COMPARATIVE ANALYSIS OF ACTIVITY RATIO BEFORE AND DURING PANDEMIC (2019-2020) ON THE FOOD & BEVERAGE SECTOR LISTED ON IDX

Gwyneth Limbong[1]; Harman Malau[2]
Universitas Advent Indonesia[1,2]
Correspondence email : gwynethlimbong@gmail.com

ABSTRACT

The COVID-19 pandemic in Indonesia has shaken the country, from public health to economic conditions. This has led to the issuance of new policies from the government, one of which has an impact on the sales of companies. This study aims to examine whether there are differences in the company's activities using the activity ratio as a benchmark. The sample of this research is food and beverage companies listed on the IDX with purposive sampling method. The data analysis method used is descriptive statistics and normality test, while the average difference test uses the paired sample t-test and the wilcoxon signed-rank test. Paired sample t-test on current asset turnover shows that there is a difference between before and during the pandemic. Meanwhile, the results of inventory turnover show no difference before and during the pandemic. The wilcoxon signed-rank test for total asset turnover showed that there was a difference between before and during the pandemic. Meanwhile, accounts receivable turnover and account payable turnover showed no difference before and during the pandemic.

Keywords : comparative; activity ratio

ABSTRAK

Pandemi COVID-19 di Indonesia mengguncang kondisi kesehatan masyarakat sampai dengan kondisi perekonomian. Hal ini menyebabkan terbitnya kebijakan baru dari pemerintah yang salah satunya berdampak bagi penjualan perusahaan-perusahaan. Penelitian ini bertujuan untuk meneliti apakah adanya perbedaan aktifitas perusahaan menggunakan tolak ukur rasio aktifitas. Sampel penelitian ini adalah perusahaan makanan dan minuman yang terdaftar di BEI dengan metode purposive sampling. *Metode analisis data yang digunakan yaitu statistik deskriptif dan uji normalitas, sedangkan uji beda rata-rata yang digunakan adalah* paired sample t-test *dan* wilcoxon signed-rank test. Paired sample t-test *pada* current asset turnover *saat ini menunjukkan bahwa ada perbedaan antara sebelum dan selama pandemi Sedangkan hasil* inventory turnover *tidak menunjukkan perbedaan sebelum dan selama pandemi.* Wilcoxon signed-rank test *untuk* total asset turnover *menunjukkan bahwa ada perbedaan antara sebelum dan selama pandemi. Sedangkan* accounts receivable turnover *dan* account payable turnover *menunjukkan tidak ada perbedaan sebelum dan selama pandemi.*

Kata kunci : komparatif; rasio aktifitas

INTRODUCTION

The SARS-CoV-2 virus was first discovered in Wuhan, China at the end of 2019. This virus spread so quickly that it caused a worldwide pandemic in mid-2020 (Yip &

Perasso, 2021). A pandemic is an epidemic of disease that spreads to many people in many places and can even occur throughout the world (Resti, 2020). Officially on March 9, 2020, World Health Organization declared COVID-19 a pandemic. The spread and transmission of this disease are so fast that in approximately 3 months there are 114 countries affected (WHO, 2020). This pandemic has not only shaken public health conditions but the world economy, and Indonesia is one of them. In Indonesia, the first case of the virus was discovered in March 2020. It is recorded on the covid.go.id website that until early March 2022, there have been 5,770,105 positives cases affected, 5,171,402 cases recovered, and 150,430 deaths by COVID-19.

The government has implemented several policies to stop the spread of the COVID-19 virus. The initial policy carried out by the President of Indonesia was to issue a Government Regulation containing *Pembatasan Sosial Berskala Besar* (Large-Scale Social Restrictions) (Hidayat, 2020). PSBB is restrictions on certain activities such as school and in office work, religious activities, and activities on public places or facilities (Kemenko PMK, 2020). Initially enforced in DKI Jakarta Province and followed by West Java Province,then followed by other big cities from various provinces in Indonesia. One of the impacts of this policy is that the economic activities of all business units are hampered. The impact of the pandemic at the beginning of 2020 also shook the world of equities. Recorded on March 23, 2020, the Composite Stock Price Index reached its lowest level at 3,937.63 (Intan, 2020).

There was a panic buying phenomenon when the PSBB was announced, which triggered most people to buy things in excess. This happened when the PSBB rules stated that there were restrictions on mobility and restrictions on opening public places (including markets and other selling places). This has happened before during the Spanish flu phenomenon in England in 1918 and also during the 2003 SARS outbreak in China and Hong Kong. The panic buying phenomenon that occurred in Indonesia at the beginning of the 2020 pandemic caused a shortage of masks and hand sanitizers at that time. Sales of various vitamins and herbal medicines have also increased because people are worried about their immunity and health so they don't get infected with COVID-19 (Permana, 2022).

With the anomalous policies and market conditions, there will be changes in the company's effectiveness in operating. The company's strategy, especially the financial

strategy in responding to anomalous conditions such as at this pandemic, must be implemented so that the company can survive and adapt. One of the ratios that can ensure that financial planning runs optimally is the activity ratio. Analyzing the company's financial condition by looking at the performance of sales and investment levels in all company assets makes it one of the tools to monitor the balance of sales business and productivity of asset management (Ambarwati & Kusnadianti, 2021). Not utilizing assets to maximize the level of sales will result in a more significant cessation of funds in these assets. However, these funds will be more useful in other assets that are more productive. So, this ratio information is important to know and analyze by the company's finance department to maximize its function.

Previous research from Zulmariadi (2017) regarding the analysis of the company's financial performance before and after the IPO, one of which is the activity ratio, stated that there is a significant relationship. Likewise, with previous research from Indiraini (2018) regarding the analysis of the company's financial performance before and after the acquisition, there are significant differences between 2 and 4 years after the acquisition. Meanwhile, in previous research by Dara and Firdaus (2020) regarding comparative analysis of the financial performance of non-financial companies before and after acquisitions and mergers, stated that there were no differences in activity ratios. Thus, researchers conducted a study to compare the company's operating efficiency before and during the pandemic in the food and beverage sector using the activity ratio indicator.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Financial Ratio

One of the conditions of a company can be seen by analyzing the financial statements. From the comparison of numbers in the elements of financial statements, we can produce financial ratios that compare achievements in one period and another. Financial ratio analysis is a simple arithmetic calculation that can help provide answers about the company's condition through interpretation (Harahap, 2015). Financial ratio analysis is useful for internal and external parties such as investors, service providers or contractors, suppliers, and others. The resulting analysis can also be useful for knowing the company's performance and achievements, the basis for planning and decision making as well as an evaluation tool for the company's condition (Ramadhan, 2019). In

carrying out its functions, financial ratio analysis still has its limitations. It is difficult to analyze if the data is out of sync, the data used to calculate the ratio does not exist, the accounting standards differ between companies, and it is also difficult to determine which ratio should be used for the benefit of the analyst (Fahmi, 2014).

Activity Ratio

The financial ratios have several types, namely liquidity ratios, solvency, profitability, leverage, activity, growth, market assessment, and productivity (Hery, 2018). The ratio used in this study is the activity ratio. The activity ratio is a ratio that describes the company's operational activities such as production activities, process activities, sales activities, and other activities. This ratio can be used to measure how effective the company is in managing its assets for the company's operational activities. Such as measuring how many times the funds are embedded in assets, inventories, accounts receivables, working capital rotates in one period, how long and effective is the collection of receivables, how long the average inventory is stored in the warehouse until it is sold, and how effective is the inventory sales activity (Noviyanti & Ruslim, 2021). In this study, there are several types of activity ratios used, namely the ratio of total asset turnover, current asset turnover, fixed asset turnover, inventory turnover, accounts receivable turnover, and account payable turnover.

Total asset turnover is defined as the ratio used to measure the effectiveness of the company using its assets. According to Hery (2018), total asset turnover ratio is generated from the comparison between the number of sales and the average total assets (Hery, 2018). If sales are greater than total assets, company will obtain high rate of return, because large sales reflect large profits for the company. On the other hand, if total assets are higher than sales, the return or rate of return on profits will be low (Basri, et al., 2022). Likewise, the ratio of current asset turnover and fixed asset turnover is the same as total asset turnover. The only difference is the component of the asset distribution used. One uses current assets and the other uses fixed assets.

According to Wikardi and Wiyani (2017), the number of times the funds invested in inventory rotate in one period named inventory turnover ratio. This ratio indicates the number of times inventory is replaced in terms of being bought and resold. To calculate the ratio, we need to divide cost of goods sold by the inventory. Account payable turnover is a ratio that shows how many times a company pays its business

debts in a period until it is paid off. Account receivable turnover is the ability of funds embedded in receivables to rotate how many times in a certain period through sales (Suminar, 2015).

Hypothesis

With the theory and explanation described above, the ratio of total asset turnover, current asset turnover, fixed asset turnover, inventory turnover, account payable turnover, and account receivables turnover depends on the number of sales. It can be seen that there are differences in sales activities pre-pandemic and during the COVID-19 pandemic due to government regulations regarding restrictions on activities including economic activities. If a comparative analysis is carried out, it can be stated that the hypothesis for this research is that there is a difference in the activity ratio between pre-pandemic and during the COVID-19 pandemic.

RESEARCH METHODOLOGY

The purpose of this study was to determine whether there were differences in the activity ratio of food & beverage companies listed on the IDX before and during the COVID-19 pandemic. Therefore, the type of research used is a comparative study with a quantitative approach.

To obtain a sample in this study, the researcher used a purposive sampling method, which means a method of determining sampling with certain considerations. The sample criteria applied in this study are companies listed on the Indonesia Stock Exchange, that are in the food and beverage sector, companies that provide financial reports in the 2018-2020 period, and those that have elements of net sales, total assets, current assets, fixed assets, cost of goods sold, inventory, accounts receivables, and accounts payable. Based on the criteria above, there are 20 samples from 26 companies.

The data analysis method used is descriptive statistics and normality test, while the average difference test used is the paired sample t-test and the Wilcoxon signed-rank test. The activity ratio data that has been calculated through Microsoft Excel is then processed with SPSS Statistics version 26.

RESULT AND DISCUSSION

Activity Ratio Calculation

The results that will be shown in this study are the first activity ratio calculations, namely the ratio of total asset turnover, current asset turnover, fixed asset turnover,

inventory turnover, accounts receivable turnover, and account payable turnover. The results of the calculation of the activity ratio before and during the pandemic are presented in table 1.

Descriptive Statistics

Descriptive statistics are used to describe the research variables used by calculating the minimum, maximum, average, and standard deviation. The results of descriptive statistics can be seen in table 2. The variable current asset turnover before the pandemic had a minimum value of 0.64, a maximum value of 4.51, an average of 2.6091, and a standard deviation of 1.08543. Current asset turnover during the pandemic has a minimum value of 0.49, a maximum value of 3.83, an average of 2.2361, and a standard deviation of 0.92592. From these results, it can be interpreted that the current asset turnover during the pandemic has decreased compared to before the pandemic, which means that the current asset turnover before the pandemic is better than the current asset turnover during the pandemic.

The pre-pandemic variable fixed asset turnover was a minimum of 0.37, a maximum of 30.61, an average of 4.4251 and a standard deviation of 6.62698. The pandemic fixed asset turnover is 0.35 minimum, 12.11 maximum, 2.6778 average, and 2.75697 standard deviation. From these results, it can be interpreted that the fixed asset turnover rate during the pandemic decreased compared to before the pandemic. In other words, the fixed asset turnover rate before the pandemic was better than the fixed asset turnover rate during the pandemic.

The pre-pandemic inventory turnover variable had a minimum of 1.11, a maximum of 17.79, a mean of 6.8201, and a standard deviation of 3.93709. Pandemic inventory turnover has a minimum value of 0.96, a maximum value of 13.60, a mean of 6.0854 and a standard deviation of 2.99519. From these results, it can be explained that pandemic inventories are lower than pre-pandemic, which means that pre-pandemic inventories are better than pre-pandemic inventories.

The account receivables turnover variable before the pandemic had a minimum value of 1.29, a maximum value of 88.09, an average of 12.5616, and a standard deviation of 18.24027. Account receivables turnover during the pandemic has a minimum value of 1.07, a maximum value of 77.51, an average of 11.4679, and a standard deviation of 15.93076. From these results, it can be interpreted that the account

receivables turnover during the pandemic decreased compared to before the pandemic, which means that the account receivables turnover before the pandemic was better than the account receivables turnover during the pandemic.

The account payable turnover variable before the pandemic had a minimum value of 2.25, a maximum value of 246.15, an average of 32.9421, and a standard deviation of 65.25962. Account payable turnover during the pandemic has a minimum value of 1.79, a maximum value of 270.35, an average of 25.5979, and a standard deviation of 58.98391. From these results, it can be interpreted that the account payable turnover during the pandemic decreased compared to before the pandemic, which means that the account payable turnover before the pandemic was better than the account payable turnover during the pandemic.

Normality Test

A normality check is carried out to provide information on whether the facts is normally distributed or no longer. The outcomes of the normality check using the Kolmogorov-Smirnov take a look at for the contemporary asset turnover variable can be visible in table 3. The importance cost before the pandemic become 0.200 and for the duration of the pandemic, the price become 0.200. because the price is extra than 0.05, which is the regular restrict price, the significance price for current asset turnover is generally allotted. The regular significance fee will use paired pattern t-test for a different check.

The normality test on fixed asset turnover may be visible in table 4. The importance cost of fixed asset turnover before the pandemic was 0.000 and throughout the pandemic turned into 0.035. From this number, fixed asset turnover is not usually distributed because the number continues to be much less than 0.05. Therefore, the different check to be able to be finished is the Wilcoxon signed-rank test.

The normality test on inventory turnover may be seen in table 5. The significance cost of inventory turnover before the pandemic is 0.200 and the importance value at some point of the pandemic is 0.200. From this value, the inventory turnover is normally distributed due to the fact the importance value is greater than 0.05. Therefore, the different check to be able to be finished is the paired pattern t-check.

The normality test on account receivable turnover may be seen in table 6. The significance cost of account receivable turnover before the pandemic is 0.000 and the

importance value at some point of the pandemic is 0.000. From this value, the account receivable turnover is normally distributed due to the fact the importance value is less than 0.05. Therefore, the different check to be able to be finished is the Wilcoxon signed-rank test.

The normality test on account payable turnover may be seen in table 7. The significance cost of account payable turnover before the pandemic is 0.000 and the importance value at some point of the pandemic is 0.000. From this value, the account payable turnover is normally distributed due to the fact the importance value is less than 0.05. Therefore, the different check to be able to be finished is the Wilcoxon signed-rank test.

The Average Difference Test

The average difference test in this study was carried out by two tests, namely paired sample t-test for normality test results distributed normally and Wilcoxon signed-rank test for normality test results not normally distributed. In table 8, the average current asset turnover before and during the pandemic is 2.6091 and 2.2361, respectively. This illustrates that the current asset turnover value before the pandemic was greater than during the pandemic. T count is 2,928 and the significance value is 0.009, wherein value is < 0.05. It can be concluded that there's a difference between current asset turnover before and during the pandemic.

In table 9, the average inventory turnover before and during the pandemic was 6.8201 and 6.0854. This illustrates that the inventory turnover value before the pandemic was greater than during the pandemic. T count is 1.966 and the significance value is 0.064, which is > 0.05. It can be concluded that there may be no difference between inventory turnover before and during the pandemic.

The results of the comparison of fixed asset turnover in table 10 show a Z value of -2.501 and a significance value of 0.012. It may be concluded that there is a distinction among fixed asset turnover before and during the pandemic because this significance value is > 0.05.

The results of the comparison of accounts receivable turnover in table 11 show a Z value of -1,680 and a significance value of 0.093. It may be concluded that there is no distinction among account receivable turnover before and during the pandemic because this significance value is < 0.05.

The results of the comparison of accounts payable turnover in table 12 show a Z value of -1.157 and a significance value of 0.247. It may be concluded that there is no distinction among account payable turnover before and during the pandemic because this significance value is < 0.05.

CONCLUSION

This study was conducted to determine whether there were differences in the activity ratio before and during the pandemic in food & beverage companies listed on the IDX. This study used paired sample t-test and Wilcoxon signed-rank test.

The paired sample t-test on current asset turnover shows that there is a difference between before and during the pandemic. The proportion of current assets is changed significantly to support the enterprise's operational activities. While the inventory turnover results show no difference before and during the pandemic. Although inventory turnover has decreased, the difference is not that big.

The Wilcoxon signed-rank test for the variable fixed asset turnover showed that there was a difference between before and during the pandemic. The proportion of fixed assets was changed significantly to support the enterprise's operational activities. While the accounts receivable turnover and account payable turnover results show no difference before and during the pandemic. This means that the company is still able to manage short-term debt and receivables properly.

REFERENCES

Ambarwati, D., & Kusnadianti, Y. 2021. Pengaruh Penjualan Terhadap Laba Bersih Pada Primer Koperasi Kartika Kijang Cakti Periode 2016 – 2020. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 5(3), 214-227. https://doi.org/10.31955/mea.vol5.iss3.pp214-227

Basri, M., Batubara, H. C., & Simatupang, F. L. 2022. Return On Asset, Debt To Asset Ratio, Quick Rasio And Total Assets Turn Over On Stock Price In The Chemical Sector Companies Listed On The Indonesia Stock Exchange. In Proceeding International Seminar of Islamic Studies (Vol. 3, No. 1, pp. 507-521).

Fahmi, I. 2014. Analisis Laporan Keuangan Edisi Cet. 4. Bandung: Alfabeta.

Firdaus, G., & Dara, S. 2020. Analisis Perbandingan Kinerja Keuangan Sebelum dan Sesudah Melakukan Akuisisi dan Merger pada Perusahaan Non Keuangan. AKURASI: *Jurnal Riset Akuntansi Dan Keuangan*, 2(2), 63 – 74. https://doi.org/10.36407/akurasi.v2i2.184

Harahap, S. 2015. Analisis Kritis atas Laporan Keuangan Edisi Cet. 12. Jakarta: Rajawali Pers.

Hery. 2018. Analisa Laporan Keuangan – Integrated and comprehensive. Jakarta: PT Grasindo.

Hidayat, R. 2020. Kebijakan PSBB Harus Mendapat 'Restu' Pemerintah Pusat. *Hukumonline.com.* www.hukumonline.com/berita/a/kebijakan-psbb-harus-mendapat-restu-pemerintah-pusat-lt5e847795ecc2f

Indriani, A. 2018. Analisis Kinerja Keuangan Perusahaan yang Terdaftar di Bursa Efek Indonesia (BEI) Sebelum dan Sesudah Akuisisi. *Jurnal Ilmu Manajemen.* 15(1), 27 – 36. https://doi.org/10.21831/jim.v15i1.25074

Intan, K. 2020. IHSG menguat 41,69% dari level terendah tahun ini, cermati rekomendasi saham berikut. *Kontan.co.id.* investasi.kontan.co.id/news/ihsg-menguat-4169-dari-level-terendah-tahun-ini-cermati-rekomendasi-saham-berikut

Kemenko PMK. 2020. Pembatasan Sosial Berskala Besar. *Kemenko PMK.* www.kemenkopmk.go.id/pembatasan-sosial-berskala-besar

Noviyanti, D., & Ruslim, H. 2021. Pengaruh Struktur Modal, Profitabilitas, Rasio Aktivitas Terhadap Nilai Perusahaan. *Jurnal Manajerial dan Kewirausahaan Untar,* 3 (1), 34-41 http://dx.doi.org/10.24912/jmk.v3i1.11285

Permana, R. H. 2022. Awal Corona Masuk Indonesia dan Kilas Balik 2 Tahun Lalu. *DetikNews.* News.detik.com/berita/d-5965789/awal-corona-masuk-indonesia-dan-kilas-balik-2-tahun-lalu

Ramadhan, A. 2019. Pengaruh Utang Perusahaan Terhadap Kinerja Keuangan. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, & Akuntansi)*, 3(2), 16-27.

Resti, N. 2020. Memahami Endemi, Epidemi, dan Pandemi. *Itjen Kemdikbud.* Itjen.kemdikbud.go.id/webnew/covid19/memahami-istilah-endemi-epidemi-dan-pandemi/

Suminar, M. T. 2015. Pengaruh perputaran persediaan, perputaran piutang dan perputaran kas terhadap profitabilitas pada perusahaan sektor Industri barang konsumsi yang terdaftar Di BEI Periode 2008-2013. *Journal Of Accounting*, 1(1).

WHO. 2020. WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 March 2020. *World Health Organization.* www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

Wikardi, L. D., & Wiyani, N. T. 2017. Pengaruh Debt to Equity Ratio, Firm Size, Inventory Turnover, Assets Turnover dan Pertumbuhan Penjualan Terhadap Profitabilitas (Studi Kasus Pada Industri Makanan dan Minuman yang Terdaftar di BEI Periode 2011-2015). *Jurnal Online Insan Akuntan*, 2(1), 99-118.

Yip, B., & Perraso, V. 2021. Asal Covid-19: Apakah kita perlu tahu dari mana asal virus corona ini? *BBC News Indonesia.* www.bbc.com/Indonesia/dunia-57590872

Zulmariadi, R. 2017. Analisis Kinerja Keuangan Perusahaan Sebelum dan Sesudah IPO yang Terdaftar di Bursa Efek Indonesia (BEI). Skripsi. Yogyakarta: Universitas Islam Indonesia

FIGURES AND TABLES

Table 1. The Result of Activity Ratio Calculation

No	Company Code	CATO 2019	CATO 2020	FATO 2019	FATO 2020	INTO 2019	INTO 2020	RETO 2019	RETO 2020	PYTO 2019	PYTO 2020
1	AISA	3.18	1.85	1.08	0.98	13.78	9.94	4.83	5.48	3.43	3.14
2	ALTO	1.95	1.67	0.37	0.35	2.61	2.53	7.29	7.86	3.73	3.34
3	CAMP	1.42	1.27	30.61	2.86	2.49	3.18	5.47	6.23	10.52	11.47
4	CEKA	2.92	2.87	9.59	12.11	10.51	10.11	9.63	9.38	27.85	20.62

5	CLEO	4.51	3.83	1.08	0.92	6.91	5.52	10.21	8.03	8.33	8.02
6	DLTA	0.64	0.49	6.21	4.49	1.11	0.96	4.67	3.66	5.36	5.30
7	GOOD	4.22	3.33	2.75	1.81	7.34	6.46	18.21	15.47	7.17	6.41
8	HOKI	3.42	2.77	4.53	2.43	9.05	7.02	12.35	9.28	246.15	270.35
9	ICBP	2.54	2.25	1.92	0.56	7.26	6.41	10.34	10.01	9.98	10.36
10	INDF	2.44	2.13	1.18	0.66	5.58	4.93	14.17	13.81	12.60	12.31
11	MLBI	3.19	1.67	2.14	1.16	8.61	6.11	5.06	3.32	9.92	6.67
12	MYOR	1.96	1.91	4.00	3.53	6.13	6.12	4.36	4.31	4.97	4.58
13	PANI	2.51	2.49	8.28	7.01	3.12	3.31	88.09	77.51	67.11	44.15
14	PCAR	0.77	0.73	1.44	1.19	5.35	4.08	1.29	1.07	2.25	1.79
15	PSDN	4.29	3.16	2.56	1.86	6.35	4.22	14.89	11.99	188.52	50.06
16	ROTI	1.78	2.07	1.19	0.72	17.79	13.60	7.46	7.76	7.37	7.45
17	SKBM	2.37	3.32	2.26	3.88	4.47	7.34	8.04	9.92	13.18	16.23
18	SKLT	3.39	3.30	3.11	3.18	5.91	6.27	7.30	7.38	9.45	10.60
19	STTP	3.01	2.55	2.05	1.98	8.08	9.53	7.29	7.77	11.74	12.09
20	ULTJ	1.67	1.07	2.15	1.89	3.93	4.04	10.26	9.12	9.19	7.03

Table 2. Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CATO_before	20	.64	4.51	2.6091	1.08543
CATO_after	20	.49	3.83	2.2361	.92592
FATO_before	20	.37	30.61	4.4251	6.62689
FATO_after	20	.35	12.11	2.6778	2.75697
INTO_before	20	1.11	17.79	6.8201	3.93709
INTO_after	20	.96	13.60	6.0854	2.99519
RETO_before	20	1.29	88.09	12.5616	18.24027
RETO_after	20	1.07	77.51	11.4679	15.93076
PYTO_before	20	2.25	246.15	32.9421	65.25962
PYTO_after	20	1.79	270.35	25.5979	58.98391
Valid N (listwise)	20				

Table 3. Normality Test: Current Asset Turnover

One-Sample Kolmogorov-Smirnov Test

		CATO_before	CATO_after
N		20	20
Normal Parameters[a,b]	Mean	2.6091	2.2361
	Std. Deviation	1.08543	.92592
Most Extreme Differences	Absolute	.081	.090
	Positive	.078	.068
	Negative	-.081	-.090
Test Statistic		.081	.090
Asymp. Sig. (2-tailed)		.200[c,d]	.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Table 4. Normality Test: Fixed Asset Turnover

One-Sample Kolmogorov-Smirnov Test

		FATO_before	FATO_after
N		20	20
Normal Parameters[a,b]	Mean	4.4251	2.6778
	Std. Deviation	6.62689	2.75697
Most Extreme Differences	Absolute	.294	.200
	Positive	.294	.200
	Negative	-.270	-.199
Test Statistic		.294	.200
Asymp. Sig. (2-tailed)		.000[c]	.035[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Table 5. Normality Test: Inventory Turnover

One-Sample Kolmogorov-Smirnov Test

		INTO_before	INTO_after
N		20	20
Normal Parameters[a,b]	Mean	6.8201	6.0854
	Std. Deviation	3.93709	2.99519
Most Extreme Differences	Absolute	.147	.150
	Positive	.147	.150
	Negative	-.086	-.075
Test Statistic		.147	.150
Asymp. Sig. (2-tailed)		.200[c,d]	.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Table 6. Normality Test: Account Receivable Turnover

One-Sample Kolmogorov-Smirnov Test

		RETO_before	RETO_after
N		20	20
Normal Parameters[a,b]	Mean	12.5616	11.4679
	Std. Deviation	18.24027	15.93076
Most Extreme Differences	Absolute	.349	.351
	Positive	.349	.351
	Negative	-.277	-.257
Test Statistic		.349	.351
Asymp. Sig. (2-tailed)		.000[c]	.000[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Table 7. Normality Test: Account Payable Turnover

One-Sample Kolmogorov-Smirnov Test

		PYTO_before	PYTO_after
N		20	20
Normal Parameters[a,b]	Mean	32.9421	25.5979
	Std. Deviation	65.25962	58.98391
Most Extreme Differences	Absolute	.419	.384
	Positive	.419	.384
	Negative	-.319	-.343
Test Statistic		.419	.384
Asymp. Sig. (2-tailed)		.000[c]	.000[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Table 8. Paired Samples Test: Statistics Current Asset Turnover

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	CATO_before	2.6091	20	1.08543	.24271
	CATO_after	2.2361	20	.92592	.20704

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	CATO_before - CATO_after	.37308	.56974	.12740	.10643	.63972	2.928	19	.009

Table 9. Paired Samples Test: Statistics Inventory Turnover

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	INTO_before	6.8201	20	3.93709	.88036
	INTO_after	6.0854	20	2.99519	.66975

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	INTO_before - INTO_after	.73467	1.67158	.37378	-.04766	1.51699	1.966	19	.064

Table 10. Rank Test: Fixed Asset Turnover

Ranks

		N	Mean Rank	Sum of Ranks
FATO_after - FATO_before	Negative Ranks	17[a]	10.12	172.00
	Positive Ranks	3[b]	12.67	38.00
	Ties	0[c]		
	Total	20		

a. FATO_after < FATO_before

b. FATO_after > FATO_before

c. FATO_after = FATO_before

Test Statistics[a]

	FATO_after - FATO_before
Z	-2.501[b]
Asymp. Sig. (2-tailed)	.012

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Table 11. Rank Test: Account Receivable Turnover

Ranks

		N	Mean Rank	Sum of Ranks
RETO_after - RETO_before	Negative Ranks	13[a]	11.54	150.00
	Positive Ranks	7[b]	8.57	60.00
	Ties	0[c]		
	Total	20		

a. RETO_after < RETO_before

b. RETO_after > RETO_before

c. RETO_after = RETO_before

Test Statistics[a]

	RETO_after - RETO_before
Z	-1.680[b]
Asymp. Sig. (2-tailed)	.093

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

Table 12. Rank Test: Account Payable Turnover

Ranks

		N	Mean Rank	Sum of Ranks
PYTO_after - PYTO_before	Negative Ranks	13[a]	10.46	136.00
	Positive Ranks	7[b]	10.57	74.00
	Ties	0[c]		
	Total	20		

a. PYTO_after < PYTO_before

b. PYTO_after > PYTO_before

c. PYTO_after = PYTO_before

Test Statistics[a]

	PYTO_after - PYTO_before
Z	-1.157[b]
Asymp. Sig. (2-tailed)	.247

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.