

FINANCIAL PERFORMANCE ANALYSIS OF FOOD AND BEVERAGE PUBLIC LISTED COMPANIES FOR THE THREE QUARTERS BEFORE AND AFTER THE COVID-19 PANDEMIC IN INDONESIA

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ABSTRACT

The COVID-19 pandemic has disrupted the Indonesian economy and caused a decline in various business's performance. Even though the food and beverage industry had been enjoying a sustain and stable year on year growth over the previous five years, it has not immune to the downturn. This study aims to measure the impact of COVID-19 pandemic to the food and beverage public listed company's financial performance on the Indonesia Stock Exchange. The study selected six companies from the food and beverage industry and analyzed the financial data before the pandemic (three quarters in 2019) and after the pandemic (three quarters 2020). All data were collected from the quarterly published financial reports in Indonesia Stock Exchange. Although none of the observed companies were state owned enterprise but author used eight financial ratios and financial healthiness level, as per SOE Minister Decree No 100/2002 to examine the data. Statistical student t-test was applied to validate the significant difference on the financial performance before and after the pandemic. The result shows a decline in the company's Profitability ratio (Return on Investment, and Return on Equity), Activity ratio (Collection period, Inventory Turnover, and Total Assets turnover), Solvency (Total Equity to Total Assets) and overall Financial Healthiness after the pandemic COVID-19. On the other way around, an increase in Liquidity (Cash and Current ratio) was identified after the pandemic. However, the difference between before and after the pandemic was not significant.

Key words: COVID-19, Food and Beverage, Financial Performance, student t-test statistic

1. INTRODUCTION

For the past five years, the food and beverage industry in Indonesia Stock Exchange has shown positive growth. Based on the annual report from the industry, and the report from the Ministry of Industry in Feb 2019, the incremental in revenue and net income were confirmed. The positive outcomes are confirmed by the Ministry of Industry in national media and presented in the Statistic Data (*Kemenperin RI, 2015-2019 Report, Feb 2019*). Figure 1 shows the growth of Food and Beverage industry in Indonesia between 2015-2019.

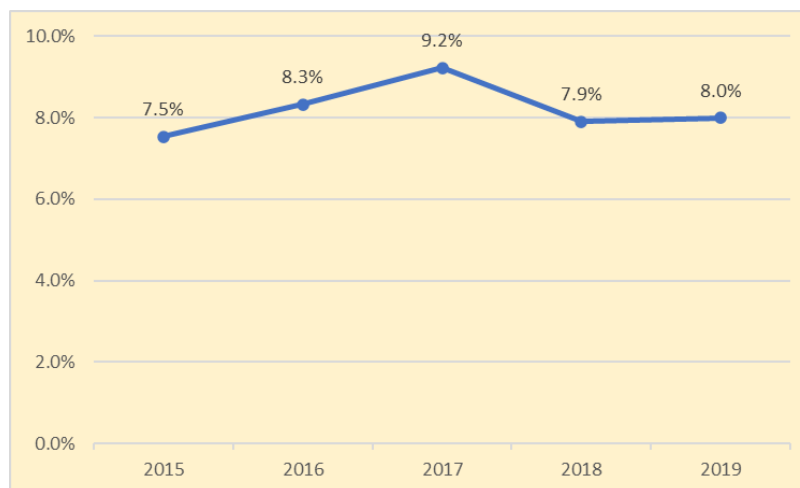


Figure 1: Food and Beverage Industry Growth (Kemenperin, 2015-2019 Report)

The industry growth was better than the GDP within the same timeline. Based on Indonesia Central Statistics Bureau (BPS) data, BPS No 17-02-XXIII 5 Feb 2020, Indonesia GDP growth for the past five years shown stable increment at year-on-year basis, approximately 5%. Even though the Government of Indonesia slashed the energy subsidy and focused on infrastructure investment, the 5% growth rate was still lower compared to the half decade before.

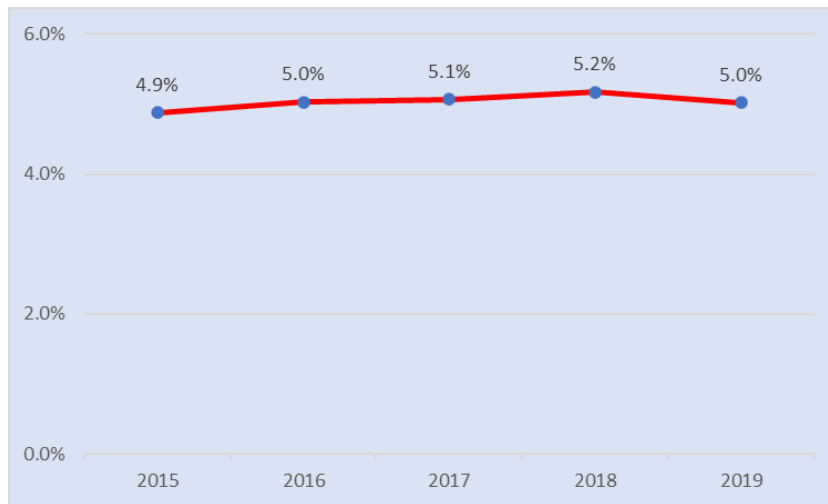


Figure 2: Indonesia GDP (Biro Pusat Statistik, 2020)

However, the positive trend seems to stop due to the occurrence of pandemic coronavirus (COVID-19). Since the World Health Organization (WHO) declared the COVID-19 as a pandemic on the 30th of January (WHO, 2020), many countries decided to enact lockdown and banned people movement, social activity and business. The lockdown was implemented with the hope of reducing the virus spreading globally.

Compare to other South East Asian neighbors, Singapore and Malaysia, Indonesia did not report any COVID-19 case until March 2020 (CNN.com, 2020). President Joko Widodo announced two positive cases that happened to be near Jakarta, the nation's capital, that located in Java, the most populated island in Indonesia.

Anticipating higher risk that could be faced in the future, the government of Indonesia soon formed a task force to contain the COVID-19 impact, via Presidential Decrees (Presidential Decree 7 and 9, 2020).

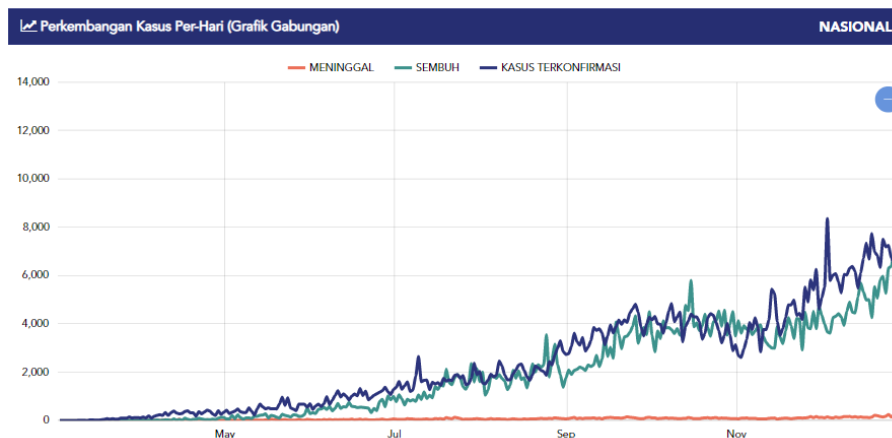


Figure 3. Timeline of Indonesia COVID 19 Cases and Deaths (Source: Official Website Indonesia COVID-19 Task Force, covid19.go.id)

Other Asian countries like South Korea, Singapore, and Hongkong, have all had some success in containing the COVID-19 spread by rolling out mass tests and mobility restrictions (McCurry, Ratcliffe, and Davidson, 2020). Indonesia did not apply lockdown, instead the Government of Indonesia chose to apply large scale social restriction. The government of Indonesia limiting human activities and movement such as school closure and apply work from home mechanism, to minimize economic impact to the country.

In June 20, the Government revised the State Budget 2020. This revision was meant to strengthen the Pandemic handling and focus on national economic recovery. The revision was lower on the Income expectation, while higher on state spending for economic recovery (*Peraturan Presiden No 72 Tahun 2020 tentang Perubahan Atas Peraturan Presiden No 54 Tahun 2020 tentang Perubahan Postur dan Rincian APBN Tahun 2020*).

The pandemic also affects the stock market. Until the 3rd Quarter of 2020, the Indonesia Stock Exchange recorded lowest index at 3,937 (*IDX Quarterly Statistic, Q3-2020*). This happened when the government began implementing lockdowns and social distancing, which resulted in panic and a drastic decline in economic activity. Among all industries and subsectors of public listed

companies in Indonesia, the food and beverage subsector are one of the most interesting focus, as they produce human basic needs. The food and beverage have a strategic role to support the sustenance of community consumption, keeping people alive, and more importantly keeping the economic growing.

This research study focuses on the association between financial performances of the public listed food and beverage companies in IDX for the period Q2/2019-Q3/2020. The timeline is chosen to determine if there are different on the company's financial performance on the three Quarters before and three Quarters after the pandemic. The other aspect is to determine what is the health conditions of the food and beverage companies, using the Indonesia State Owned Enterprise

2. RESEARCH QUESTIONS AND OBJECTIVES

This research was conducted to answer the following questions.

1. Are there any differences on the company's performance based on financial ratio measurement between the three quarters before and the three quarters after COVID-19 pandemic using Indonesia Minister's Decree No 100/2002 and t-test statistical analysis?
2. Are there any differences on the company's financial healthiness rating between the three quarters before and the three quarters after COVID-19 pandemic based on the SOE Minister's Decree No 100/2002 and t-test statistical analysis?
3. What is the healthiness status of the six samples food and beverage companies between before and after COVID-19 pandemic based on the descriptive financial ratio analysis from the SOE Minister's Decree No 100/2002?

The research objectives are:

1. To determine and analyse whether there are significant differences on the company financial performance three (3) quarters before (Q2/2019 – Q4/2019) and after COVID-19 pandemic (Q1/2020-Q3/2020) by measuring eight financial ratios from the Indonesia SOE Minister's Decree No. 100/2002 and t-test statistical analysis.
2. To determine and analyse whether there are differences on the financial healthiness rating for the three (3) quarters before (Q2/2019-Q4/2019) and after (Q1/2020-Q3/2020) COVID-19 pandemic based on the SOE Minister's Decree No 100/2002 and t-test statistical analysis.
3. To analyse the financial healthiness rating of the six sample companies between before and after the COVID-19 pandemic based on the descriptive financial ratio analysis from the SOE Minister's Decree No 100/2002

3. METHODOLOGY

Financial Statement Overview

Financial statement has important function in business. It provides fundamental information on the financial position and the company's performance over a period of time to both internal and external stakeholder. According to Pernyataan Standard Akuntansi Keuangan (PSAK) No.1, a financial statement is part of financial reporting. The financial statement shows what management has done and a report that shows the accountability of the resource entrusted to the management. A complete financial statement consists of balance sheet, income statement, statement of cash flow, statement of equity changes, and notes to financial statement. Financial statement is used by the Management for decision making basis.

Financial Ratio Analysis

Financial ratio is a numeric outcome as a result of dividing one financial data to other data and is used to express the relativity of different financial variables. Financial ratios are normally grouped into below categories:

- Short Term Solvency, or Liquidity ratio
- Long Term Solvency, or Financial Leverage ratio
- Asset Management, or Turnover ratio
- Profitability ratio
- Market value ratio

Profitability Ratio

Profitability ratio is a method used to measure business ability to generate revenue and profit at certain period of time (Ross et al, 2016). Some notable ratios are: Gross Margin Ratio, Profit Margin, Return on Assets, Return on Investment, and Return on Equity. For the purpose of this study, author select the ROI and ROE to measure profitability.

Return on Equity (ROE) is a method to determine return on a dollar of equity over a period of time. (Ross et al, 2012: 64)

$$ROE = \frac{Net\ Income}{Shareholders\ Equity} \times 100\%$$

Return on Investment (ROI) is a method to measure how effective a business generating income based on the capital employed over a period of time. (Damodaran, 2015:161,189).

$$\text{ROI} = \frac{\text{EBITDA}}{\text{Capital Employes}} \times 100\%$$

Liquidity Ratio

Liquidity ratio is a formula to measure how fast and ease a business can convert its assets into cash in a period of time. Liquidity can also be considered as ratio used to measure a company's ability to pay off their bills due in short term. Consequently, these ratios focus on current assets and current liabilities. (Ross et al, 2012:57)

Cash Ratio is a method to measure company's liquidity that focus on cash and cash equivalent. This ratio assesses whether the company's cash and cash equivalent could pay its current liabilities that due in short term. (Ross et al, 2012:58)

$$\text{Cash Ratio} = \frac{\text{Cash}}{\text{Current Liabilities}} \times 100\%$$

Current Ratio measures a company's ability to pay current or short-term liabilities with its current, or short term assets. (Ross et al, 2012:57)

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} \times 100\%$$

Activity Ratio

Activity Ratio measures how efficient a company manages its assets to generate revenue. (Ross et al, 2012:61).

There are several ratios can be classified under Activity ratio. Based on the SOE Minister Decree, author select three ratios: the Total Assets Turnover, Inventory Turnover, and Collection Period.

Total Asset Turnover ratio is a method to measure the effectiveness of total assets to generate sales. (Ross et al, 2012:63).

$$\text{Total Assets Turnover} = \frac{\text{Net Sales}}{\text{Capital Employed (Total Assets - Fixed Assets)}} \times 100\%$$

Inventory Turnover is a method to measure company's effectivity in managing its inventory. The formula, states in days, is by comparing the cost of goods sold to inventory over a period of time. (Ross et al, 2012:61).

$$\text{Inventory Turnover} = \frac{\text{Inventory}}{\text{Cost of Goods Sold}} \times 365$$

Collection Periods is the number of days different between when a company's receives cash with when the company's record the Accounts Receivable. Business uses Collection Period to measure its cash availability to meet their financial obligations. (Ross et al, 2012:62).

$$\text{Collection Period} = \frac{\text{Accounts Receivable}}{\text{Sales}} \times 365$$

Solvency Ratio

Solvency ratios are used to measure a company's long-term ability to meet its financial obligations (Ross, 2012:59). Solvency ratios also help the business owner keep an eye on downtrends that could suggest the potential for bankruptcy in the future.

For this study, author used Total Equity to Total Asset Ratio when analysing the data.

Total Equity to Total Asset Ratio, measures how much of a company's assets are financed by issuing equity rather than by financing on debt. (Kenton, 2020).

$$\text{Total Equity to Total Assets} = \frac{\text{Total Equity}}{\text{Total Assets}} \times 100\%$$

Healthiness Rate for Indonesia State Owned Company

The Indonesia government has established an assessment basis for measuring the performance of State-Owned Enterprises, by issuing BUMN Minister's Decree No: KEP-100/BMU/2002 about The Assessment of Healthiness Rate of State-Owned Company. In this study, author use the Health Level and Criteria of SOE as per the Decree to assess the six sample companies. In table below, Company's healthiness rating and classification as per the Minister decree is presented.

Table 1. Company Healthiness Rating (Source: Minister of SOEs Decree No 100, 2002)

Healthiness Level	Rating	Total Weighted Score (TWS)
Healthy	AAA	TWS > 95
	AA	80 < TWS ≤ 95
	A	65 < TWS ≤ 80
Less Healthy	BBB	50 < TWS ≤ 65
	BB	40 < TWS ≤ 50
	B	30 < TWS ≤ 40
Unhealthy	CCC	20 < TWS ≤ 30
	CC	10 < TWS ≤ 20
	C	TWS ≤ 10

To assess the financial performance aspect, the total weighted score is obtained from summing up the score of eight financial ratios. Total weighted score of Non-Infrastructure company (include the Food and Beverage sub sector) group is seventy. The score is sum and compiled by computing financial ratios as below (the “Non-Infra” column).The financial ratios used to measure were presented in the following eight tables.

Table 2. ROE Scoring System (Source: Minister of SOEs Decree No 100, 2002)

Return on Equity (%)	Score	
	Infra	Non Infra
15 < ROE	15	20
13 < ROE ≤ 15	13.5	18
11 < ROE ≤ 13	12	16
9 < ROE ≤ 11	10.5	14
7.9 < ROE ≤ 9	9	12
6.6 < ROE ≤ 7.9	7.5	10
5.3 < ROE ≤ 6.6	6	8.5
4 < ROE ≤ 5.3	5	7
2.5 < ROE ≤ 4	4	5.5
1 < ROE ≤ 2.5	3	4
0 < ROE ≤ 1	1.5	2
ROE < 0	1	0

Table 3. ROI Scoring System (Source: Minister of SOEs Decree No 100, 2002)

Return on Investment (%)	Score	
	Infra	Non Infra
18 < ROI	10	15
15 < ROI ≤ 18	9	13.5
13 < ROI ≤ 15	8	12
12 < ROI ≤ 13	7	10.5
10.5 < ROI ≤ 12	6	9
9 < ROI ≤ 10.5	5	7.5
7 < ROI ≤ 9	4	6
5 < ROI ≤ 7	3.5	5
3 < ROI ≤ 5	3	4
1 < ROI ≤ 3	2.5	3
0 < ROI ≤ 1	2	2
ROI < 0	0	1

Table 4. Cash Ratio Scoring System (Source: Minister of SOEs Decree No 100, 2002)

Cash Ratio = X (%)	Score	
	Infra	Non Infra
$X \geq 35$	3	5
$25 \leq X < 35$	2.5	4
$15 \leq X < 25$	2	3
$10 \leq X < 15$	1.5	2
$5 \leq X < 10$	1	1
$0 \leq X < 5$	0	0

Table 5. Current Ratio Scoring System (Source: Minister of SOEs Decree No 100, 2002)

Current Ratio = X (%)	Score	
	Infra	Non Infra
$125 \leq X$	3	5
$110 \leq X < 125$	2.5	4
$100 \leq X < 110$	2	3
$95 \leq X < 100$	1.5	2
$90 \leq X < 95$	1	1
$X < 90$	0	0

Table 6. Current Ratio Scoring System (Source: Minister of SOEs Decree No 100, 2002)

CP = X (hari)	Perbaikan = X (hari)	Score	
		Infra	Non Infra
$X \leq 60$	$X > 35$	4	5
$60 < X \leq 90$	$30 < X \leq 35$	3.5	4.5
$90 < X \leq 120$	$25 < X \leq 30$	3	4
$120 < X \leq 150$	$20 < X \leq 25$	2.5	3.5
$150 < X \leq 180$	$15 < X \leq 20$	2	3
$180 < X \leq 210$	$10 < X \leq 15$	1.6	2.4
$210 < X \leq 240$	$6 < X \leq 10$	1.2	1.8
$240 < X \leq 270$	$3 < X \leq 6$	0.8	1.2
$270 < X \leq 300$	$1 < X \leq 3$	0.4	0.6
$300 < X$	$0 < X \leq 1$	0	0

Table 7. Inventory Turnover Scoring System (Source: Minister of SOEs Decree No 100, 2002)

PP = X (hari)	Perbaikan = X (hari)	Score	
		Infra	Non Infra
$X \leq 60$	$35 < X$	4	5
$60 < X \leq 90$	$30 < X \leq 35$	3.5	4.5
$90 < X \leq 120$	$25 < X \leq 30$	3	4
$120 < X \leq 150$	$20 < X \leq 25$	2.5	3.5
$150 < X \leq 180$	$15 < X \leq 20$	2	3
$180 < X \leq 210$	$10 < X \leq 15$	1.6	2.4
$210 < X \leq 240$	$6 < X \leq 10$	1.2	1.8
$240 < X \leq 270$	$3 < X \leq 6$	0.8	1.2
$270 < X \leq 300$	$1 < X \leq 3$	0.4	0.6
$300 < X$	$0 < X \leq 1$	0	0

Table 8. Total Assets Turnover (Source: Minister of SOEs Decree No 100, 2002)

TATO = X (%)	Perbaikan = X (%)	Score	
		Infra	Non Infra
120 < X	20 < X	4	5
105 < X ≤ 120	15 < X ≤ 20	3.5	4.5
90 < X ≤ 105	10 < X ≤ 15	3	4
75 < X ≤ 90	5 < X ≤ 10	2.5	3.5
60 < X ≤ 75	0 < X ≤ 5	2	3
40 < X ≤ 60	X ≤ 0	1.5	2.5
20 < X ≤ 40	X < 0	1	2
X ≤ 20	X < 0	0.5	1.5

Table 9. Total Equity to Total Assets (Source Minister of SOEs Decree No 100, 2002)

Total Equity to TA (%) = X	Score	
	Infra	Non Infra
X < 0	0	0
0 ≤ X < 10	2	4
10 ≤ X < 20	3	6
20 ≤ X < 30	4	7.25
30 ≤ X < 40	5	10
40 ≤ X < 50	6	9
50 ≤ X < 60	5.5	8.5
60 ≤ X < 70	5	8
70 ≤ X < 80	4.5	7.5
80 ≤ X < 90	4	7
90 ≤ X < 100	3.5	6.5

Last step is to sum up the total score obtained from eight financial ratios result, and subsequently define the weighted score by dividing seventy (70) as denominator and multiply by one hundred (100). The result will then determine the company's healthiness rating (criteria: AAA, AA, A, BBB, BB, B, CCC, CC, or C).

Student t-Test

Student t-test is one of the widely used statistical method and is used to test whether the Mean difference between two groups of data are significant statistically. A null hypothesis state that both Means are statistically equal, whereas alternative hypothesis state that both Means are not statistically equal.

There are three types of t-test: one sample t-test, independent samples t-test, and paired samples t-test. The t-test requires that observations are taken from a normally distributed population and the two-sample t-test requires that the two populations should have the same variance.

According to Ambrosius (2007), Paired Samples means that there are two groups of samples, each sample in the first group is related to one and only one sample in the second group, and there are no unpaired samples in either group. Both groups have the same sample size, n. The most common types of paired samples is a measurement on the same subject prior and after an intervention. To compute the t-statistic, we must first compute the difference between each of the paired values.

$$D_i = x_{i1} - x_{i2}$$

Then compute the mean and standard deviation, \bar{x}_D and s_D , of the differences. It is assumed that the D_i have a normal distribution. This is guaranteed if both groups are assumed to come from underlying normal distributions. Usually, the difference is compared with zero, so the null and alternate hypothesis are:

$$H_0: \delta = 0 \text{ or } \mu_1 = \mu_2$$

$$H_A: \delta \neq 0 \text{ or } \mu_1 \neq \mu_2$$

Where δ is the (unknown) true value of the mean difference. The t-test for two dependent samples (Sheskin, 2000).

$$t = \frac{\bar{D}}{s_{\bar{D}}}$$

Where,

\bar{D} represents the mean of the difference scores.

$s_{\bar{D}}$ represents the standard error of the mean difference.

\bar{S}_D represents a standard deviation of the difference scores.

$$\bar{D} = \frac{\sum D}{n} ; \bar{S}_D = \sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{n}}{n-1}} ; s_{\bar{D}} = \frac{\bar{S}_D}{\sqrt{n}}$$

4. RESEARCH MODEL

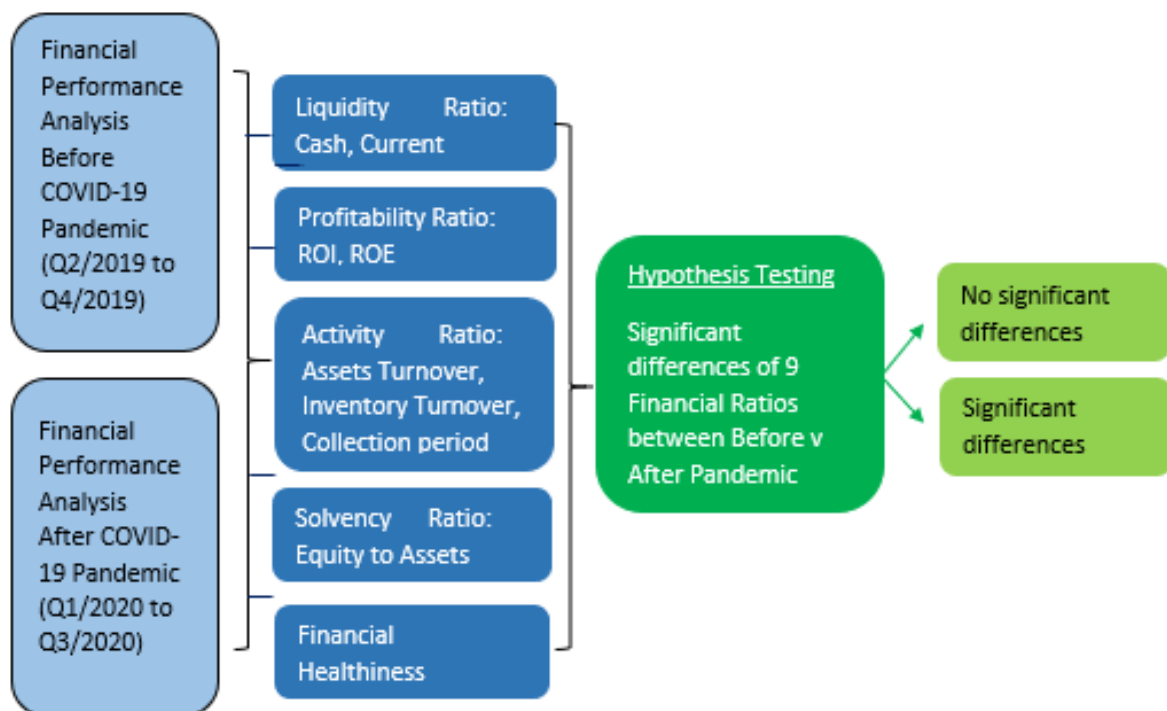


Figure 3. Research Model (Author, 2020)

This research model is adapted based on previous studies regarding financial performance analysis in comparing the significant difference between certain condition to another condition after occurrence of an event. Several previous studies on financial analysis that can be named were study by Daryanto and Kartiningsih in 2019, examining effect of firm characteristic to profitability of food and beverage companies, Daryanto and Purwanto in 2020, examining financial performance analysis of state-owned companies before and after JKN,

The author added up some variables and made several comparisons as novelty of this research, by using statistical measurement. The financial data were collected from published quarterly financial report from each listed company. The data then computed and compiled to get the Financial Ratio Analysis, as a basis to answer the nine hypotheses.

5. RESEARCH HYPOTHESIS

Author decided to utilize the following hypothesis when examining the financial performance before and after the COVID-19 pandemic.

H1: There is significant difference in ROI analysis of the company before and after COVID-19 pandemic.

H2: There is significant difference in ROE analysis of the company before and after COVID-19 pandemic.

H3: There is significant difference in Cash Ratio analysis of the company before and after COVID-19 pandemic.

H4: There is significant difference in Current Ratio analysis of the company before and after COVID-19 pandemic.

- H5: There is significant difference in Inventory Turnover analysis of the company before and after COVID-19 pandemic.
 H6: There is significant difference in Total Assets Turnover analysis of the company before and after COVID-19 pandemic.
 H7: There is significant difference in Collection Period analysis of the company before and after COVID-19 pandemic.
 H8: There is significant difference in Total Equity to Total Assets Ratio analysis of the company before and after COVID-19 pandemic.
 H9: There is significant difference in Total Weighted Scores of the Company Healthiness Level before and after COVID-19 pandemic.

6. RESEARCH LIMITATION

This study only focused to analyze eight financial ratio analysis and the sample companies' healthiness rating, referred from the Indonesia State-Owned Enterprise decree No.100/2002. Analysis of this study only sourced from secondary data which provided by the company in the published quarterly financial reports. Hence the author did not implicate the financial performance analysis with the company's management strategy during the pandemic, cost efficiency, and other business dynamic that were not highlighted in the Quarterly financial report.

Due to the relatively small sample size (six companies' performance from Q2/2019 to Q3/2020), Author recommends further studies by extending the sample periods and different companies to validate the result consistency. Period and timeline are important to the future study, as the pandemic impact is still on going by the time this report is written.

7. RESULTS AND DISCUSSIONS

Based on data compilation and analysis along with a statistical test, below are the recapitulation of the eight financial ratios and healthiness level:

Table 10. Recapitulation of Eight Financial Ratios and Healthiness Level

Financial Ratio	Period	Standard		P Value	Decision
		Mean	Deviation		
ROI	Before	5.34%	1.75	0.451	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	4.64%	4.10		
ROE	Before	4.15%	1.76	0.962	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	4.12%	2.84		
Cash Ratio	Before	93.49%	63.97	0.372	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	104.47%	56.55		
Current Ratio	Before	235.31%	108.33	0.134	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	260.95%	125.08		
Inventory Turnover	Before	147.50	62.06	0.176	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	159.50	69.89		
Total Assets Turnover	Before	46.06%	17.84	0.091	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	42.35%	20.47		
Collection Period	Before	174.06	81.60	0.624	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	170.44	69.55		
Total Equity to Total Assets	Before	62.83%	11.89	0.491	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	61.63%	5.31		
Total Weighted Scores	Before	53.411	5.31	0.656	P Value > 0.05. Reject the hypothesis. There was NO significant difference
	After	52.444	8.33		

PROFITABILITY PERFORMANCE

The graphic below illustrates Return on Investment (ROI) performance from all companies between Q1/2019 to Q3/2020. Overall, they were showing declining patterns from early 2019 until after the pandemic, and then slightly increased starting in the second quarter 2020. PT Ultrajaya (ULTJ) ROI reaches >12% in Q3/2020 better than before the pandemic. Lowest ROI trends were in Q2/2020, where most of Companies recorded the lowest ROI. During the same period, lowest ROI was recorded by PT Garudafood (GOOD) by -1%.

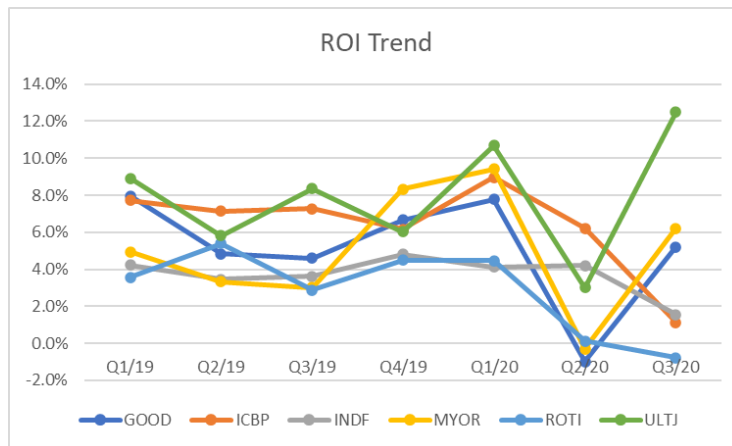


Figure 4. ROI Trend of Six Companies Before and After Pandemic

Early result from each company and period shows trend of lower return on equity on the period after pandemic. The ROE trend is quite similar with ROI. PT Indofood Sukses Makmur (INDF) is the least volatile compare to the others, yet the most stable. Most of the companies had their lowest ROE in Q2/2020, but soon were followed with better result in the following Quarter (Q3/2020). ROE result from each company can be seen in graphic below.

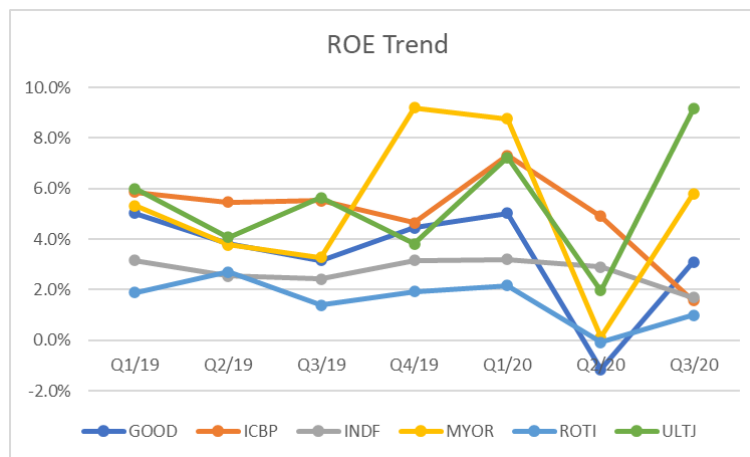


Figure 5. ROE Trend of Six Companies Before and After Pandemic

LIQUIDITY PERFORMANCE

Overall, there were slight increase in the percentage of cash and current ratio. The cash ratio below entails the liquidity performance from all companies. As can be seen, all companies have distinctive trends in terms of liquidity. Between the seven Quarters, most of companies have their highest ratios in either Quarter 2/2020 or Quarter 3/2020. This can also be viewed as indicators that all companies tried to reserve and maintain their liquidities as high as they can during the crisis.

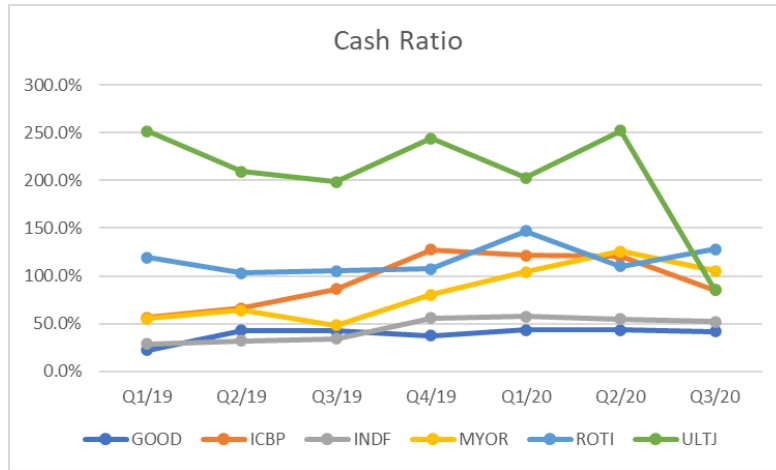


Figure 6. Cash Ratio Trend of Six Companies Before and After Pandemic

The current ratio indicates this industry’s Liquidity condition is healthy, as the current ratio is above 100%. The Current ratio trends show similar pattern with Cash ratio, where after the pandemic most companies tried to reserve cash as much as they can. The trends can be furtherly interpreted that they no issues in paying their short-term obligations.

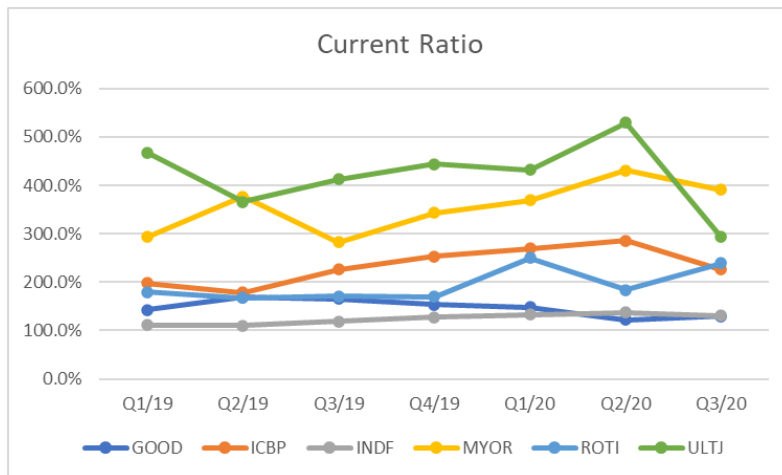


Figure 7. Current Ratio Trend of Six Companies Before and After Pandemic

ACTIVITY PERFORMANCE

All companies indicated distinctive trends. PT Ultrajaya had their inventory turnover increasing since Q1-2019, with the highest in Q2/2020. This trend shows they have issues in selling their inventory before and after the pandemic. On the other hand, after the pandemic all companies tried to reduce their turnover, by either selling more or maintaining lower inventory.

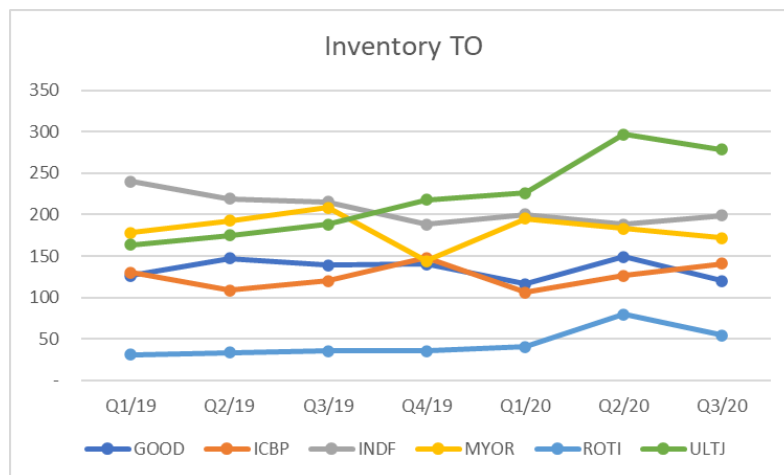


Figure 8. Inventory Turnover Trend of Six Companies Before and After Pandemic

Before 2020, 5 (five) companies have the average Total Assets turnover between 32%-49%, while only PT Garudafood (GOOD) posted above 80%. However, the trend indicates same pattern, where since Q1/2019 the Total Assets turnover is declining, and it is getting worse after the pandemic. This indicated that the Companies assets were less efficient in generating sales/income.

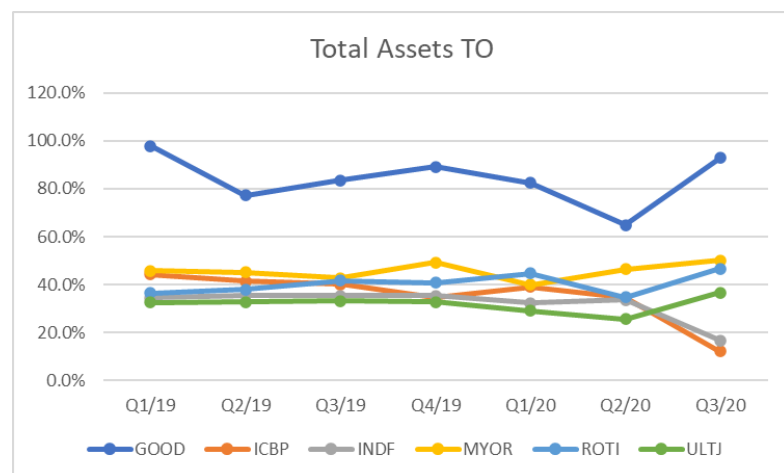


Figure 9. Total Assets Turnover Trend of Six Companies Before and After Pandemic

Collection Period between Q1/2019 to Q3/2020 for all companies. 5 of 6 Companies collection period were between 100-200 days, while only PT Mayora (MYOR) have a collection period above 275 days. All companies show relatively stable collection trend. Starting 2019, all companies tried to reduce their collection period, and getting better starting 2020.

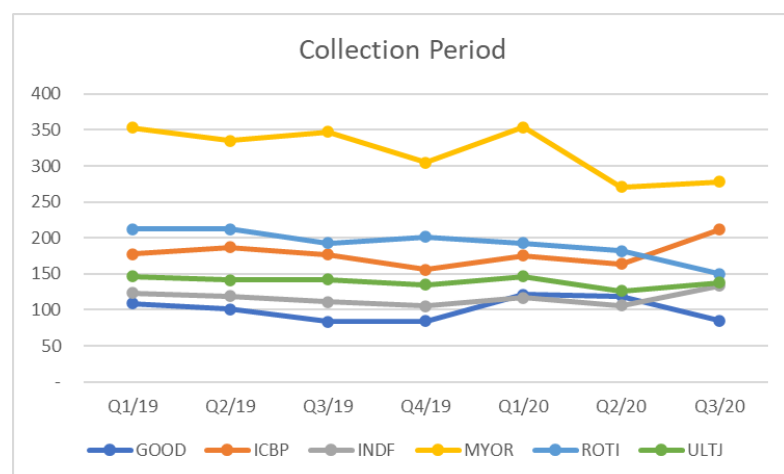


Figure 10. Collection Period Trend of Six Companies Before and After Pandemic

SOLVENCY PERFORMANCE

Based on the result, it can be viewed that the total equity to assets in this industry are stable, with most of the companies are between 45% to 70%. This means a percentage where the Companies assets are funding through Equity. Only 1 company, PT Ultrajaya (ULTJ) have different percentile, above 80%.

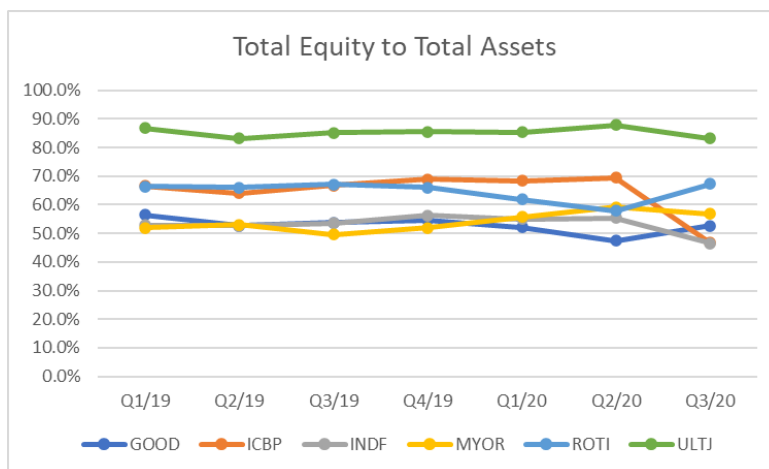


Figure 11. Total Equity to Total Assets Trend of Six Companies Before and After Pandemic

FINANCIAL HEALTHINESS

Based on the 8 (eight) ratios, we could apply the score referring on the KEP 100 MBU 2002 and calculated the weighted average to get the health rating of each company. In the figure below, most of the Companies can be interpreted that the Companies are in the Less Healthy category.

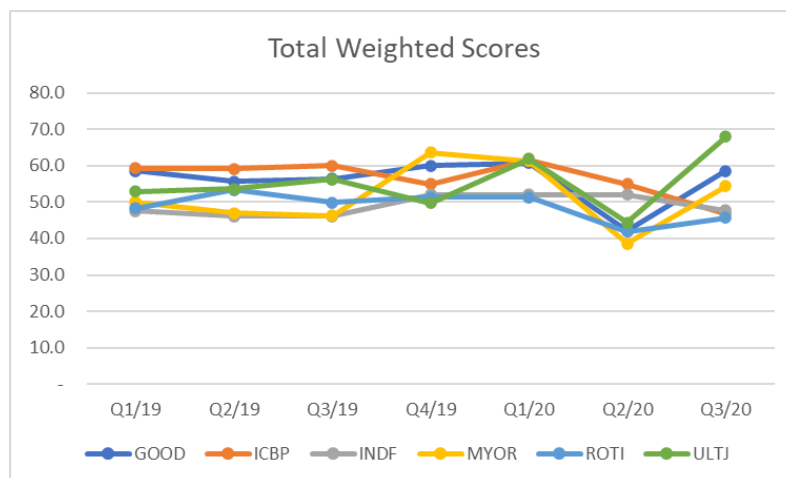


Figure 12. Total Weighted Scores Before and After Pandemic

The paired t-test statistic result shown no significant difference on the total weighted score between before and after the pandemic. The weighted score is ranged between 38.6 (Min) recorded by MYOR in Q2/20 to 68.0 (Max) achieved by ULTJ in Q3/20.

The Mean of weighted score Before Pandemic was 52.4, whilst Mean After Pandemic was 52.4. Both Means value were scored as “BBB” and translated as “Less Healthy”, as per the SOE Minister Decree No.100/2020.

8. CONCLUSION AND RECOMMENDATION

Based on the research and its result written in previous chapters, this study has achieved its objective in explaining the research questions and hypotheses by examining between variables involved.

Overall, the study discovered there were no significant difference affected by the pandemic COVID-19 for the three quarters after, to the financial ratios and healthiness rating of the public listed food beverage companies. After the pandemic, all companies experienced same declining financial performance in different ratios and timelines. The level of impact and timelines depend on each company’s strategy and strength.

Based on the research of each company's financial ratio, the following conclusion can be noted:

- Garuda Food was able to improve their Cash ratio and Inventory Turnover, however their majority ratios were declining.
- Indofood CBP performance in Cash, Current ratio and Inventory Turnover were improving after the pandemic, whilst the other five ratios were declining.
- Similar to its sister company, Indofood Sukses Makmur experienced declined in their financial ratios, with Cash, Current ratio and Inventory were better.
- Mayora Indah improved their financial ratios for ROI, Cash, Current ratio, Inventory Turnover, and Total Equity to Total Assets, However the other four ratio and the Company's weighted scores were declining.
- Nippon Indosari had a declining trend in 50% of its financial ratios, whilst Cash ratio, Current ratio, Total Assets Turnover, and Collection Period were all improving.
- Ultrajaya was able to improve their majority financial ratios, except for the Cash ratio, Inventory Turnover, and Total Assets Turnover.

Author recommends the management of the food and beverage companies to use this research result as reference when implementing strategy to overcome the crisis caused by pandemic. Based on the research, the Liquidity was one ratio that was improved After the pandemic compare to Before the pandemic. Therefore, it is recommended when in crisis, companies must try to improve their Liquidity and optimize their Activity Ratio.

In order to examine and analyze further impact of the pandemic, it is recommended to extend the periods after the pandemic i.e Q4/2020, Q1-Q2/2021 to get clearer impact of pandemic in longer term. Other study is also recommended to see on the industry's business strategic to survive and overcome the pandemic impact.

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