value of X1 is 4.65, while the minimum value is -0.96. There is a considerable range between maximum and minimum values in the X1 data. The standard deviation of X1 is 0.39. This suggests a relatively low level of variation or dispersion in the X1 data. The target Financial variable (X2) has an average yield of X2 of 0.004. This suggests that overall, X2 values tend to be around numbers very close to zero. The median X2 is 0.005.

A median that is almost equal to the mean indicates that the distribution of X2 tends to be symmetric. The maximum value of X2 is 0.115, while the minimum value is -0.181. The relatively small range suggests that the X2 data has limited variation. The standard deviation of X2 is 0.030. This indicates a fairly low level of variation or dispersion in the X2 data. The External Pressure variable (X3) has an average X3 yield of 0.795. This suggests that overall, X3 values tend to be around high numbers. The median X3 is 0.830. The median approximating the mean indicates that the X3 distribution is fairly symmetric. The maximum value of X3 is 1.078, while the minimum value is 0.050. The relatively large range indicates the presence of significant variation in the X3 data. The standard deviation of X3 is 0.144. This indicates a fairly significant degree of variation or dispersion in the X3 data. The Ineffective Monitoring Variable (X4) has a mean average result of X4 of 0.595.

This suggests that overall, X4 values tend to be around moderate numbers. The median X4 is 0.600. The median approximating the mean indicates that the X4 distribution is fairly symmetric. The maximum value of X4 is 1,000, while the minimum value is 0.250. The limited range indicates the presence of limited variation in the X4 data. The standard deviation of X4 is 0.129. This indicates a relatively low level of variation or dispersion in the X4 data.

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t- test was carried out by researchers with testing criteria that if the significant value is <0.05 then the hypothesis is acceptable. Conversely, if the significance value is >0.05 then the hypothesis is rejected.

Table 3. t-test Result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.212422	0.524674	4.216756	0.0000
Financial Stability	-0.291060	0.177344	-1.641220	**0.1024**
Financial Target	-8.598929	2.300532	-3.737800	**0.0002**
External Pressure	-3.010962	0.475529	-6.331821	**0.0000**
Ineffective Monitoring	-0.490529	0.507279	-0.966981	**0.3348**
Change in Auditor	0.055924	0.134451	0.415944	**0.6779**
Director Changes	-0.036230	0.170857	-0.212047	**0.8323**
CEO's Politics	0.404832	0.348370	1.162075	**0.2466**

In this analysis, the Financial Stability variable was not seen to have a significant linear influence on the dependent variable. Hence H1 is rejected which means that Financial Stability does not affect financial statement fraud. This is due to the growth of sub-sector banking assets listed on the Indonesia Stock Exchange (BEI) in the period 2017 — 2021 due to several factors, according to researchers, one of them is because the financial statements prepared by the company provide appropriate and stable data so that there is no factor for management to commit fraud in financial statements to maintain the company's image or meet market expectations. Judging by the movement of net income earned annually from the companies of the companies in question, few researchers noticed any significant change in the difference between years, the movement of profits that occurred is still very logical, as when the company suffered losses in 2017 and in 2018 it still suffered losses but gradually decreased, according to the researchers there are no strange movements of the companies above.

In such conditions, it can be said in accordance with Agency Theory because the agent can be responsible to the principal, although the company at the end of the period went through the problem of the outbreak of Corona Virus (Covid-19) that resulted in some companies experiencing losses/instability, but the management side owned by the company can still behave honestly and transparently what happens in the company based on the results of its financial statements so that no acts of fraud occur. The results of this study do not support the studies of Kurnia and Anis, (2017) and (Bewekes, 2018), which stated that in the period of the study, it was mentioned that there was an unstable level of financial condition in the company, leading the management to falsify the data of the financial statements to prevent the company from being judged ugly and so that the performance shown was excellent to keep the flow of funds to the shareholders of the company.

In this study, it was found that the Financial Target variable has a significant influence on the dependent variable. Hence H2 is accepted which means that the Financial Target affects financial statement fraud. According to the results of this study, this happens because It is because a high rate of return on assets (ROA) can indicate that a banking company can improve its performance by carrying out various product innovations to follow the trends of the emerging market so that the company can remain competitive and compete with other companies in the same industry. Under this condition, according to Agency Theory, the agent has the opportunity to commit fraud when the financial targets of the company are lagging behind and not good, but if the company's managers have good quality, this does not encourage the agent to commit fraud in the financial

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statements. The results of this study support the results of studies conducted by (Ratnasari & Solikhah, 2019) and (Kurnia & Anis, 2017) stating that financial targets do not affect the occurrence of financial report fraud. In his opinion, the loss conditions faced by the companies under study do not make management commit fraud in financial statements and they prefer strategies to continue to benefit from new innovations each year.

The regression analysis showed that there was no significant linear relationship between the Ineffective Monitoring variable and the dependent variable. Hence H4 was rejected which means that Ineffective monitoring did not affect financial statement fraud. According to the results of this study, with the policy issued by OJK, companies are required to have an independent board of commissioners, because this position is very important. The presence of an independent commissioner as the party who supervises the company's movements can minimize the existence of fraud in financial statements for the personal benefit of the company. This is under agency theory that good supervision can make it difficult for agents to be able to commit fraud. In the absence of good supervision, it is very easy for these agents to commit fraud on the financial statements due to the absence of an independent supervisory authority that is not bound by anyone in the company. The results of this study are in line with the studies carried out (Ratnasari & Solikhah, 2019) and (Alvirenza, 2020), which also mentioned that with comprehensive supervision under the established standards, the incidence of financial statement fraud is very small because the movements that can be carried out by the perpetrators are very narrow and always monitored in the supervision.

In this study, the Change in the Auditor variable showed no significant linear influence on the dependent variable. Then H5 is accepted which means that the Change in Auditors has no effect on the fraud of the financial statements. In this case, the company wants more competent public accountants to check the company's financial statements. With the change of public accountants better than ever, the quality of the financial statements they have will be more trusted by the public, especially investors. This is in accordance with agency theory, the agent must be able to be responsible in all situations, when there is a change of auditor, there may be an opportunity to commit fraud because the situation is wary of committing fraud of financial statements. The results of this study are in line with studies conducted by (Ratnasari & Solikhah, 2019) and (Bawekes et al, 2018) which stated that the change of auditor was based because the company was dissatisfied with the results of the audit of the public accounting firm so decided to replace it to a more competent auditor. The reason for this change is very objective and supported by strong supervisory mechanisms, so that the risk of fraud of financial statements can be minimized.

5. Conclusion

Regression analysis shows that the Change of Directors variable does not have a significant linear relationship with the dependent variables. hence H6 is accepted which means that the Change of Directors has no effect on financial statement fraud. According to the researcher, this condition occurs for the same reason when companies change their public accounting offices, namely because of dissatisfaction with the quality provided by the directors. In addition, with the change of directors, companies usually replace with directors who are more competent and have a higher quality of work so as to improve the condition of the company. This condition is related to Agency Theory because when the change of directors occurs, especially actively carried out every year, it can increase the presence of irresponsible agents taking advantage of the company's adjustment period to

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the way the new board of directors works. However, the fact of the study is that there is no fraud due to the change of directors who are of better quality than before so that even if they are new in office, they can adapt quickly.

The results of this study are in line with studies conducted by (Ratnasari & Solikhah, 2019) and (Alvirenza, 2020) which stated that the change of the board of directors did not affect the rigging of financial statements. This result is due to the factor of careful and transparent selection, and followed by strengthening corporate governance, the risk of financial statement fraud can be suppressed so that the change of directors still does not increase the occurrence of financial statement fraud. With the occurrence of a much better performance than ever, the company has the opportunity to attract investors to invest in the company.

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References

AICPA Professional Standards. (2002). AICPA Audit Guides. The American Institute of Certified Public Accountants Publishing.

Alvieza. (2020). The Phenomenon of Learning at a Distance through Emergency Remote Teaching Amidst the Pandemic Crisis. Asian Journal of Distance Education, 15, 144-153

Aprilia. (2017). Analisis Pengaruh Fraud Pentagon Terhadap Kecurangan Laporan Keuangan Menggunakan Beneish Model Pada Perusahaan Yang Menerapkan Asean Corporate Governance Scorecard. Jurnal ASET (Akuntansi Riset, 9(1), 101–132. https://doi.org/https://doi.org/10.17509/jaset.v9i1.5259.

Association of Certified Fraud Examiners. (2016). Report to the Nations on Occupational Fraud and Abused. USA.

Bawekes, H. F. 2018. Pengujian Teori Fraud Pentagon Terhadap Fraudulent Fianncial Reporting (Studi Empiris pada Perusahaan yang Terdaftar di Bursa Efek Indonesia Tahun 2011-2015). Jurnal Akuntansi & Keuangan Daerah, 13, (1), 114-124.

Brennan, Niamh M. and McGrath, Mary, Financial Statement Fraud: Some Lessons from US and European Case Studies (2007). Australian Accounting Review, 17 (2) (42)

Jensen, Michael and Meckling, William. (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure," The Journal of Financial Economics, 3.

Kurnia, A. A., & Anis, I. 2017. Analisis Fraud Pentagon Dalam Mendeteksi Kecurangan Laporan Keuangan dengan Menggunakan Fraud Score Model. Paper presented at the Simposium Nasional Akuntansi XX, 1-30.

Kurnia, Aidil Adherian dan Anis, Idrianita. 2017. Analisis Fraud Pentagon Dalam Mendeteksi Kecurangan Laporan Keuangan dengan Menggunakan Model Fraud Score Model. Simposium Nasional Akuntansi XX. Jember.

Novita, N. (2019). Teori Fraud Pentagon Dan Deteksi Kecurangan Pelaporan Keuangan. Jurnal Akuntansi Kontemporer, 11(2), 64–73. https://doi.org/10.33508/jako.v11i2.2077.

Ratnasari, E., & Solikhah, B. (2019). Analysis of Fraudulent Financial Statement: the Fraud Pentagon Theory Approach. Gorontalo Accounting Journal, 2(2), 98–112

Ruchiatna, G., Midiastuty, P. P., & Suranta, E. (2020). Pengaruh Karakteristik Komite Audit Terhadap Fraudulent Financial Reporting (The Effect of Audit Committee

Characteristics On Fraudulent Financial Reporting). Jurnal Akuntansi, Keuangan, Dan Manajemen (JAKMAN), 1(4), 255–264.
Sariutami, Annisa dan Annisa Nurbaiti. (2016). Analysis of Fraudulent Financial Statement in Fraud Triangle Perspective (Study at Listed Companies in Indonesia Stock Exchange (BEI) in Period 2010-2014. The 7th Smart Collaboration for Business in Technology and Information Industries, 59–64.
Sugiyono, P. D. (2017). Metode Penelitian Bisnis. Pendekatan Kuantitatif, Kualitatif, Kombinasi, dan R&D. (19th ed.). Alfabeta, Jakata.