

## Fraud Risk Analysis Using Fraud Hexagon Model and Beneish M-Score in the Financial Report of PT Indo Listrik Nusantara Period 2021-2023

✉ Eko Gumaya Sari & Cahyana

Program Studi Akuntansi, Politeknik TMKM, Indonesia

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### ABSTRACT

The purpose of this study is to analyze and identify the possibility of Fraud in the financial report of PT. Indo Listrik Nusantara. Using a mixed qualitative and quantitative methodology. The quantitative technique calculates the Beneish index ratio, while the qualitative method selects a sample of questionnaire responses from 52 respondents who are considered significant to be examined. An overall analysis of PT Indo Listrik Nusantara for the past three years, namely 2021 to 2023, revealed a risk of Fraud based on respondent responses. Additional searches and interviews revealed that the Company had double-booked on two different databases, namely internal management and taxation, which had an impact on the decline in the Company's performance. Although activities like this often occur, the 2022 financial report with the calculation of the Beneish index ratio is an example of organized Fraud. This shows that the Company will not have a strong financial performance in 2022 because high sales figures are followed by high overall costs. The Beneish index ratio and the fraud hexagon are excellent tools for determining the risk of Fraud in a company's financial statements.

**Keyword:** Financial Report of PT Indo Listrik Nusantara, Fraud Hexagon Theory, Beneish M-Score Model.

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✉ Corresponding author :  
Email: [eggysyfa@yahoo.com](mailto:eggysyfa@yahoo.com)

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Page. 31-46

## 1. INTRODUCTION

The purpose of this study is to assess the possibility of Fraud in financial statements by utilizing the Beneish M-Score Model methodology and the Fraud Hexagon technique for its analysis.

The researcher found the phenomenon of fraud scandals that often occur in Indonesia very interesting. One of the cases is the falsification of financial data at PT. Garda Tujuh Buana Tbk. In accordance with the provisions of the work contract, PT. Garda Tujuh Buana Tbk wants to realize income from Agrocom Ltd. The story begins with the approval of a work contract of US\$ 250 million, which was implemented on June 14, 2014. However, on May 13, 2013, Agrocom Ltd stated that the agreement was terminated, resulting in a loss of IDR 711.5 billion for PT. Garda Tujuh Buana Tbk. The cause of this loss was because, in the 2012 financial report, PT. Garda Tujuh Buana Tbk failed to record full income from work contract payments (Kurniati et al., 2021). With the interesting case example above, the researcher was motivated and tried to conduct further research on PT. Indo Listrik Nusantara, by first studying the Financial Statements presented.

The gap research in this study refers to previous research conducted by Freina Rianggi in 2023 with the research title "Fraud Hexagon and Fraudulent Financial Statements with the Beneish M-Score Model Approach." The results of this study emphasize that there are several components of the fraud hexagon that can trigger fraudulent financial statements and fraudulent financial statements as measured by the Beneish M-Score Model, but there has been no more detailed explanation of the measurement results. From this gap, the researcher feels the need to review and conduct further research on the theory that is still unclear in the results of this previous study.

The empirical phenomenon that occurred at PT. Indo Listrik Nusantara is a researcher who found irregularities in the presentation of PT Indo Listrik

Nusantara's financial report for the 2021-2023 period, where the total sales figure increased significantly in 2022, namely IDR 40,311,057,941 with a percentage increase of 1.11%, double compared to 2021, researchers also found that the nominal cost details were too high compared to the previous year, resulting in a small gross profit, the researcher's suspicion is that there is a concern about manipulation between management and employees, for this reason, the researcher tried to analyze using a mixed method, namely qualitative and quantitative methods in order to get more detailed and accurate research results. The qualitative method uses indicators from the fraud hexagon theory, a theory created in 2019 by Vousinas, which is a test tool used to detect the risk of financial statement fraud in an entity using six factors, including Pressure, Ability, Collusion, Opportunity, Rationalization, and Arrogance,

The quantitative method uses the Beneish M-Score Model calculation, which is an index calculation tool that compares several items in the Company's financial statements. Specifically, if a case of Fraud occurs in the case of PT Garda Tujuh Buana, the research findings are expected to provide input, an overview, suggestions for implementing strategies, fraud detection to avoid the risk of Fraud.

## 2. LITERATURE REVIEW AND HYPOTHESIS

The grand theory in this study is an organization that integrates and organizes various resources with the aim of creating commodities or services for sale, which is known as the Theory of the Company. A business is an entity that creates goods and services ready for sale by organizing and combining all available resources. Companies are part of society because they help distribute products and services, a task that is difficult for individuals to complete, according to Setiono (2015). The basic idea found in most managerial economics research is the theory of the Company. Individuals who are directly

affected by business activities include shareholders, management, staff members, suppliers, and consumers. The following are the activities of the community company (stakeholders), including the use of limited resources that affect the efforts of stakeholders. In addition to producing goods and services for the community, the business world also pays taxes and creates jobs. Therefore, business must run as well as possible. According to the Theory of the Company, maximizing profits is the primary goal of the Company. First, maximizing short-term profits. Long-term, aims to maximize predictive value. An organization that manages various resources, of course, expects the final results obtained from a report. Financial reporting or Financial statements are the main picture of the results of the Company's performance; whether a Company is good or bad can be seen from the results of the financial statements presented including the notes on the financial statements that are used as a reference by investors or shareholders to invest in the Company. At the same time, financial statements have a very high potential for Fraud or cheating. The potential for profit mark-ups and other hidden crimes in presenting a Company's financial statements.

According to Haryono (2014), fraudulent financial reporting is the presentation or omission of an amount or disclosure that is deliberate with the intention of misleading users of financial statements. Often, there is a deliberate misrepresentation of quantities, not a disclosure error. Most cases of financial reporting that contain Fraud involve an attempt to report an overstated opinion either by overstating assets and income or by eliminating liabilities and expenses. Entities can also intentionally report an understated opinion. Such things are usually done in an effort to reduce income tax. Entities can also intentionally report profits with a lower amount when profits are high as profit reserves or "cookie jar reserves" that can be used to increase profits in the coming period. Such

practices are often referred to as income smoothing and income management. Income management is an action taken intentionally by management to meet profit goals. Income smoothing is a form of income management that is done by shifting the period of income and expenses to reduce fluctuations in income.

According to Tuanakotta (2019), Fraud, as a human tendency, becomes a problem, threat, or risk for every organization (which is nothing more than a collection of humans). Fraud as a tendency of certain people (specific individuals) and "people with high moral standards" are not immune from this tendency. Cressey interviewed 133 convicted fraudsters. According to ACFE (2006) Prediction is the entire event (circumstances surrounding the event), which leads a person who is sufficiently qualified, professionally trained, and someone with caution to the conclusion that Fraud has, is, or will take place, the correct Prediction.

Types of Fraud:

- a. According to the idea of the fraud triangle, Fraud occurs as a result of opportunity, Pressure, and rationalization in order to be accepted by society. One of the founders of the Association of Certified Fraud Examiners, Cressey (1953), formulated this idea (Figure 1).

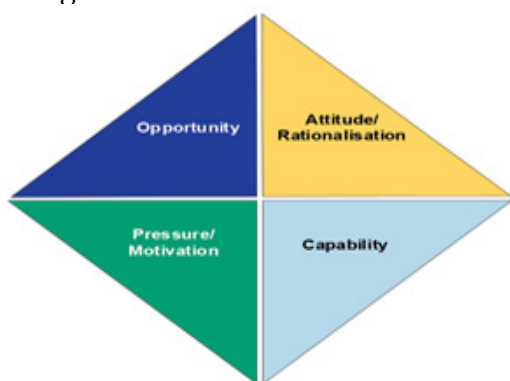
Figure 1. Fraud Triangle



Source : Processed Data

- b. The fraud triangle theory was revised in 2004 by adding the capacity factor as a fourth component, giving rise to a fraud theory known as the Diamond Theory (Figure 2).

Figure 2. **Fraud Diamond**



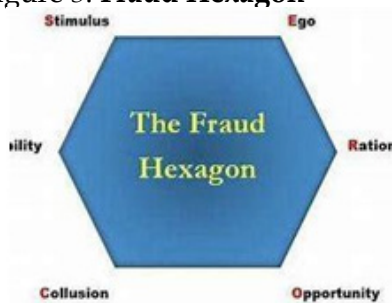
Source : Processed Data

- c. Crowe (2011) proposed the Pentagon fraud hypothesis, which replaced the competence component with the capacity element and added the arrogance factor. In addition, the Fraud Pentagon lists the following factors—shown in the figure below—as causes of financial statement fraud: Pressure, opportunity, rationalization, competence, and arrogance (Figure 3).  
**Figure 3. Fraud Pentagon**



Source : Processed Data

- d. Vousinas (2019) introduced the Fraud Hexagon, a new theory, and included the collusion component as a factor that can persuade someone to commit fraud Grand theory (Figure 4).  
**Figure 3. Fraud Hexagon**



Source : Processed Data

A technique called the Beneish M-Score can be used to identify businesses that may be fraudulent in their financial statements about their earnings (Beneish, 2012). Businesses that have a higher M-Score have a higher level of Fraud. A series of financial measurements called the Beneish M-Score can be used to identify Fraud. Businesses that commit Fraud are identified based on their Beneish M-Score. A company score of  $M > -2.22$  indicates that Fraud is likely to have been committed by the Company; a score of  $M < -2.22$  indicates that Fraud is not recommended by the Company (Sulistyaningsih & Rafika, 2023).

Previous references that are relevant to the current study are:

- a. Freina Rianggi (2023): "Fraud Hexagon and Fraudulent Financial Statements with the Beneish M-Score Model Approach". The results of this study emphasize that there are several components of the fraud hexagon that can trigger fraudulent financial statements.
- b. Mardeliani (2022): "Analysis of Financial Report Fraud According to the Hexagon Fraud Model in BUMN Companies in 2016-2020". The results obtained from this study have proven that financial objectives significantly and profitably influence financial report fraud indicators.
- c. Salsabila Amajida Hernanda (2022): "Analysis of the Influence of Fraud Hexagon in Detecting Potential Financial Report Fraud." The findings of this study indicate that: (1) the proxy variable of financial target pressure has a positive correlation with the incidence of financial report fraud; (2) changes in the ability of director proxies are negatively correlated with financial report fraud; and (3) financial stability, external Pressure, opportunities (nature of the industry), rationalization (auditor change), arrogance (CEO image), and collusion (joint government projects) have no relationship with financial report fraud. The weakness of this study is

that the rationalization variable which is measured is not good because it is proxied by auditor change.

### 3. METHODS

The Company is the subject of a case study that examines financial statements for three years, from 2021 to 2023. The Company uses the fraud hexagon model method to analyze the entity's fraud risk and calculate the Beneish M-Score Model ratio in the income statement and balance sheet for the period.

#### Data Sources

Primary data used is data that can be directly obtained by researchers from interviews and observations at PT. Indo Listrik Nusantara, namely asking directly to the auditors, finance staff, and employees about the reporting system, management system, and the truth of the reporting in the Company.

Secondary data is obtained from records and books or other sources used as a reference to analyze reporting problems related to auditing financial statements in order to prevent the risk of Fraud in the report and using the income statement and balance sheet for 3 years at the Company.

Direct observation by looking directly at data in the field, which is carried out simultaneously with the interview process with staff and employees, especially those tasked with reporting on the Company's financial statements, namely Asep Saepulloh (Accounting Staff).

Recording In addition to conducting observations accompanied by interviews, researchers also collect information from facts contained in letters, diaries, image archives, meeting minutes, souvenirs, activity journals, and other materials. Documents such as these include data that can be used to reveal historical events. To understand all these records and not just treat them as useless objects, researchers must use theoretical sensitivity.

Focus Group Discussion: The last data collection technique is a focus group discussion, which is an effort by a group of individuals to clarify a topic through

conversation so that researchers do not misinterpret it. For example, the research team discusses the findings.

#### Data Collection Techniques

Two different categories of data collection techniques were used in this study, in accordance with the research model chosen by the researcher: qualitative techniques (case studies) and quantitative procedures (experiments). The following methodologies were used to collect data for the report:

- a. Qualitative Data Collection Techniques (Case Studies) To detect fraud risks, the qualitative method used in this analysis involves the use of questionnaires distributed to auditors, accounting, and employees who have direct access to the financial statements. The questionnaire consists of 20 statements that are responded to by both auditors, accounting, and employees by considering various indicators of Fraud in the six aspects of Fraud (Fraud) in accounting reports consisting of:
  - a. Stimulus (Pressure)
  - b. Collusion (Collusion)
  - c. Capability (Capability).
  - d. Opportunity (Opportunity)
  - e. Rationalization (Rationalization)
  - f. Ego (Arrogance)
- b. Quantitative Data Collection Techniques (Experiment): The following techniques (Beneish M-Score Model) will be used on the balance sheet and income statement of PT Indo Listrik Nusantara in order to use its financial statements:
  - a. DSRI (Days Sales in Receivable Index)
  - b. GMI (Gross Margin Index)
  - c. AQI (Asset Quality Index)
  - d. SGI (Sales Growth Index)
  - e. DEPI (Depreciation Index)
  - f. SGAI (Sales, General and Administrative Expenses Index)
  - g. LEVI (Leverage Index)
  - h. TATA (Total Accruals to Total Assets)

### Data Analysis Techniques

The ratio index approach for the research sample of the Company's financial statement data. The purpose of calculating the ratio index is to classify a company as a manipulator or non-manipulator. If a company receives a ratio index value that matches the parameter index according to the Beneish M-Score, then the Company is classified as a manipulator or non-manipulator. To ensure a business is a manipulator or not, the ratio index is calculated with the following steps:

- a. Find the specified index for the Company's ratio.
  - b. Calculate the Beneish M-score.
  - c. Evaluate and differentiate the parameter index with the calculated index.
- Beneish index obtains the following calculation (Table 1)

**Table 1. Beneish M-Score Parameter Index**

| No | Parameter Index | Category          |
|----|-----------------|-------------------|
| 1  | > - 2.22        | Manipulator       |
| 2  | < - 2.22        | Non - Manipulator |

Source: Processed Data

- d. Utilizing categorization criteria to categorize businesses as Non/manipulators. Businesses are categorized as manipulators if the calculated index, as determined by the parameter index, exceeds -2.22. Companies are categorized as non-manipulators if the calculated index is less than -2.22 based on the parameter index.
- e. Classify non-manipulator companies in percentage.
- f. Write a description of the rise and fall of financial statement fraud in 2021 - 2023.

### Population and Sample

The population consists of 60 employees from the Company's auditor, finance, and accounting divisions, who filled out the questionnaire and provided supporting data for this research report. The purposive sampling approach was then used to select the sample. "Purposive sampling is a

technique for sampling data sources with certain considerations" (Sugiyono, 2013). This is because the selection of employee samples uses specific standards that are in line with the objectives of the study. By comparing the financial statements of three financial periods or three years, select employee criteria that match the employee's rank and position in the organization. This will help the report to be more focused and methodical. Therefore, the Slovin formula used to apply the purposive sampling strategy is as follows:

$$\begin{aligned}
 N \text{ or population} &= 60 \\
 e \text{ or margin of error} &= 5\% = 0.05 = \\
 &(0.05)^2(\text{MOE: } 1\%, 5\%, 10\%) \\
 \text{Then } n &= 60 / 1 + N(e)^2 \\
 &= 60 / 1 + 60(0.05)^2 \\
 &= 52.1 \text{ rounded by the researcher} \\
 &\text{to } 52 \text{ Samples/ Respondents.}
 \end{aligned}$$

The difference between the margins of 1%, 5%, and 10% in the Slovin formula relates to the acceptable level of error in estimating the sample against a larger population.

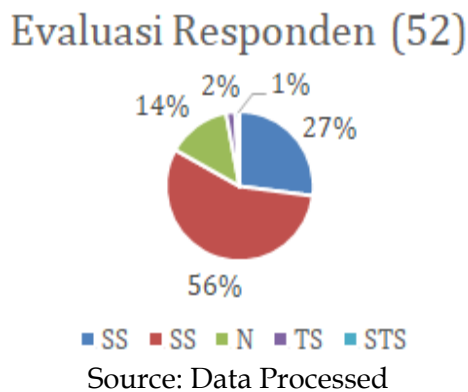
### Description

- a. Margin 1%: A margin of error of 1% indicates that only a 1% error is allowed in estimating the sample against the population. By using a margin of 1%, a higher level of confidence in the results of the survey or research will be obtained. However, to achieve this small margin of error, a larger sample size is often required, which may require more resources and time. Example: Health, Medicine, etc.
- b. 5% Margin: A 5% margin of error is a common choice and is often used in various surveys and studies. By using a 5% margin, you will get a good level of confidence in the results of the survey or study without requiring an immense sample size. A 5% margin provides a good balance between accuracy of estimation and efficiency in data collection. Example: Public opinion on an issue, usually used in the field of education and researchers

- use a 5% Margin in this report.
- c. 10% Margin: A 10% margin of error allows for greater tolerance for error in sample estimates. Using a 10% margin may be appropriate for surveys or studies where a very high level of confidence is not required, or when limited resources limit the sample size that can be collected. However, it should be noted that a large margin of error like this can reduce the accuracy of the estimation results and can produce a less accurate representation of the population, usually used when the population is too large, so that it can save costs and time in collecting samples in the field.

Thus, the difference between the margin of error of 1%, 5%, and 10% in the Slovin formula in a sample determination or calculation lies in how much tolerance of error is allowed in the sample estimate and how it affects the level of confidence and the required sample size (Roflin et al., 2021).

Figure 5. Results of Respondents' Answers on Fraud Hexagon with Likert Scale



#### 4. RESULTS AND DISCUSSION

The calculation shown above consists of 52 respondents, including employees, accountants, and auditors. Accounting and finance workers are the majority of respondents. The average answers given are strongly agree (27%), agree (56%), disagree (2%), and strongly disagree (1%), indicating that the six components of the fraud hexagon are beneficial in identifying

fraud risks (Figure 5). Positive results from 52 respondents who meet the sample assessment criteria. Specifically, the Fraud hexagon indication shows that (Appendix 1).

- a. Stimulus (Pressure) has a value of 67.3% which is agreed by 35 respondents who answered that it means that the existing Pressure causes an individual to potentially commit financial Fraud including: Financial Pressure in life makes individuals not think long about the impact in the future, Pressure on work which on the one hand the individual still really needs the job can also trigger Fraud, Pressure on the prominent internal family makes someone, especially the backbone of the family, become blind and finally get involved in Fraud.
- b. Capability (ability) has a value of 55.8% which is agreed by 29 respondents who answered agree. This means that half of the respondents agree with the ability to compete to show the good side of the Company, making individuals or between employees work together to commit Fraud, hidden personal interests of individuals because there are specific particular intentions and goals make them commit Fraud, positions/positions that have full power also with specific particular intentions and goals so that manipulation is carried out.
- c. Collusion value shows that 67.3% of respondents agree from 30 respondents who answered agree, meaning that the working relationship between employees and auditors has a significant impact on committing Fraud or colluding with each other both internally and externally, the existing Work Agreement contains points that require one party to commit Fraud in order to achieve the existing points, the initial Cooperation Agreement also triggers Fraud because of concerns about violating the agreement that has been made and the possibility of sanctions that have been agreed upon.

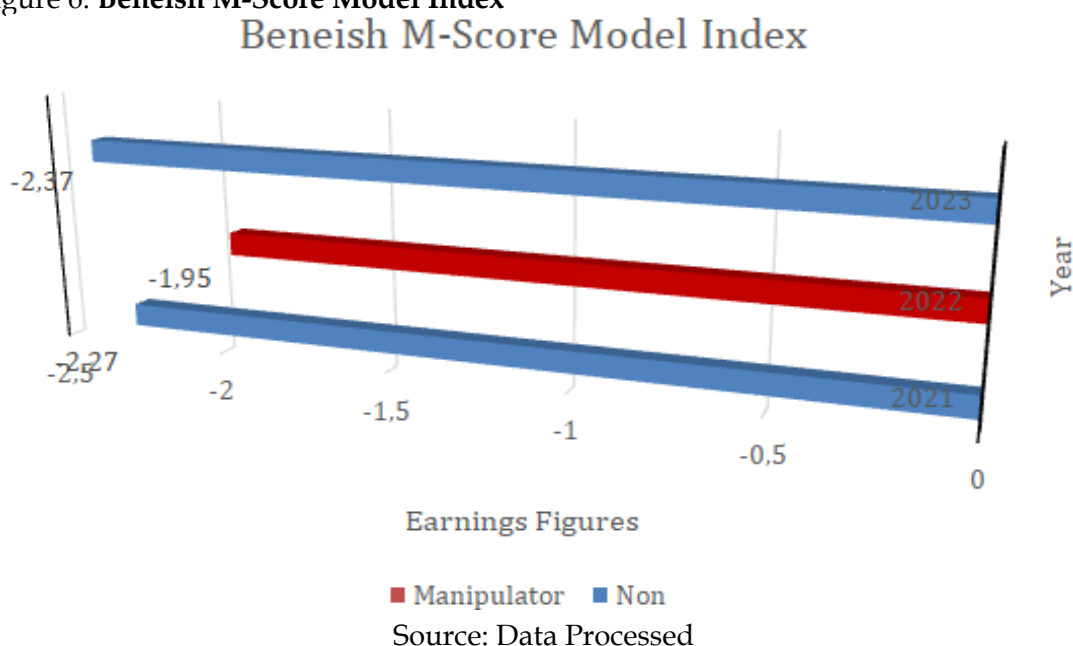
- d. Opportunity has a value of 57.7% of respondents agree. The results show that out of 30 respondents who answered agree, it means that Weak Controlling creates flexibility, especially the core financial section, to commit Fraud, which is the Inability to assess the quality of performance in the Company where there must be a performance evaluation makes it unmonitored how the performance of human resources in the Company increases or decreases so that Fraud can occur, Lack of Access to Information that should be able to be directly updated, especially by interested parties, makes Fraud easy to occur, Audit Weaknesses that occur make anyone free to commit fraud or data manipulation.
- e. Rationalization Attitude, namely 63.5% of respondents out of 33 respondents who answered agree, meaning Self-Justification in someone where the Action is a culture that occurs in the Company makes it a habit to do, an attitude that does not want to be harmed which is usually done based on the company culture also makes it trigger Fraud.
- f. Ego/arrogance attitude, namely 59.6% of respondents agreed from 31 respondents answered agree, meaning that the Employee Status especially has priority for the employee or specialization because of a relationship or agreement that causes fraudulent acts, Family Work Relationships also considerabsignificantly trigger fraudulent acts where ego or arrogance attitudes are more apparent because they are based on strong brotherhood and mutual coverage in the family.

**Results of the Beneish M-Score Model Index Analysis.**

Then, from the calculation results that have been adjusted based on each component contained in the Beneish M-Score variable, they are then accumulated with the following formula and calculation results:  
 $M\text{-score} = -4.84 + 0.92 \cdot DSRI + 0.528 \cdot GMI + 0.404 \cdot AQI + 0.892 \cdot SGI + 0.115 \cdot DEPI + 4.679 \cdot TATA - 0.327 \cdot LEVI$

In the table 2, the researcher describes one by one and enters the financial reports of PT Indo Listrik Nusantara from the period 2021-2023 into the eight components of the Beneish M-Score variable and obtains the following explanation:

Figure 6. Beneish M-Score Model Index



- a. Days Sales in Receivable Index (DSRI) Analysis: After calculating the index value, the Days Sales in Receivable Index (DSRI) of PT Indo Listrik Nusantara in 2021 was 0.45, in 2022 it was 0.46, and in 2023 it was 0.72. PT Indo Listrik Nusantara's DSRI experienced spikes and declines that were not excessive and unusual, this indicates that the turnover of sales receivables constantly fluctuates but not too significantly.
- b. Gross Margin Index (GMI) Analysis: After calculating the index value, the Gross Margin Index (GMI) of PT Indo Listrik Nusantara in 2021 was 1.05, in 2022 it was 1.65, and in 2023 it was 0.93. PT Indo Listrik Nusantara's GMI is expected to increase significantly in 2022 and then decrease again in 2023. This means that if GMI is greater than 1, the Company's gross margin will decrease and there is evidence of a negative signal; conversely, an increase in GMI indicates that its profits are exaggerated.
- c. Analysis of PT Indo Lstrik Nusantara's Asset Quality Index: After calculating the index numbers, the AQI in 2021 was 2.32, in 2022 it was 1.63, and in 2023 it was 1.25. In other words, if the AQI is more than 1, this indicates that the Company may have improved cost control. In 2021, the ratio will be higher than the previous three years.
- d. Sales Growth Index (SGI) Analysis: PT Indo Listrik Nusantara's Sales Growth Index (SGI) was 1.05 in 2021, 1.91 in 2022, and 1.27 in 2023, based on the calculation of the more prominent 2022 index figures. Because the increase in SGI indicates a tendency for companies to record fictitious income by calculating the normal growth expected in a period, meaning that if the result is greater than 1, it indicates that sales have increased from the previous year. , allowing SGI to identify which companies are involved in fake sales.
- e. Depreciation Index Analysis: PT Indo Listrik Nusantara's Depreciation Index is 1.92 in 2023, 0.60 in 2022, and 0.54% in 2021. If the index number is calculated, DEPI will increase in 2023. Thus, if DEPI is more than 1 (One), depreciation will slow down, increasing the possibility that the business has increased estimates or adopted new strategies, such as increasing revenue. DEPI calculates the possibility of manipulation and DEPI is positively correlated.

Table 2. Conclusion of Beneish M-Score Calculation

| Year                    | 2021  |            |             | 2022    |                    |             | 2023   |            |             |
|-------------------------|-------|------------|-------------|---------|--------------------|-------------|--------|------------|-------------|
|                         | Ratio | M-Score    | Value ratio | Rresult | M-Score            | Value Ratio | Result | M-Score    | Value Ratio |
| DSRI                    | 0,92  | 0,45       | 0,412       | 0,92    | 0,46               | 0,423       | 0,92   | 0,72       | 0,661       |
| GMI                     | 0,528 | 1,05       | 0,556       | 0,528   | 1,65               | 0,871       | 0,528  | 0,93       | 0,493       |
| AQI                     | 0,404 | 2,32       | 0,938       | 0,404   | 1,63               | 0,659       | 0,404  | 1,25       | 0,506       |
| SGI                     | 0,892 | 1,05       | 0,941       | 0,892   | 1,91               | 1,704       | 0,892  | 1,27       | 1,133       |
| DEPI                    | 0,115 | 0,54       | 0,062       | 0,115   | 0,60               | 0,069       | 0,115  | 1,92       | 0,221       |
| SGAI                    | 0,172 | 0,95       | 0,163       | 0,172   | 0,75               | 0,128       | 0,172  | 0,94       | 0,162       |
| LEVI                    | 0,327 | 0,98       | 0,321       | 0,327   | 1,11               | 0,362       | 0,327  | 0,88       | 0,287       |
| TATA                    | 4,679 | 0,03       | 0,140       | 4,679   | -0,07              | -0,047      | 4,679  | -0,02      | -0,094      |
| <b>M- Score</b>         |       | -2,27      |             |         | -1,95              |             |        | -2,37      |             |
| <b>Conclu-<br/>sion</b> |       | <-2,22 Non |             |         | >-2,22 Manipulator |             |        | <-2,22 Non |             |

Source: Processed Data

- f. Based on testing the Selling, General and Administrative Expense Index, the SGAI of PT Indo Listrik Nusantara in 2021 was 0.95, in 2022 it was 0.75, and in 2023 it was 0.94 after being calculated. The index number shows a disproportionate shift in 2022, indicating that the disproportionate movement in SGAI sales is an indication of a bad future for the Company.
- g. Leverage Index (LEVI) Analysis: In 2021, PT Indo Listrik Nusantara's LEVI was 0.98; in 2022 it was 1.11; and in 2023 it was 0.88. Based on the calculation of the index value, LEVI increased in 2022, so organizations that experience increased leverage are more susceptible to revenue manipulation if  $LEVI > 1$ .
- h. Analysis of Total Accruals to Total Assets: this component theory explains that if accruals are positive, the possibility of revenue manipulation is higher. Based on the calculation, PT Indo Listrik Nusantara's Total Accruals to Total Assets (TATA) in 2021 was 0.03, in 2022 it was -0.07, and in 2023 it was -0.02.

Based on the study above, it can be concluded that the researcher found that Fraud was the main finding in the 2022 financial statements based on data collected over three years. This may be due to the manipulator parameter in Beneish M-Score, which is  $> -2.22$ , and the final accumulation of -1.95. The GMI, AQI, LEVI, and TATA indices—all of which

tend to be positive—dominate the financial statements of businesses included in the definition of manipulators.

### Conclusion Results of the Mix Method Fraud Hexagon Analysis and the Beneish M-Score Model Index on the Financial Statements of PT Indo Listrik Nusantara.

The table 3 above illustrates how Likert calculations and percentages are presented as percentages and scores, thus showing positive results from 52 respondents. Specifically, the Fraud hexagon indication shows that Stimulus (Pressure) has a value of 67.3% which is agreed by 35 respondents who answered, and Capability (ability) has a value of 55.8% which is agreed by 29 respondents who answered. Of the 35 respondents who answered, the Collusion value shows that 67.3% of respondents agree. Of the 30 respondents, the opportunity has a value of 57.7% who agree. The results show that of the 33 respondents who answered, 63.5% agreed with the statement "rationalization" and 59.6% agreed with the statement "ego/arrogance". This shows that the majority of workers answered yes when asked whether the six components of the fraud hexagon are very useful in identifying the possibility of Fraud in financial statements at PT Indo Listrik Nusantara. The primary respondents are accounting professionals. The results or answers from the respondent samples are relevant to those analyzed by the author, strengthening the results of the index calculations that have also been carried out, namely respondents who

Table 3. Table of Accumulated Values of Calculation Results

|                       |            | Fraud Hexagon |             |                 |       |      |       |      |       |    |       |
|-----------------------|------------|---------------|-------------|-----------------|-------|------|-------|------|-------|----|-------|
| Stimulus              | Capability | Collusion     | Opportunity | Razionalization | Ego   |      |       |      |       |    |       |
| S                     | S          | S             | S           | S               | S     |      |       |      |       |    |       |
| 35                    | 67,3%      | 17            | 51,9%       | 24              | 67,3% | 20   | 57,7% | 24   | 63,5% | 21 | 59,6% |
| Beneish M-Score Model |            |               |             |                 |       |      |       |      |       |    |       |
| No                    | Year       | DSRI          | GMI         | AQI             | SGI   | DEPI | SGAI  | LEVI | TATA  |    |       |
| 1                     | 2021       | 0,45          | 1,05        | 2,32            | 1,05  | 0,54 | 0,95  | 0,98 | 0,03  |    |       |
| 2                     | 2022       | 0,46          | 1,65        | 1,63            | 1,91  | 0,60 | 0,75  | 1,11 | -0,07 |    |       |
| 3                     | 2023       | 0,72          | 0,93        | 1,25            | 1,27  | 1,92 | 0,94  | 0,88 | -0,02 |    |       |

Source: Data Processed, 2024

agree with the suspicion or indication of manipulation in the financial statements of PT Indo Listrik Nusantara with fraud hexagon, also proven by the results of the Beneish M-Score index calculation which shows figures or results that indicate the risk of Fraud in the presentation of financial statements, especially with the phenomenon that is currently rampant which makes the author very interested in conducting further calculations and analysis regarding real cases and phenomena that occur in the Company.

## DISCUSSION

Returning to the initial objective of this study is to analyze and identify the possibility of Fraud in the financial statements of PT. Indo Listrik Nusantara. By using a mix method, namely qualitative and quantitative methods. And trying the gaps from previous studies that have been conducted, one of which was by Freina Riangi in 2023 to conduct further research using qualitative methods from the results of the respondent sample answers using a Likert scale and quantitative methods using the Beneish M score method as a tool to measure whether there is potential for Fraud. The results of this study are in line with research from Freina which states that a combination of factors from the fraud hexagon, such as Pressure, opportunity, and rationalization, can trigger fraudulent financial statements. In addition, it is also in line with research from Mardeliani in 2022: "Analysis of Financial Statement Fraud According to the Hexagon Fraud Model in BUMN Companies in 2016-2020". obtained the results of fraud indicators influencing Fraud in financial statements. But it is not in line with research conducted by Salsabila Amajida Hernanda in 2022 regarding "Analysis of the Influence of Fraud Hexagon in Detecting Potential Fraud in Financial Statements." The findings of this study indicate that: (1) the proxy variable of financial target pressure has a positive correlation with the occurrence of financial statement fraud; (2) changes in the proxy ability of directors

are negatively correlated with financial statement fraud; and (3) financial stability, external Pressure, opportunities (nature of industry), rationalization (auditor change), arrogance (CEO image), and collusion (joint government projects) have no relationship with financial statement fraud. The weakness of this study is that the rationalization variable that is measured is not good because it is proxied by auditor change.

The analysis of the research on the sample of respondent responses is consistent with the results of the index calculation also carried out by the researcher; specifically, these results support the suspicion or indication of manipulation of PT Indo Listrik Nusantara's financial statements with the fraud hexagon, which is indicated by the average answer of agreeing from the sample of respondents to the results of the calculation.

The researcher is very interested in conducting additional calculations and analysis regarding actual cases and phenomena that occur in the Company because the Beneish M-Score index displays figures or results that indicate the risk of Fraud in the presentation of financial statements, especially with the phenomenon that is currently widespread.

The management statement that has been confirmed directly is in accordance with the researcher's suspicions regarding the reasons for the annual change in holders or makers of financial statements, the existence of double book by the Company. There are employees who resign because the Company accepts more qualified candidates; further supported by the discovery of a double bookkeeping system carried out by the Company. The term "Double Book" refers to the storage of records and books in two different databases: one for internal administration and the other for taxation. Internal management refers to all transactions that are documented as a whole, while taxation only focuses on those who are taxpayers. This type of activity is usually referred

to as structured Fraud in tax terminology and usually occurs in a large number of businesses with the aim of minimizing tax payments and optimizing profits.

The limitations of this study are that it was only carried out in one Company, so there is no comparison with other companies and only the last 3 years, it is hoped that in the followingsubsequent study it will add samples and the latest methods to strengthen and reassure the results of further research.

The implications of this study are that PT Indo Listrik Nusantara should improve its integrity and professionalism in compiling, making, recording, reporting all financial transactions to maintain the credibility and good name of the Company in the future. Especially if there are investors who want to work with PT. Indo listrik nusantara, because usually careful and thorough investors will first measure the Company's performance in the past and predict or forecast in the future.

The irregularities that are read make investors reconsider their good plans and will harm the Company itself. Always find a solution to every financial problem and tax payment. A company culture that violates ethics should be eliminated and the best solution sought, so that it does not become a habit and ultimately fosters a rationalization attitude for employees. Internal control and jobdesk division are emphasized more, constantly update the safety system and performance updates and apply strategy innovation to minimize the possibility of manipulation actions, provide discourse to all management and employees that structured manipulation is also an act of violating ethics or also called covert Fraud. Auditors, both internal and external, are selected by independent parties, prioritize integrity and can be trusted. Thus, fraudulent actions can be avoided and even not happen again in the future.

## 5. CONCLUSION

The fraud hexagon theory proves that the opinions of auditors, accounting, and employees are able to detect the risk of Fraud and indicate or suspicion because the figures currently obtained have met the parameters of the Beneish M-Score variable which states that a company can be said to be a manipulator if the total index reaches  $>-2.22$  while the figures obtained and indicate financial reports that are indicated to contain manipulation are  $-1.95$  in 2022, then from the processing of the data obtained there are several indicators that dominate including GMI, AQI, SGI, and LEVI.

Respondents' answers can strengthen the results of the previous Beneish M-Score index calculation analysis. It can be concluded that the Company is indicated to have irregularities in debt, income from the Company's profits in 2022 which has increased significantly from the previous year, and suspicions of cost control manipulation in the employee environment in that year. This suspicion can be seen from the year-on-year index figures, where the financial statements of PT Indo Listrik Nusantara in the 2022 period need to be reviewed in order to improve the Company's prospects.

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## Appendix 2. Calculation of the Beneish M-Score Model Index

| No | Index | Formula   | Year  |        |   |        |   |        |
|----|-------|---|---|--------|---|--------|---|--------|
|    |       |   | 2021  |        | 2022  |        | 2023  |        |
|    |       |   | Nominal (Rp)  | Result | Nominal (Rp)  | Result | Nominal (Rp)  | Result |
| 1  | DSRI  | $\frac{\text{Account Receivable}(t)}{\text{Sales}(t)}$  | 2.014.985.391 / 21.102.334.067                      | 0,45   | 8.223.751.320 / 40.311.057.941                      | 0,46   | 7.502.194.686 / 51.194.000.060                        | 0,72   |
|    |       | $\frac{\text{Account Receivable}(t-1)}{\text{Sales}(t-1)}$  | 4.694.098.896 / 20.002.556.023                      |        | 2.014.985.391 / 21.102.334.067                      |        | 8.223.751.320 / 40.311.057.941                        |        |
| 2  | GMI   | $\frac{\text{Sales}(t-1) - \text{Cost of Sales}(t-1)}{\text{Sales}(t-1)}$   | 20.002.556.023 - 15.952.044.700 / 20.002.556.023    | 1,05   | 21.102.334.067 - 17.712.538.668 / 21.102.334.067    | 1,65   | 40.311.057.941 - 36.384.265.459 / 40.311.057.941      | 0,93   |
|    |       | $\frac{\text{Sales}(t) - \text{Cost of Sales}(t)}{\text{Sales}(t)}$   | 21.102.334.067 - 17.712.538.668 / 21.102.334.067    |        | 40.311.057.941 - 36.384.265.459 / 40.311.057.941    |        | 51.194.000.060 - 45.857.939.964 / 51.194.000.060      |        |
| 3  | AQI   | $\frac{1 - \text{Current Asset}(t) + (\text{Net Fixed Assets}(t) / \text{Total Assets}(t))}{1 - \text{Current Asset}(t-1) + (\text{Net Fixed Assets}(t-1) / \text{Total Assets}(t-1))}$ | 1-26.865.888.908 + (1.116.760.994 / 27.982.649.901) | 2,32   | 1-43.802.763.421 + (1.617.143.884 / 45.419.907.305) | 1,63   | 1-54.828.467.997 + (6.454.242.876 / 61.282.710.874)   | 1,25   |
|    |       |   | 1-11.568.278.835 + (531.864.614 / 12.100.143.448)   |        | 1-26.865.888.908 + (1.116.760.994 / 27.982.649.901) |        | 1 - 43.802.763.421 + (1.617.143.884 / 45.419.907.305) |        |
| 4  | SGI   | $\frac{\text{Sales}(t)}{\text{Sales}(t-1)}$   | 21.102.334.067 / 20.002.556.023                     | 1,05   | 40.311.057.941 / 21.102.334.067                     | 1,91   | 51.194.000.060 / 40.311.057.941                       | 1,27   |
| 5  | DEPI  | $\frac{(\text{Depreciation} / (\text{Depreciation} + \text{PPE}))t - 1}{(\text{Depreciation} / (\text{Depreciation} + \text{PPE}))t}$   | (39.205.386 / (39.205.386 + 571.069.998))           | 0,54   | (163.931.070 / (163.931.070 + 1.280.702.063))       | 0,60   | (380.054.457 / (380.054.457 + 1.617.143.884))         | 1,92   |
|    |       |   | (163.931.070 / (163.931.070 + 1.280.702.063))       |        | (380.054.457 / (380.054.457 + 1.617.143.884))       |        | (709.228.649 / (709.228.649 + 6.454.242.876))         |        |

| No | Index | Formula  | Year  |        |   |        |   |        |
|----|-------|--|---|--------|---|--------|---|--------|
|    |       |  | 2021  |        | 2022  |        | 2023  |        |
|    |       |  | Nominal (Rp)                                    | Result | Nominal (Rp)                                    | Result | Nominal (Rp)                                    | Result |
| 6  | SGAI  | $(SGA\ expense / Sales)_t$                                       | 2.552.861.383 / 21.102.334.067                  | 0,95   | 3.642.083.897 / 40.311.057.941                  | 0,75   | 4.365.520.693 / 51.194.000.060                  | 0,94   |
|    |       | $(SGA\ expense / Sales)_{t-1}$                                   | 2.552.861.383 / 20.002.556.023                  |        | 2.552.861.383 / 21.102.334.067                  |        | 3.642.083.897 / 40.311.057.941                  |        |
| 7  | LEVI  | $(Long\ Term\ Debt + Current\ Liabilities) / Total\ Assets\ (t)$ | (516.094.600 + 26.692.836.814) / 27.982.649.901 | 0,98   | (296.033.800 + 43.136.025.849) / 40.311.057.941 | 1,11   | (335.198.401 + 57.674.131.971) / 61.282.710.874 | 0,88   |
|    |       | $(Long\ Term\ Debt + Current\ Liabilities) / Total\ Assets\ t-1$ | (0 + 11.988.665.287) / 12.100.143.448           |        | (516.094.600 + 26.692.836.814) / 27.982.649.901 |        | (296.033.800 + 43.136.025.849) / 40.311.057.941 |        |
| 8  | TATA  | $Net\ Operating\ Income - Cash\ Flow\ from\ operating\ activity$ | 836.934.016-179.823.760                         | 0,03   | 284.708.585 - 3.242.303.545                     | -0,07  | 970.539.403 - 2.328.103.704                     | -0,02  |
|    |       | $Total\ Asset$   | 21.102.334.067                                  |        | 40.311.057.941                                  |        | 51.194.000.060                                  |        |

Source : Processed Data