

ANALYZING THE EFFECTS OF COVID-19 PANDEMIC ON THE FINANCIAL PERFORMANCE OF INDONESIAN LISTED COMPANIES

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ABSTRACT

This study is aimed to analyzing the effects of the COVID-19 pandemic on the financial performance of Indonesian listed companies. The data of this study were taken from the financial statements of the LQ-45 companies which were listed on the Indonesia Stock Exchange (IDX) before and after the announcement of the first case of Covid-19 in Indonesia. The data was processed with paired sample t-test using SPSS version 20. From the results of the data processing, it shows that there is no significant difference in financial ratios in the form of liquidity ratios and profitability ratios of LQ 45 companies listed on the Indonesia Stock Exchange (IDX) before and after the announcement of the first case of Covid-19 in Indonesia. However, there is a significant difference in financial ratios in the form of solvency ratio and activity ratio of LQ-45 companies listed on the Indonesia Stock Exchange (IDX) before and after the announcement of the first case of Covid-19 in Indonesia, as well as the Covid-19 pandemic, which has an impact on the decline in financial performance in the form of Activity ratio (Total Asset Turnover) of LQ-45 companies listed on the Indonesia Stock Exchange (IDX).

Keywords: Covid 19, Liquidity, Profitability, Solvency, Activity

INTRODUCTION

Corona Virus Disease 19 (Covid-19) is a pandemic caused by the SARS-CoV-2 virus, which was previously called 2019-nCoV, and was declared a pandemic on March 12, 2020 (Susilo, et al., 2020). This disease is growing very rapidly and is due to the virus distribution chain that has spread to various parts of the world, starting in the City of Wuhan, China (Junusi, 2020). Even in several countries outside China, Covid 19 has infected 7000 cases and 3000 people have died (Dong et al., 2020). Indonesia is also one of the countries affected by the Covid-19 pandemic. Statistical data as of September 2020 shows the number of confirmed positive cases 214,746 people and 8,650 people died (Ministry of Health, 2020).

The rapid spread of the Covid-19 outbreak, of course, has an impact not only on the health sector, but almost all sectors which are predicted to last a long time (Djalante et al., 2020). The impact of this epidemic has caused several countries to experience economic crisis and even recession (Wu & Olson, 2020). Likewise with the results of the latest research conducted by the Central Statistics Agency (BPS) regarding the impact of the Covid-19 pandemic on business actors carried out by BPS in the period 10-26 July 2020 with a total of 34,559 business actors from various sectors. In the study, it was stated that as many as 82.29% of Medium and Large Enterprises experienced a decrease in income, while Micro and Small Enterprises recorded a decrease in income of 84.20%. Some of the business sectors that were most affected was in the accommodation and food and drink sectors at 92.47%, other services 90.90%, and transportation and warehousing 90.34%. However, the conclusion of CAS Unpad, (2020), the Corona pandemic is not an adjusting

event and does not have a significant impact on the 2019 financial report so that the figures in the 2019 financial report including reserves do not need to be adjusted. Meanwhile, the impact of the corona pandemic in Indonesia only started after January 1, 2020.

The effects of the Covid-19 pandemic have occurred in almost all world exchanges, so that many stock prices have fallen (He, Sun, Zhang & Li, 2020; Singh, Dhall, Narang & Rawat, 2020; Shahabi, Azar, Faezy-Razi & Fallah-Shams, 2020; Anh & Gan, 2020). Meanwhile, several studies have stated that at the firm-level, the COVID-19 outbreak may affect the stock market (Iyke, 2020; Liu, Wang & Lee 2020; Narayan & Phan, 2020), firm performance in the energy industry (Fu & Shen, 2020) and other aspects (Hagerty & Williams, 2020). This is also supported by several other studies that tried to analyze the company's financial performance during a pandemic, for example, research conducted by Shen, Fu, Pan, Yu & Chen, (2020) which stated that COVID-19 has a negative impact on company performance. Likewise, Rababah, et al., (2020) stated that the areas and industries that were most severely affected by COVID-19 experienced a sharper decline in financial performance compared to other industries. Song, Yeon & Lee, (2021) who analyzed the Impact of the COVID-19 pandemic US restaurant industry found that restaurant companies with past characteristics were larger in size, more leverage, more cash flow, less ROA, and more internationalization, more resilient to falling stocks reacting to COVID-19 than similar companies. Meanwhile Pramitasari (2020) stated that the financial ratios in the form of ROA and LDR before and after the Covid-19 pandemic have significantly different values, while NPL is not significantly different. In general, there are significant differences in the performance of the largest banks in Indonesia before and after the Covid-19 pandemic.

LITERATURE REVIEW

Covid-19

Covid-19 is the name of the disease caused by the corona virus. This name is given by the WHO (World Health Organization) as the official name of this disease. Covid-19 itself stands for Corona Virus Disease-2019. Covid-19 is a disease caused by the corona virus which attacks the respiratory tract, causing high fever, cough, flu, shortness of breath and sore throat. Based on the research of Xu, et al., (2020); Zhu, et al., (2020), it was found that the causative agent for Covid-19 comes from the genus beta coronavirus, which is the same genus as the causative agent for Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS). The virus can pass through mucous membranes, especially the nasal mucosa and larynx, then enter the lungs through the respiratory tract and then to the target organs (Gennaro et al., 2020). COVID-19 can be transmitted from human to human and in general, respiratory viral infections can occur through: (1) contact (direct or indirect), (2) short-distance transmission (droplet) spray (droplet) and, (3) aerosols in transmission long distance (Moriyama, Hugentobler & Iwasaki, 2020).

Financial Performance

According to Gitman & Zutter, (2015) company performance is a company's ability to make a profit at the level of sales, assets and certain share capital. Investors will certainly invest their funds in companies with good profits in order to benefit from the funds that have been invested. This is reinforced in research by Chariri & Ghazali, (2013) which states that company performance can also be measured using financial information or also using non-financial information, this non-financial information can be in the form of customer satisfaction with the services provided by the company, however, most of the performance companies are measured by financial ratios in a certain period.

The company's performance in question can be seen from the financial performance, which is a company measurement to make its financial condition look good within a specified time period. The financial performance of a company is measured to show information in and out of funds as well as the effectiveness and efficiency of the company from what has been achieved by a company which shows good conditions for a certain period of time. Financial performance is ability of an organization to achieve its financial targets. Financial objectives include, among others, maximizing shareholder wealth, maximizing profit, revenue growth, earnings per share growth and increasing liquidity (Gift, 2018). Measuring company performance is one of the most important factors for the company, because the purpose of measurement is to assess whether the goals set by the company have been achieved so that the interests of stakeholders can be met. This statement is reinforced by Anderson & Reeb, (2003) that the measurement of company performance is a benchmark for company management in determining company policy, whether the company's performance is good from a financial or non-financial perspective. Financial Performance Measurement is to obtain useful information related to the flow of funds, use of funds, effectiveness, efficiency and to facilitate the best decision making (Amal, Sameer & Yahya, 2012)

According to Team FME (2013), financial performance is measured to determine whether the entity's financial performance is good or not which is known as financial ratios. Financial ratios show the company's ability to earn profits or a measure of the effectiveness of company management (Wiagustini, 2010). Financial ratios are used as a measure to determine the financial position and success of a company which can be applied as a guide when making decisions. Financial ratio analysis serves as a determinant of company performance used by company management. Meanwhile, financial ratio analysis for investors serves to determine where to invest based on the company's financial condition that will be used as a place of investment.

A company can be said to be in good shape if it has four indicators that can be known through financial reports including liquidity ratios, profitability ratios, solvency ratios and activity ratios. This is also in accordance with the opinion of several experts stating that financial performance can be seen from the Types of Financial Ratio Analysis, where financial ratios can generally be divided into several groups, namely; liquidity ratio, profitability ratio, solvency ratio and activity ratio (Horne & Wachowicz, 2009). Liquidity Ratio is a ratio that describes the company's ability to fulfill short-term obligations. Liquidity ratio, or often called the working capital ratio, is a ratio to measure how 'liquid' a company is. Profitability ratios are a type of financial ratios that are used to assess a business's ability to generate earnings relative to its revenues, operating costs, balance sheet assets, and shareholders' equity over time. Activity Ratio is the ratio used to measure the level of efficiency of the use of company resources (sales, inventory, debt collection, and others) or ratio to assess the company's ability to carry out daily activities. Solvency ratios are used to measure the extent to which company assets are financed by debt.

METHOD

In this research used is a quantitative method with a descriptive verification approach. Quantitative research methods are characterized by being numerical and objective in nature. An observed fact or phenomenon has an objective reality that can be measured. This study uses a sample of the LQ-45 company financial statements listed on the Indonesia Stock Exchange (BEI). The data source of this research is secondary data on financial performance consisting of liquidity ratio (Current ratio), Profitability ratio (Net Profit Margin), Solvency ratio (Debt ratio) and Activity ratio (Total Asset Turnover) before and after of Covid-19 impact. This research technique is purposive sampling in which the researcher takes from the secondary data. While data analysis was carried out on this research data was taken before and after the announcement of the first case of Covid-19 in Indonesia which was processed by paired sample t-test, using SPSS version 20.

RESULT AND DISCUSSION

To answer the research objectives, statistical testing was carried out using the paired sample test. The paired sample test is part of the comparative hypothesis test or comparison test. The data used in the run sample test are generally interval or ratio data (quantitative data). The paired sample test aims to determine whether there is a difference in the mean of two samples (two groups) that are paired or related. This paired sample test was carried out on 4 types of financial performance ratios consisting of liquidity ratio (Current ratio), Profitability ratio (Net Profit Margin), Solvency ratio (Debt ratio) and Activity ratio (Total Asset Turnover). The results of the test can be seen below:

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	CR _{before}	6,2372	20	7,56812	2,58604
	CR _{after}	5,4195	20	5,64546	1,88182
Pair 2	NPM _{before}	0,1983	20	0,1885	5,62498
	NPM _{after}	0,1867	20	0,1787	2,62938
Pair 3	DR _{before}	0,3636	20	0,5781	6,20026
	DR _{after}	0,3713	20	0,6008	6,85935
Pair 4	TATO _{before}	3,308	20	1,44428	0,48143
	TATO _{after}	2,291	20	1,30976	0,43659

Based on table 1 above, a summary of the results of descriptive statistics from the value of financial performance under study is shown, namely the liquidity ratio (Current ratio), Profitability ratio (Net Profit Margin), Solvency ratio (Debt ratio) and Activity ratio (Total Asset Turnover) before and after covid 19. Using a sample of 20 samples, the value of the current ratio before Covid 19 was 6.2372 and the value of standard deviation in the current ratio before was 7.56812. As for the value of the Current ratio after Covid 19, the average value is 5,4195 and the standard deviation value in the Current ratio after Covid 19 is 5,64546. If paid attention to the two average Current ratio values, there has been a decrease in the value of the company's Current ratio from before being exposed to Covid-19 (CR_{before}) and after being exposed to Covid-19 (CR_{after}).

Likewise with the Profitability ratio obtained for the Net Profit Margin value before Covid 19 of 0,1983 and the standard deviation value of the Net Profit Margin before it were 0,1885. Meanwhile, the Net Profit Margin value after Covid 19 obtained an average value of 0,1867 and the standard deviation value of the Net Profit Margin after Covid 19 was 0,1787. If paid attention to the two average Net Profit Margin values, there has been a decrease in the company's Net Profit Margin value from before being exposed to Covid-19 (NPM_{before}) and after being exposed to Covid-19 (NPM_{after})

The same thing also happened to the activity ratio, where the value of Total Asset Turnover before Covid 19 was 3.308 and the standard deviation value of Total Asset Turnover before was 1.44428. Meanwhile, the value of Total Asset Turnover after Covid 19 obtained an average value of 2.291 and a standard deviation value of Total Asset Turnover after Covid 19 of 1.30976. If paid attention to the two average values of Total Asset Turnover, then there has been a decrease in the value of the company's Total Asset Turnover from before Covid-19 (TATO_{before}) and after Covid-19 (TATO_{after}).

However, the results differed for the solvency ratio which was obtained for Debt ratio value before Covid 19 of 0,3636 and the standard deviation value in the Debt ratio before was 0,5781. Whereas for the Debt ratio value after Covid 19, the average value was 0,3713 and the standard

deviation value in the Debt ratio after Covid 19 was 0,6008. If paid attention to the two average Debt ratio values, there has been an increase in the company's Debt ratio value from before being exposed to Covid-19 (DR_{before}) and after being exposed to Covid-19 (DR_{after}).

Furthermore, to prove whether the difference is really real (significant) or not, we need to interpret the results of the paired sample test contained in the output of the paired sample test in table 2 below.

		t	df	Sig. (2-tailed)
Pair 1	CR _{before}	2,92	19	0,486
	CR _{after}			
Pair 2	NPM _{before}	1,35	19	0,213
	NPM _{after}			
Pair 3	DR _{before}	-3,3	19	0,011
	DR _{after}			
Pair 4	TATO _{before}	3,22	19	0,012
	TATO _{after}			

Based on the paired sample test output table above, it is known that the sig value for the liquidity ratio (Current ratio) is $0.486 > 0.05$, so H_0 is accepted or H_a is rejected. So it can be concluded that there is no significant difference in the liquidity ratio (Current ratio) both before and after Covid 19. It means there is no significant effect of the liquidity ratio (Current ratio) both before and after the announcement of Covid 19 on the IDX. Likewise for the profitability ratio (Net Profit Margin), it is known that the sig value is $0.213 > 0.05$, so H_0 is accepted or H_a is rejected. So it can be concluded that there is no significant difference in the profitability ratio (Net Profit Margin) both before and after Covid 19. It means that there is no significant effect on the profitability ratio (Net Profit Margin) both before and after the announcement of Covid 19 on the IDX.

Different results were obtained for the solvency ratio (Debt ratio) of the paired sample test above, it is known the value of sig. is equal to $0.011 < 0.05$ then H_0 is rejected or H_a is accepted. So it can be concluded that there is a significant difference in the solvency ratio (Debt ratio) before and after Covid 19. It means that there is a significant effect of the solvency ratio (Debt ratio) before and after the announcement of Covid 19 on the IDX. Likewise, for the ratio of Activity (Total Asset Turnover), it is known that the sig value is $0.012 < 0.05$, so H_0 is rejected or H_a is accepted. So it can be concluded that there is a significant difference in the ratio of Activity (Total Asset Turnover) before and after Covid 19. It means that there is a significant effect on the ratio of activity (Total Asset Turnover) before and after the announcement of Covid 19 on the IDX.

From the results of the research as a whole it can be stated that the Covid 19 pandemic has affected the company's financial performance, especially the performance as assessed from the solvency ratio (Debt ratio) and the Activity ratio (Total Asset Turnover) which are the company's main activities. The LQ-45 corporate sector which was affected by the decline in financial performance after the impact of Covid-19 was the distribution of staple fuel (BBM), the automotive industry, banking, tobacco cigarettes, exploration, mining, nickel processing and production, clothing retail business, plantation, gas, telecommunication support services, mining contractor and manufacturing of soap, detergents, household consumption. These results indicate that many corporate sectors have been affected by the decline in financial performance from the Covid-19 pandemic.

Based on the above conditions, it can be stated that to overcome the impact of the Covid-19 pandemic on LQ-45 companies listed on the Indonesia Stock Exchange (IDX) the following things can be done: for further researchers, you can add research samples or add other financial performance variables. For investors, they should add insight after reading this research, so they can find out what companies are worthy of being an investment and the right time to invest in these companies. For Managers should pay attention to the changing environment outside and adjust their business strategies in time. It is vital to make the production and operation meet the consumption trend of the “post-pandemic era,” to promptly restore the operation.

CONCLUSIONS

Based on the results of the research and discussion as previously described, the following conclusions can be drawn:

1. There is no significant difference in financial performance in the form of liquidity ratio of LQ-45 companies listed on the Indonesia Stock Exchange (IDX) before and after the first case national announcement of Covid-19.
2. There is no significant difference in financial performance in the form of profitability ratios of LQ-45 companies listed on the Indonesia Stock Exchange (IDX) before and after the first case national announcement of Covid-19.
3. There is a significant difference in financial performance in the form of the solvency ratio of LQ-45 companies listed on the Indonesia Stock Exchange (IDX) before and after the first case national announcement of Covid-19.
4. There is a significant difference in financial performance in the form of activity ratios of LQ-45 companies listed on the Indonesia Stock Exchange (IDX) before and after the first national announcement of Covid-19.
5. The Covid-19 pandemic that hit Indonesia had an impact on decreasing financial performance: Activity ratio (Total Asset Turnover) of LQ-45 companies listed on the Indonesia Stock Exchange (IDX)

REFERENCES

- Amal, A.Y., Sameer, A.A., & Yahya, A.Z. (2012). Factors affecting the financial performance of jordanian insurance companies listed at amman stock exchange. *Journal of Management Research*, 4(2), 266–289.
- Anderson, C.R., & Reeb, D.M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. *The Journal of Finance*, 58(3), 1301-1328
- Anh, D.L.T., & Gan, C. (2020). The impact of the COVID-19 lockdown on stock market performance: evidence from Vietnam. *Journal of Economic Studies*.
- CAS Unpad, (2020), The impact of the corona pandemic on financial reports and business practices in Indonesia.
- Chariri, A., & Ghozali, I., (2013). Accounting theory. Semarang: Diponegoro university publishing agency.
- Djalante, R., Lassa, J., Setiamarga, D., Sudjatma, A., Indrawan, M., Haryanto, B., ... & Warsilah, H. (2020). Progress in disaster science review and analysis of current responses to COVID-19 in Indonesia : Period of January to March 202. *Progress in Disaster Science Journal*, 6.
- Dong, E., & Du, H.G.L. (2020). *An interactive web-based dashboard to track COVID-19 in real time*. *Lancet Infect Dis*; Published Online, 30991–13.
- Fu, M., & Shen, D.H. (2020). Covid-19 and corporate performance in the energy industry - Moderating effect of goodwill impairment. *Energy Research Letters*, 1(1),12967.
- Gennaro, F., Di, Pizzol, D., Marotta, C., Antunes, M., Racalbutto, V., Veronese, N., & Smith, L. (2020). Coronavirus diseases (COVID-19) current status and future perspectives : A narrative review. *International Journal of Environmental Research and Public Health Environmental Research and Public Health*, 17(2690), 1–11.
- Gift, E.O. (2018). Internal control and financial performance of hospitality organizations in rivers state. *European Journal of Accounting, Auditing and Finance Research*, 6(3), 32- 52.
- Gil-Alana, A.L., & Monge, M. (2020). Crude oil prices and COVID-19: Persistence of the shock. *Energy Research Letters*, 1(1), 13200.
- Lawrence, J.G., & Zutter, C.J. (2015). *Principles of managerial finance*. (14th Edition). Global Edition. Pearson Education

- Hagerty, L.S., & Williams, L.M. (2020). The impact of COVID-19 on mental health: The interactive roles of brain biotypes and human connection. *Brain, Behavior, & Immunity – Health*, 5, 100078.
- He, P., Sun, Y., Zhang, Y., & Li, T. (2020). COVID-19's impact on stock prices across different sectors—An event study based on the Chinese stock market. *Emerging Markets Finance and Trade*, 56(10), 2198–2212.
- Horne, V.W. (2009). *Fundamental of financial management*. Book 1, edition 4. Jakarta: Salemba Empat.
- Shen, H., Fu, M., Pan, H., Yu, Z., & Chen, Y. (2020). *The Impact of the COVID-19 Pandemic on Firm Performance*, *Emerging Markets Finance and Trade*, 56(10), 2213-2230
- Iyke, B.N. (2020). COVID-19: The reaction of US oil and gas producers to the pandemic. Working Paper.
- Junusi, R.E. (2020). Digital marketing during the pandemic period: A study of Islamic perspective. *Journal of Digital Marketing and Halal Industry*, 2(1), 15–28.
- Liu, L., Wang, E.Z., & Lee, C.C. (2020). Impact of the COVID-19 pandemic on the crude oil and stock markets in the US: A time-varying analysis. *Energy Research Letters*, 1(1), 13154.
- Ministry of Health Republic of Indonesia. (2020). COVID-19: Case situation, Indonesia [Internet]. 2020.
- Moriyama, M., Hugentobler, W.J., & Iwasaki, A. (2020). *Annual review of virology seasonality of respiratory viral infections*. *Annual Review of Virology*, 7(September).
- Narayan, K.P. (2020). Oil price news and COVID-19 - Is there any connection? *Energy Research Letters*, 1(1), 13176.
- Narayan, K.P., & Phan, B.D.H. (2020). Country responses and the reaction of the stock market to COVID-19 – A preliminary exposition. *Emerging Markets Finance and Trade*, 56 (10), 2138–2150.
- Pramitasari, T.D. (2020). Comparative analysis of the biggest banking performance in Indonesia, ICBAE 2020, August 05-06, Purwokerto, Indonesia
- Rababah, A., Al-Haddad, L., Sial, M.S., Chunmei, Z., & Cherian, J. (2020), Analyzing the effects of COVID-19 pandemic on the financial performance of Chinese listed companies. *Journal of Public Affairs*, 20, 2440.
- Shahabi, V., Azar, A., Faezy-Razi, F., & Fallah-Shams, F.M. (2020). Simulation of the effect of COVID-19 outbreak on the development of branchless banking in Iran: Case study of Resalat Qard-al-Hasan Bank. *Review of Behavioral Finance*.
- Singh, B., Dhall, R., Narang, S., & Rawat, S. (2020). *The outbreak of covid-19 and stock market responses: An event study and panel data analysis for g-20 countries*. Global Business Review.
- Song, H.J., Yeon, J., & Lee, S. (2021). Impact of the COVID-19 pandemic: Evidence from the U.S. restaurant industry. *International Journal of Hospitality Management*, 92(2021) 102702
- Susilo, A., Rumende, C.M., Pitoyo, C.W., Santoso, W.D., Yulianti, M., Sinto, R., Yunihastuti, E. (2020). Coronavirus Disease 2019 : Recent literature review. *Journal of Internal Medicine Indonesia*, 7(1), 45–67
- Team FME. (2013). *Assessing Financial Performance (Finansial Skills)*. ISBN 978-1-62620-957-2
- WHO. (2020). Coronavirus disease 2019 (COVID-19) (Vol. 2019, Issue April).
- Wiagustini, N.I.P. (2010). *Fundamentals of financial management*. denpasar. Udayana University Press
- Wu, D.D., & Olson, D.L. (2020). *The Effect of COVID-19 on the Banking Sector*, 89–99.
- Xu, X., Chen, P., Wang, J., Feng, J., Zhou, H., Li, X., & Hao, P. (2020). Evolution of novel coronavirus from the ongoing Wuhan outbreak and modeling of its spike protein for risk of human transmission. *Science China Life Sciences*. *Science China Life Sciences*, 63(3), 457–460
- Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., & Tan, W. (2020). A novel coronavirus from patients with pneumonia in China, 2019. *The New England Journal of Medicine*, 382(8), 727–733.