

**COMPARISON OF FACTORS AFFECTING THE LEVEL OF FRAUD  
IN LQ-45 INDEX CORPORATE FINANCIAL REPORTS**

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**ABSTRACT**

This research intends to identify the possibility what companies listed on LQ 45 Index will commit the fraudulent financial statement after the Covid-19 pandemic. In addition, the research aims to assign the most influential account will commit in fraudulent financial statement. In this research, Companies listed on the LQ 45 Index in 2020 and 2021 were selected be the sample for this research, and financial reporting from 2020 and 2021 was collected. Using the Beinish Model M-Score, sample was divided into two groups, namely manipulators and non-manipulators. Furthermore, to find the most influential variables, a Mann Whitney test was carried out by using the SPSS. The result indicates that in 2020 and 2021, respectively, around 10% and 17% of registered companies are suspected of committing fraud. This study also reveals accounts in financial statements such as revenue, sales, profit, and cash flow to be very important key accounts that need to be considered in assessing financial statements because the information contained a significant possibility to be manipulated.

**ABSTRAK**

Penelitian ini bertujuan untuk mengidentifikasi kemungkinan perusahaan-perusahaan yang terdaftar pada Index LQ 45 melakukan kecurangan laporan keuangan setelah pandemi Covid-19. Selain itu, penelitian ini bertujuan untuk menetapkan akun-akun yang paling berpengaruh terhadap kecurangan laporan keuangan. Dalam penelitian ini, perusahaan yang terdaftar pada Indeks LQ 45 pada tahun 2020 dan 2021 dipilih menjadi sampel untuk penelitian ini, dan data laporan keuangan dari tahun 2020 dan 2021 dikumpulkan. Menggunakan Beneish Model M-Score, sampel dibagi menjadi dua kelompok, yaitu manipulator dan non-manipulator. Selanjutnya untuk mencari variabel yang paling berpengaruh dilakukan uji Mann Whitney dengan menggunakan SPSS. Adapun hasilnya menunjukkan bahwa pada tahun 2020 dan 2021, masing-masing sekitar 10% dan 17% perusahaan terdaftar diduga melakukan kecurangan. Penelitian ini juga mengungkapkan akun-akun dalam laporan keuangan seperti pendapatan, penjualan, laba, dan arus kas menjadi akun kunci yang sangat penting yang perlu diperhatikan dalam menilai laporan keuangan karena informasi tersebut mengandung kemungkinan yang signifikan untuk dimanipulasi.

*Kata kunci: kecurangan; M-score; laporan keuangan*

**1. INTRODUCTION**

Financial statements are an important thing and crucial for each company. They are an overview of the overall activities of each company in a certain period. This report shows the operational, managerial, strategy, and direction of the company's policies. The information contained in it is transaction activities that occur in business processes, which are then assessed as having economic and monetary value. Furthermore, this information is assessed in monetary and economic terms, it can be said that company's financial statements are a form of corporate responsibility to the public.

For the practice, because the financial statements contain information related to the financial condition of the company, this information is often used as a reference basis for evaluating their performance within a particular period as well as to prevent and overcome unwanted conditions that will occur.

Furthermore, financial reports are also used as a basis for strategic planning, policy direction, and material for future decision-making. Therefore, the information contained in it must be presented properly and accurately, to prevent losses from both inside the company and outside the company.

In its development, there have been many errors in the presentation of financial statements which have resulted in losses both internal to the company and external to the company and the public. According to the ACFE Indonesia Chapter report, fraud in financial statements is the second cause with a total loss of IDR 240 billion (ACFE Indonesia Chapter, 2019). Take for example the fraudulent financial statements experienced case by PT. Garuda Indonesia in 2021 which results in the threat of bankruptcy because it is unable to pay debts (Binekasri, 2022). Even though the development of the operational business looks positive and doing well. In addition, fraudulent

financial statements cases also have an impact on the amount of state financial losses. This happened in the case of fraudulent financial statements by PT. ASABRI which resulted in state financial losses of IDR 22,788,566,482 083 (Medistiara, 2022).

On the other hand, based on the ACFE Indonesia chapter report, of the many cases of financial statement fraud, the duration for detecting fraud in financial statements takes approximately 12 months as much as 93.7% (ACFE Indonesia Chapter, 2019).

Furthermore, the above conditions were exacerbated by the Covid-19 pandemic, which caused a decline in the company's performance and the stock market. Limited mobility of the people is one of the causes of the decline in people's purchasing power which leads to restrictions on operations or production activities which leads to a decrease in supply. A decrease in supply is accompanied by reduce people's purchasing power which leads to reduces sales and company income (Junaidi & Salim, 2021).

Based on the above phenomena, it is deemed necessary to assess the possibility what companies listed on the LQ 45 Index after the Covid-19 pandemic will commit the fraudulent financial statement and to aims to assign the most influential account will commit in fraudulent financial statement in Indonesia. This information can then be used by parties with an interest in financial reports to take attitudes and policies regarding relevant information contained in financial reports for both investment purposes and business operational purposes (Asiruwa et al., 2018).

## 2. LITERATURE REVIEW

According to Association of Certified Fraud Examiners (ACFE), the meaning of fraud in financial statements is intentional fraudulent acts committed by managers or employees by not providing actual financial information, for example, fictitious income, reporting costs that are too low, and so on (ACFE, 2014). Furthermore, this behaviour can have adverse effects such as reducing investor confidence, decreasing reputation, causing potential fines, causing criminal proceedings, reducing profitability, and making losses due to market uncertainties (Rostami & Rezaei, 2022). Due to the importance of this condition, various in-depth studies have been carried out regarding cases of fraudulent financial statements. Among them is research that shows that financial statement fraud is significantly influenced only by external pressure and rationalization (Yesiariani & Rahayu, 2017). A similar opinion is also completed by further research that states that pressure and rationalization can be elements can cause fraud in financial statements (Novita, 2019). In its development, to complement previous research, further research was carried out on fraud in financial reports and the results show that the variables of personal financial need and total accruals has a

positive and significant influence on financial statement fraud (Sari & Lestari, 2020).

Furthermore, other research on fraudulent financial statements was also conducted in food and beverage sub-sector manufacturing companies. The research found that financial stability and financial targets have a significant influence on fraudulent financial statements. Meanwhile, auditor changes, political connections, changes in directors, ineffective supervision, SOEs, frequent CEO photos, and government projects, have no significant influence (Sagala & Siagian, 2021). Intending to complement previous research, through the perspective of the fraud diamond model it is stated that the nature of industry, sales history and financial need have a positive and significant effect on fraudulent financial statements (Khamainy et al., 2022). Further research in the banking sector states that exaggerating income, increasing intangible assets, and reducing costs and accruals are very closely related to the detection of fraudulent financial statements (Khatun et al., 2022). For this reason, it is necessary to improve and strengthen the management section to reduce fraud conditions (Seifzadeh et al., 2022).

Based totally on previous research, there are several strategies for calculating the possibilities of fraudulent financial reporting, which includes research on the Athens inventory alternate marketplace, using the Benish version M-rating where there are 33 (out of 40) agencies having an M-rating beneath -2.22. therefore, 82.5% of the sample considered it not possible to manipulate earnings whilst 17.5% of businesses tend to govern their profits (Maniatis, 2022). Other research additionally attempts to combine numerous techniques consisting of research which indicates that the Altman, Springate, and Grover techniques offer a robust indication of GIAA's financial difficulties and all fashions get the same indication of misery 14 times (Aviantara, 2021).

Each model has its advantages and disadvantages. However, there was research that reveals that the M-score is more accurate for detecting possible manipulation in financial statements compared to the F-score model (Hugo, 2019). Other research also states that the Z-score model can detect more indications of fraud in financial reports compared to the M-score model (Kukreja et al., 2020).

Therefore, this research uses the M-score model to assess the opportunity for manipulating financial statements to occur using a fairly long period. This research tries to see how the potential for financial statement manipulation on the LQ 45 Index and to find out aims to assign the most influential account will commit in fraudulent financial statement using the M-score model.

## 3. RESEARCH METHOD

The kind of this studies is quantitative studies with a descriptive approach. In line with Arikunto, in this look at numbers have been used beginning from

the records series manner, records interpretation, and the advent of the results. (Arikunto, 2014)

This research objectives to decide the capacity for monetary declaration fraud after the Covid-19 pandemic in groups in Indonesia. The sample selection method is purposive sampling taken from companies that are always listed in the LQ 45 Index in 2020 and 2021. The reason for the LQ 45 Index being chosen as a sample is because this index is considered to provide the best financial information, as well as the best regulations and compliance. Of all the listed companies, due to the fact not all economic reports incorporate the statistics wished by the measurement variables, along with agencies engaged within the banking region, banking corporations are excluded from deciding on the sample. From the selection results obtained 30 companies as samples.

In this research, data were analysed in two steps. For the first step, the data from financial statement are calculate the value of the M-Score variable using MS. Excel. With the help of this model, companies are categorized into 2 groups, namely manipulators and non-manipulators. The second step is to apply a statistical to find the biggest ratio of substance within the grouping of businesses. The Statistical package deal for Social Sciences (SPSS) might be used here to examine the records gathered and solve research questions; The Mann-Whitney test with SPSS was used between the two categories to find a ratio that was statistically significant in categorizing companies into two categories. In addition, this test shows that ratios dominate and attention variables are mostly used to manipulate financial data.

Operational variables

$$DSRI = \frac{\text{Receiveblet} / \text{Salest}}{\text{Receiveblet-1} / \text{Salest-1}} \dots\dots\dots(1)$$

$$GMI = \frac{\text{Gros Profitt-1} / \text{Salest-1}}{\text{Gros Profitt} / \text{Salest}} \dots\dots\dots(2)$$

$$AQI = (1 - \frac{\text{Current Assetst} + \text{Fixed Assetst}}{\text{Total Assetst}}) / (1 - \frac{\text{Current Assetst-1} + \text{Fixed Assetst-1}}{\text{Total Assetst-1}}) \dots\dots\dots(3)$$

$$DEPI = (\frac{\text{Depreciation-1}}{\text{Depreciation-1} + \text{Fixed Assetst-1}}) / (\frac{\text{Depreciation}}{\text{Depreciation} + \text{Fixed Assetst}}) \dots\dots\dots(4)$$

$$SGAI = \frac{(\frac{\text{Selling and General Administrative Expenset}}{\text{Salest}}) - (\frac{\text{Selling General and Administrative Expenset-1}}{\text{Salest-1}})}{\dots} \dots\dots(5)$$

$$LVGI = \frac{\text{Total Liabilitiest} / \text{Total Assetst}}{\text{Total Liabilitiest-1} / \text{Total Assetst-1}} \dots\dots\dots(6)$$

$$SGI = \frac{\text{Salest}}{\text{Salest-1}} \dots\dots\dots(7)$$

$$TATA = \frac{\text{Total Accrualst}}{\text{Total Assetst}} \dots\dots\dots(8)$$

$$M = -4.84 + (0.92 \times DSRI) + (0.528 \times GMI) + (0.404 \times AQI) + (0.892 \times SGI) + (0.115 \times DEPI) - (0.172 \times SGAI) + (4.679 \times TATA) - (0.327 \times LVGI)$$

Table 1. Operational Variables Table

Variable Names	Meaning
<b>Days sales in receivables index (DSRI)</b>	Verify the ratio between days income and receivables. Big growth of this variable shows a higher possibility of earnings manipulation
<b>Gross margin index (GMI)</b>	Divide the gross margin in the preceding year with the gross margin in the current year. The greater the index, the greater the fraudulent chance
<b>Asset quality index (AQI)</b>	Display the ratio between current assets plus fixed asset and overall asset in between the year and previous year. There is an effective relation between this index and viable fraudulent pastimes related to fraudulent
<b>Sales growth index (SGI)</b>	Compare the ratio of income in a year to income in prior year. The greater the ratio, the better the probability of manipulation because of the high expectancies concerning the increase price of a company
<b>Depreciation index (DEPI)</b>	Represent the ratio of depreciation in the preceding a year to the appropriate in a prior year
<b>Sales general and administrative expenses index (SGAI)</b>	Represent the ratio of sales and administrative expense to sales in a year with regards to the corresponding ratio inside the preceding a prior year. The greater ratio may additionally show the greater opportunity for fraudulent
<b>Leverage index (LVGI)</b>	Represent the ratio of total debt to total asset in a year relative to the appropriate ratio in previous year
<b>Total accruals to total assets (TATA)</b>	Show the ratio between total accruals and total asset

Source : Author, 2022

4. RESULT AND DISCUSSION  
Categorizing companies based on Benish M-Score model

30 samples are calculated on variables to find the M-Score value. Furthermore, the value will become a reference for dividing the companies in two categorize; as a company that is suspected of committing financial report fraud and those that do not. When the M-Score value is higher than -2.22,

then the company is suspected for showing fraudulent financial statement and vice versa.

Table. 1. will show the categories of companies suspected of fraudulent financial reporting after the Covid-19 pandemic (2020-2021).

**Table 2. Company Categorize**

Year	Manipulator (M-Score > -2,22)	Non-Manipulator (M-Score < -2,22)
20	3 (10%)	27 (90%)
21	5 (17%)	25 (83%)

Source : Processed, 2022

In 2020, 10% of companies are suspected of getting dedicated financial statement fraud, and the 90% of companies do not commit fraudulent financial statement. In the following year, there was an increase in companies suspected of committing fraud where 17% of companies were suspected of committing

fraudulent financial statements and the remaining 83% did not commit fraudulent financial statements.

**Finding variables that are significant to the lack of financial statements**

In this section, we will try to find and define the most significant of the eight variables forming the M-Score value so that significant causes of fraudulent financial statement can be found by using the Mann-Whitney Test in the SPSS application. Tables. 2 and 3 will show data from the Mann-Whitney test results in 2020 and 2021 respectively.

With this test, you will see the value of Asymp. Sig. (2-tailed). When the value is less than 0.05, statistically the variable has a significant influence on the accuracy of the fraudulent financial statements, otherwise if the Asymp. Sig. (2-tailed) is greater than 0.05, then this variable does not have significant influence on fraudulent financial statement.

**Table 2. Mann Whitney Test Result in 2020**

	RI	DS MI	G	AQI	I	SG PI	DE IA	SG	L VGI	T ATA
<b>Mann-Whitney U</b>	40.000	2.000	25.000	36.000	23.000	11.000	14.000	25.000		
<b>Wilcoxon W</b>	46.000	380.000	31.000	414.000	29.000	17.000	20.000	40.000		
<b>Z</b>	-.035	-2.662	-1.072	-.311	-1.210	-2.039	-.1832	-1.072		
<b>Asymp. Sig. (2-tailed)</b>	.972	.008	.284	.756	.221	.047	.064	.28		
<b>Exact Sig. [2*(1-tailed Sig.)]</b>	1.000 <sup>b</sup>	.002 <sup>b</sup>	.315 <sup>b</sup>	.795 <sup>b</sup>	.253 <sup>b</sup>	.041 <sup>b</sup>	.072 <sup>b</sup>	.31		

Source : Processed, 2022

**Table 3. Mann Whitney Test Result in 2021**

	RI	DS MI	G	A	S	D	S	LV	TA
<b>Mann-Whitney U</b>	20.000	55.500	55.000	32.000	40.500	33.000	48.000	7.000	
<b>Wilcoxon W</b>	34.500	38.500	70.500	35.500	55.000	48.500	373.000	332.000	
<b>Z</b>	-2.366	-.390	-.390	-1.699	-1.229	-1.642	-.780	-3.090	
<b>Asymp. Sig. (2-tailed)</b>	.018	.697	.697	.089	.219	.105	.432	.00	
<b>Exact Sig. [2*(1-tailed Sig.)]</b>	.016 <sup>b</sup>	.696 <sup>b</sup>	.696 <sup>b</sup>	.099 <sup>b</sup>	.228 <sup>b</sup>	.108 <sup>b</sup>	.441 <sup>b</sup>	.00	

Source : Processed, 2022

In table. 2, each the GMI variable and SGI variable values has 0.008 and 0.041 of Asymp. Sig. (2-tailed). Because their values are less than 0.05, statistically, both variables have a significant influence on the grouping of the manipulator and non-manipulator companies. DSRI, AQI, SGI,

DEPI, LVGI, and TATA variables had no statistically significant influence.

Furthermore, in table. 3, each the DSRI variable and TATA variable has 0.018 and 0.002 of Asymp. Sig. (2-tailed) of. Because the value is less than 0.05, statistically the DSRI and TATA variables have a significant influence on the grouping of the

manipulator and non-manipulator companies. GMI, AQI, SGI, DEPI, and LVGI variables had no statistically significant influence.

## Discussion

In 2020, this research discovered the GMI and SGI variables had a significant influence on allegations of fraudulent financial statement. Analysis of these variables resulted in 10% of companies belonging to the LQ 45 Index category being suspected of committing financial statement fraud. GMI variables relate to revenues and the direct costs of generating those revenues. This illustrates the company's actual growth, and research shows that companies with great growth can be expected to be involved in profit manipulation (Khatun et al., 2022). The next manipulation variable is the SGI, that quantify the sales growth index. However, sales growth is great for the company and should be appropriate with cash flow operating over time. Higher SGI values can indicate fraud in financial reports (Sarumpaet & K, 2021).

Furthermore, in 2021, it is found that 17% of suspected financial statement fraud is influenced by the DSRI and TATA variables. The DSRI variable shows that interest income and balances can be fraudulent manipulation items. Increased income and a disproportionate balance can indicate a higher increase in DSRI. A higher DSRI can indicate fraudulent financial statements (Sarumpaet & K, 2021). Then, the TATA variable can also describe misrepresentation of information because it relates to the difference between net profit accounts and cash flow operation accounts, so that a higher accrual amount can indicate accounting manipulation (Khatun et al., 2022).

## 5. CLOSING

### 5.1. Conclusion

This research intends to identify the possibility what companies listed on the LQ 45 Index after the Covid-19 pandemic will commit the fraudulent financial statement. In 2020 and 2021, respectively, around 10% and 17% of registered companies are suspected of committing fraud. In addition, this research aims to assign the most influential account will commit in fraudulent financial statement by using ratio or variable among the eight ratios of the Beneish Model through the Mann-Whitney test in SPSS. From this research, the accounts in the financial report like receivable, sales and revenue, gross profit, and cash flow were important key accounts that need to be considered in assessing financial statements because the information contained therein has a significant possibility of being manipulated. Furthermore, an increase and a very high value in the ratio Beneish Model can indicate allegations of fraud in the financial statements (Sarumpaet & K, 2021)

### 5.2. Recommendations

This study uses a relatively short time span, for this reason it is hoped that it will be able to use a long enough time span to see the variables that have a significant effect on the alleged fraudulent financial statements. If possible, compare conditions before and after the Covid-19 pandemic to get a more comprehensive picture regarding the influence of variables. Furthermore, the use of variable measuring instruments can be increased to make it more complete.

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