

Corporate Financial Performance Before, During, and After COVID-19 Activity Restrictions: Evidence for Sustainable Economic Recovery and SDG 8

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ABSTRACT

Objective: The COVID-19 pandemic and activity restriction policies significantly affected the tourism and aviation industries, particularly their financial performance. Although Indonesia revoked activity restrictions in 2022, COVID-19 cases continued to exist, creating both risks and opportunities for business sustainability. This study aims to evaluate differences in corporate financial performance before the COVID-19 pandemic, during the pandemic, and after the lifting of activity restrictions. **Method:** Employing a quantitative approach using financial data from tourism and aviation companies listed on the Indonesia Stock Exchange (IDX). The sample consisted of 14 companies selected through purposive sampling. Financial performance was evaluated across three periods: before COVID-19 (2017–2018), during COVID-19 (2020–2021), and after activity restrictions were lifted (2022). Data were analyzed using paired sample tests with SPSS. **Results:** The findings indicate significant differences in corporate financial performance across the three periods. Financial performance was relatively stable before the pandemic, declined substantially during COVID-19 due to activity restrictions, and showed signs of recovery after restrictions were lifted. However, the post-restriction recovery had not yet fully returned to pre-pandemic levels. **Novelty:** Providing empirical evidence on the comparative financial performance of tourism and aviation companies across pre-pandemic, pandemic, and post-restriction periods. The findings contribute to understanding corporate resilience and recovery strategies while offering insights for sustainable economic recovery in support of SDG 8 (Decent Work and Economic Growth).

INTRODUCTION

The COVID-19 pandemic can be said to be an acute threat in various types of areas of a country's life. This is marked by the complexity of handling, the evidence is that Covid-19 cases have not subsided after various kinds of handling (Alam et al., 2022; Chowdhury & Jomo, 2020; Loayza, 2020; Narula, 2020; Shadmi et al., 2020). As an indication of covid-19, this is a new virus that spreads very quickly and dangerously (Fong et al., 2020; Haque & Pant, 2022; Singhal, 2020). Therefore, in March 2020, the Indonesian government issued a policy of imposing restrictions and even closing various activities (Olivia et al., 2020; Sparrow et al., 2020). The action is one of the handling, but on the other hand, it certainly has an impact, one of which is on the company's financial performance. In a sense, the closure of various activities will be at risk of closing business activities, layoffs, and loss of consumer demand, then conditions like this will result in loss of production, then sources of income will certainly be lost as well, which means that the company's financial performance is also affected. However, when recording media records of Indonesian newspapers, it turns out that at the end of 2022 the policy of limiting these activities was lifted by the government. This certainly closest the destructive problems mentioned above to financial performance.

The relevance of this study is closely aligned with Sustainable Development Goal (SDG) 8, which promotes sustained, inclusive, and sustainable economic growth, productive employment, and resilient business development. The COVID-19 pandemic posed

significant challenges to economic sustainability, particularly in tourism and aviation sectors that heavily depend on mobility and consumer demand. Evaluating corporate financial performance across different stages of the pandemic is therefore important to understand business resilience, recovery capacity, and strategic adaptation. Such evaluation not only provides insights for corporate decision-making but also contributes to achieving SDG 8 by supporting sustainable economic recovery and strengthening the long-term viability of affected industries.

In Presidential Regulation No. 48 of 2023, it is reaffirmed that all forms of handling COVID-19 are ended. However, the World Health Organization (WHO) noted that globally Covid-19 cases are still occurring, there are 11,740,993 deaths, Indonesia is recorded at 161,870 (<https://covid19.go.id>, 2023). This means that the steps to eliminate various handling of covid-19 are still problematic, because the disclosure of covid-19 cases by WHO is still happening. This certainly indirectly signals that destructive opportunities for various types of life areas, especially related to the company's financial performance, will be increasingly wide open, so the response to that requires an evaluation of financial performance. This is done to protect the company by finding an overview as evaluation material that is useful for company continuation decisions. In addition, financial performance evaluations are also carried out to provide adaptation to the company after restrictions on activities during the Covid-19 period (Atayah et al., 2022; Golubeva, 2021; Kurniawan et al., 2023).

The evaluation referred to above is an evaluation of financial performance in tourism and aviation sector companies. If we observe the conditions before the Covid-19 pandemic, there was a massive use of tourist attractions and air transportation. This condition is favorable for the income of the tourism and aviation sectors, including the country's economy. However, the emergence of the COVID-19 pandemic has set a big trap for the tourism and aviation sectors (Dube et al., 2021; Gössling et al., 2020). Both sectors are considered to be severely affected by the Covid-19 pandemic, especially during 2020, as evidenced by tightening restrictions and even closing various public activities such as travel bans and massive business closures, even though transportation needs even micro, small and medium enterprises (MSMEs) can be profitable when tourism flows improve (CNN Indonesia, 2020). That is, the contribution of tourism and aviation to the country's economy is also very large. In line with this, several shares of tourism and aviation sector companies that were quite weak during activity restrictions due to the Covid-19 pandemic such as PT TPembangunan Jaya Ancol Tbk, PT Hotel Sahid Jaya Internasional Tbk, and PT Airasia Indonesia Tbk. This indicates that the Covid-19 attack on the tourism and aviation sectors is not a small attack, so a serious response is needed.

In different conditions, namely after the official lifting of activity restrictions in Presidential Regulation no. 48 of 2023, the possibility of opportunities to achieve tourism and aviation sector targets will be increasingly open. This is evident from statistical data from the Ministry of Tourism and Creative Economy that the country's tourist visits increased by 278.10% in 2022 compared to the previous year (Subandi, 2023). Optimism related to the sustainability of tourism and aviation sector companies is getting stronger due to the lifting of activity restriction policies and information on the increase in tourist visits. However, the problem is that Covid-19 cases are still detected actively amid the release of activities, and this is still problematic, so it is necessary to evaluate the extent of the company's financial performance (Ismail et al., 2024; Valaskova et al., 2023). This will be traced from three

conditions, namely before the COVID-19 pandemic, during and after activity restrictions. The evaluation will provide an overview for further business development.

As a result, it will be an important note for investors who are already planning to invest in tourism and aviation sector companies. The acquisition of information on the lifting of restrictions on general activities as well as the increase in tourist visits shown above will certainly attract the attention of investors. Based on that, this research will focus more on companies listed on the Indonesia Stock Exchange, because all companies there are public, so they have a large space for the public, especially investors in investment activities. On that basis, it is necessary to evaluate the company's financial performance, before the covid-19 pandemic, during and after activity restrictions in the midst of conditions that turned out to be still active covid-19 cases.

LITERATURE REVIEW AND HYPOTHESIS

Market demand theory

In demand theory, it is explained that a limited amount of income will result in the purchase of goods that are sufficient for needs only. It found a bright spot that the factor that quite influences changes in demand is price. If the price applied is high, consumers will automatically consider it with caution, especially in the midst of the threat of Covid-19. This situation almost reduces all sides of revenue, then in the example of the companies raised in this study it is very clear the challenges faced. As long as revenues continue to decline due to the closure of various general activities including business and layoffs, demand for aviation or tourism will decline. This condition, of course, resulted in the revenue received by flights and tourism also decreased, so that the impact of the company's financial performance was disrupted.

Research related to the impact of covid-19 on the income of each trader studied in the Makartitama market shows that there is a decrease in income from the period before the covid-19 pandemic to the covid-19 period. In addition, tourism trend records also explain that there is a decrease in global tourist arrivals. Based on that, the researchers suspected:

H1: There are differences in market demand before the COVID-19 pandemic, during, and after activity restrictions.

Financial performance

Financial performance is a company condition that is assessed based on the company's achievements in terms of finance generated in a certain period through various company activities in obtaining profits efficiently and effectively by referring to the company's financial statements. Based on this, the alleged results, both positive and negative on the financial performance condition of tourism and aviation sector companies during the period of general activity restrictions and after the lifting of general activity restrictions will be the researcher's questions by finding answers through the company's financial performance evaluation process. The impact experienced by the tourism sector when there have been restrictions on activities since 2020 is a decrease in foreign exchange by H2: The company's financial performance experienced differences before the COVID-19 pandemic, during, and after activity restrictions.

Change

The change is a systematic step to restructure the organization to be able to adjust environmental conditions outside the company or obtain targets Various efforts made by the

company certainly mean a change. If during the Covid-19 pandemic there are quite a lot of difficulties in business activities, then after the lifting of the general activity restriction policy, there needs to be a concept of change as an effort to clarify business going forward. Through the concept of change can occur when the impact of the covid-19 pandemic decreases and according to records Indonesia has decreased the impact of covid-19. Based on this, changes to financial performance may occur because there are no restrictions on activity, so researchers suspect: H3: There are changes in financial performance before the Covid-19 pandemic, during, and after activity restrictions.

Previous research findings

Some previous research findings relevant to this study, such as show that the emergence of the COVID-19 pandemic has greatly affected the sustainability of halal tourism conditions globally (El-Gohary, 2020; Jabeen et al., 2025; Ruiz-Muñoz et al., 2025). The influence then continued to the aviation industry which was considered very related to tourism. The same thing was also revealed in a study conducted which said that the flow of flights was greatly affected by the COVID-19 pandemic (Abu-Rayash & Dincer, 2020; Nižetić, 2020). The next study from said that there was a change after the decreasing impact of covid-19 (Naidich et al., 2020). He did this through a social psychology approach and the results showed that there was an excess of tourists. It is known that it is the result of a psychological vent from activity restrictions that bind freedom for two years. As a result, this condition causes the quality of tourism to decline as a result of excess tourists.

Thinking structure

In order to understand the variables used in this study, it can be observed in figure 1. The variables in question are covid-19 and the company's financial performance.

METHOD

Scope, population and data collection techniques

In evaluating the financial performance of the tourism and aviation sector listed on the Indonesia Stock Exchange (IDX), there are 21 companies whose business fields only focus on the tourism industry and there are five companies that focus on the aviation industry. Based on this amount, researchers select companies in relevant conditions through purposive sampling techniques, so that some criteria that must be met are, a) the company's annual financial statements in 2017-2018, 2020-2021, and 2022 that have been audited, b) the company's financial statements that use Rupiah (Rp). The criteria show there are 11 tourism sector companies and there are three aviation sector companies, a total of 14 companies that will be further analyzed.

Operational definition of research variables Covid-19

Covid-19 is a type of disease that occurs due to the corona virus severe acute respiratory syndrome 2 (SARS-CoV-2). Since 2019, covid-19 began to hit the world, but in Indonesia only a positive case of covid-19 was detected right in March 2020. Indonesia realizes that it is a serious threat, hence the emergence of various very strict handling. As a result, right in March-October 2022 covid-19 cases were proven to decrease so researchers assessed the release of activities in 2022 as a result of the decrease in covid-19 cases. The decrease certainly provides changes such as activity exemption, this is then used as an evaluation period after

activity restrictions. In addition, this study shows the variable covid-19 through the period 2020-2021 as a period that is quite a victim due to covid-19.

Company financial performance

The company's financial performance is the company's condition which is assessed based on the company's achievements from the financial condition in a certain period (Barauskaite & Streimikiene, 2021). Based on this, there is an evaluation of the company's financial performance from 2017-2018 as a period before covid-19, then in 2020-2021 Indonesia began to be hit by covid-19 and was accompanied by various very strict activity restrictions. On that basis, the 2020-2021 period is considered as the Covid-19 period. Finally, in 2022 as a period of decline in Covid-19 cases and the release of activities that began in the middle of the year (Akimkin et al., 2022; Chow et al., 2023; Facchin et al., 2023; Wunsch et al., 2022). On that basis, the researchers assessed this period as the period after activity restrictions. The next response is to test the difference in financial performance which will be described through financial ratios, such as liquidity, solvency, and profitability (Yusuf Rombe, et al 2023).

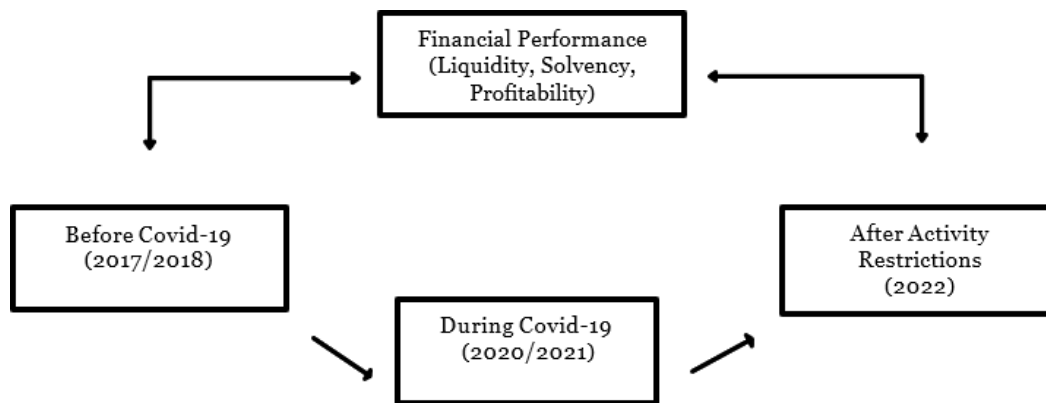


Figure 1. Thinking structure

Analysis techniques

This research will use the Statistical Package for the Social Sciences (SPSS) to process research data. This is relevant because this study has data that does not really require complex calculations, so that SPSS assistance will be more sufficient to test different financial performance in the period before covid-19, during covid-19 which was accompanied by activity restrictions, and after activity restrictions. Based on that, researchers will conduct different tests every period, and will show the results of paired samples analysis statistically, and differences. From the statistical form, we find the average, then the difference table explains the difference between each period with a significance level of 5% to get an idea of financial performance before, during, and after. This picture will certainly be useful for management's decision in evaluating the company's financial performance, especially in the tourism and aviation sectors listed on the IDX.

RESULTS AND DISCUSSION

Results

Table 1. Paired samples statistics

	Mean	N	Std. Deviation
Before Covid-19	0.00936	14	0.101283
During Covid-19	-0.11286	14	0.164753
Before Covid-19	0.00936	14	0.101283
After Restrictions	-0.02771	14	0.096700
During Covid-19	-0.11286	14	0.164753
After Restrictions	-0.02771	14	0.096700

The data shown above on an average it provides the relevant conditions. The overall average result before covid- 19 in the table above shows a positive of 0.00936. Logically, during that time there were no restrictions on activities, so the performance of flights and tourism was in a safe condition. That is, financial inflows are still occurring. Unlike the conditions during Covid-19, the table above shows that overall there was a very drastic decrease or was in a negative condition of -0.11286. This is clear because there are restrictions on activities that result in the company's financial performance being disrupted. In the sense that no income is received due to closed activities, in addition to layoffs (layoffs) which result in loss of income so that transaction activities decrease.

In this context, the flow of tourism and aviation is restricted or even closed by the government, then income will decrease. This condition is also in line with previous research from where covid-19 affects the flow of tourism and flights. In addition, from the table above there is also a period after activity restrictions. Conditions are different, public activities have been open even though active cases of COVID-19 have been detected. However, this step shows that there is an increase in conditions during Covid-19 of -0.02771, although it is not so big but it is part of a transition that is not easy. This is in line with the findings of previous research from which found that there were changes after the impact of covid-19.

Table 2. Paired samples test

Paired Differences	
	sig. (2-tailed)
Before Covid-19	0.003
During Covid-19	
Before Covid-19	0.018
After Restrictions	
During Covid-19	0.012
After Restrictions	

Based on Table 2 above, researchers found that there were differences in each of the three conditions studied. It can be seen that the significant score shown is less than 0.05. It illustrates that the company's financial performance in the period before, during, and after is very different. Financial inflows were certainly greater before covid-19 because there were no restrictions on activities, but if during covid-19 it was relevant because there were restrictions on activities that resulted in financial inflows being quite disrupted, in contrast to financial performance after activity restrictions, researchers argue that the increase

occurred because activity restrictions had been ended and people and business businesses returned to normal, Hence from Table 2 above there is a difference.

Discussion

If you review the statement of Presidential Regulation No. 48 of 2023, it is in line with the reality of conditions in the community that there has been a decrease in the impact of Covid-19, so that all handling is stopped. As a result, the changes shown in table 1 have increased slightly, on average. The change in increase is relevant because it is still at the level of covid-19, as also revealed in the WHO statement that covid-19 cases are still detected actively, Indonesia is included in it. In addition, the company also still needs adaptation to system changes. So, it is not surprising that in the period after the activity restriction there was a slight increase because it still needs deeper evaluation, so the picture of the company's financial performance in the period before Covid-19, during, and after activity restrictions is important in this case.

The step to release activities decided by the Indonesian government in the midst of covid-19 cases, turned out to be due to a decrease in the impact of covid-19 as a result of fairly strict handling. As a result, the decision provided improvements to the financial performance of tourism and aviation sector companies evaluated in different tests. The evaluation has been shown in tables 1-2 which illustrate that there are differences from the three conditions studied. During COVID-19, it is an important picture of the recovery period in 2022. This is useful for protecting while adjusting the next performance conditions. Management strategies or realizations that cause an increase in the activity release period will be an important history that needs to be applied next, in the midst of WHO's record related to COVID-19 cases (Assaad & El-Adaway, 2021; Kosack et al., 2021).

The reaction to active COVID-19 cases is to make changes as described in the initial section. That is, restructuring to be able to adapt to the external environment can also achieve company targets. This step is quite relevant in the period of activity release in the midst of taking seriously the active detected cases of COVID-19. In addition, responses to market demand can also be detected. As during covid-19, of course, the company's financial performance greatly decreased due to the closure of various business activities, layoffs, resulting in reduced revenue, the average condition of the company's financial performance during covid-19 decreased dramatically from before covid-19. For that event, the price decision will be very sensitive, so it requires normal pricing application. Unlike before Covid-19 and after activity restrictions, the company's financial performance has been fairly safe because restrictions on general activities are no longer enforced, so the difference in financial performance conditions is clearer.

The explanation above illustrates that these research hypotheses are supported, as seen below: H1: There are differences in market demand before the COVID-19 pandemic, during, and after activity restrictions. H2: The company's financial performance experienced differences before the COVID-19 pandemic, during, and after activity restrictions. H3: There are changes in financial performance before the Covid-19 pandemic, during, and after activity restrictions.

The findings of this study also provide implications for the achievement of Sustainable Development Goal (SDG) 8, which emphasizes sustainable economic growth, productive employment, and resilient business performance. The significant decline in financial performance during the COVID-19 period reflects the vulnerability of tourism and aviation industries to external shocks. Meanwhile, the improvement observed after the lifting of

activity restrictions indicates the capacity of these sectors to recover and adapt to changing economic conditions. Therefore, evaluating financial performance across different stages of the pandemic offers valuable insights for policymakers and corporate managers in designing strategies that support sustainable economic recovery, strengthen business resilience, and contribute to the long-term achievement of SDG 8.

CONCLUSION

Fundamental Finding: This study found significant differences in the financial performance of tourism and aviation companies across three periods: before the COVID-19 pandemic, during the pandemic, and after the lifting of activity restrictions. Before the pandemic, financial performance remained relatively stable due to normal market demand and uninterrupted business activities. During the COVID-19 period, financial performance declined substantially as activity restrictions reduced mobility, consumer demand, and business operations. Following the lifting of restrictions, financial performance showed signs of recovery, although the improvement had not yet fully returned to pre-pandemic conditions. These findings indicate that the tourism and aviation sectors were highly vulnerable to pandemic-related disruptions but demonstrated gradual recovery as economic activities resumed. **Implication:** The findings provide important implications for corporate managers, investors, and policymakers in evaluating business resilience during and after economic crises. The observed recovery after the removal of activity restrictions suggests that adaptive business strategies and supportive government policies can contribute to restoring financial performance. Furthermore, this study contributes to the achievement of Sustainable Development Goal (SDG) 8 by providing evidence on sustainable economic recovery, business resilience, and long-term corporate sustainability in sectors heavily affected by external shocks. **Limitation:** This study focused only on tourism and aviation companies listed on the Indonesia Stock Exchange (IDX), resulting in a relatively limited sample size. In addition, the year 2022 was categorized as the post-restriction period even though the complete lifting of activity restrictions occurred at the end of the year. Consequently, the recovery effects identified in this study may not fully reflect the actual post-pandemic business environment. The limited number of aviation companies listed on the IDX may also affect the generalizability of the findings. **Future Research:** Future studies are encouraged to expand the scope of analysis by including companies from other sectors and a larger sample size. Researchers may also examine the post-pandemic recovery period using more recent data, particularly from 2023 onward, to capture the long-term effects of lifting activity restrictions. In addition, future research could investigate aviation companies that are not listed on the IDX or employ comparative analyses across industries to provide a broader understanding of corporate resilience and sustainable economic recovery.

AUTHOR CONTRIBUTIONS

Petrus Kanisius Yosta: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, Visualization, Writing – Original Draft, and Writing – Review & Editing. **Baldrice Siregar:** Conceptualization, Supervision, Validation, and Writing – Review & Editing. All authors have read, reviewed, and approved the final version of the manuscript.

CONFLICT OF INTEREST STATEMENT

The authors state that no financial or personal conflicts of interest exist that may have affected the content or findings of this research.

STATEMENT ON THE USE OF AI OR DIGITAL TOOLS IN WRITING

The authors declare that no artificial intelligence (AI) tools or other digital writing assistants were used in the preparation, analysis, or writing of this manuscript. All stages of the research process, including data analysis, interpretation, and manuscript writing, were conducted solely by the authors. The authors take full responsibility for the originality, accuracy, and integrity of the content presented in this article.

REFERENCES

- Abu-Rayash, A., & Dincer, I. (2020). Analysis of mobility trends during the COVID-19 coronavirus pandemic: Exploring the impacts on global aviation and travel in selected cities. *Energy Research & Social Science*, 68, 101693. <https://doi.org/10.1016/j.erss.2020.101693>
- Akimkin, V. G., Popova, A. Y., Ploskireva, A. A., Ugleva, S. V., Semenenko, T. A., Pshenichnaya, N. Y., Ezhlova, E. B., Letyushev, A. N., Demina, Y. V., & Kuzin, S. N. (2022). COVID-19: the evolution of the pandemic in Russia. Report I: manifestations of the COVID-19 epidemic process. *Journal of Microbiology, Epidemiology and Immunobiology*, 99(3), 269–286. <https://doi.org/10.36233/0372-9311-276>
- Alam, M. M., Fawzi, A. M., Islam, M. M., & Said, J. (2022). Impacts of COVID-19 pandemic on national security issues: Indonesia as a case study. *Security Journal*, 35(4), 1067–1086. <https://doi.org/10.1057/s41284-021-00314-1>
- Assaad, R., & El-Adaway, I. H. (2021). Guidelines for responding to COVID-19 pandemic: Best practices, impacts, and future research directions. *Journal of Management in Engineering*, 37(3), 6021001. [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000906](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000906)
- Atayah, O. F., Dhiaf, M. M., Najaf, K., & Frederico, G. F. (2022). Impact of COVID-19 on financial performance of logistics firms: evidence from G-20 countries. *Journal of Global Operations and Strategic Sourcing*, 15(2), 172–196. <https://doi.org/10.1108/JGOSS-03-2021-0028>
- Barauskaite, G., & Streimikiene, D. (2021). Corporate social responsibility and financial performance of companies: The puzzle of concepts, definitions and assessment methods. *Corporate Social Responsibility and Environmental Management*, 28(1), 278–287. <https://doi.org/10.1002/csr.2048>
- Chow, E. J., Uyeki, T. M., & Chu, H. Y. (2023). The effects of the COVID-19 pandemic on community respiratory virus activity. *Nature Reviews Microbiology*, 21(3), 195–210. <https://doi.org/10.1038/s41579-022-00807-9>
- Chowdhury, A. Z., & Jomo, K. S. (2020). Responding to the COVID-19 pandemic in developing countries: lessons from selected countries of the global south. *Development (Society for International Development)*, 63(2–4), 162. <https://doi.org/10.1057/s41301-020-00256-y>
- Dube, K., Nhamo, G., & Chikodzi, D. (2021). COVID-19 pandemic and prospects for recovery of the global aviation industry. *Journal of Air Transport Management*, 92, 102022. <https://doi.org/10.1016/j.jairtraman.2021.102022>
- El-Gohary, H. (2020). Coronavirus and halal tourism and hospitality industry: is it a journey to the unknown? *Sustainability*, 12(21), 9260. <https://doi.org/10.3390/su12219260>
- Facchin, G., Bella, A., Del Manso, M., Rota, M. C., & Fila, A. (2023). Decline in reported measles cases in Italy in the COVID-19 era, January 2020–July 2022: The need to prevent a resurgence upon lifting non-pharmaceutical pandemic measures. *Vaccine*, 41(7), 1286–1289. <https://doi.org/10.1016/j.vaccine.2023.01.021>

- Fong, S. J., Dey, N., & Chaki, J. (2020). An introduction to COVID-19. In *Artificial intelligence for coronavirus outbreak* (pp. 1–22). Springer. https://doi.org/10.1007/978-981-15-5936-5_1
- Golubeva, O. (2021). Firms' performance during the COVID-19 outbreak: international evidence from 13 countries. *Corporate Governance: The International Journal of Business in Society*, 21(6), 1011–1027. <https://doi.org/10.1108/CG-09-2020-0405>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: a rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20. <https://doi.org/10.1080/09669582.2020.1758708>
- Haque, A., & Pant, A. B. (2022). Mitigating Covid-19 in the face of emerging virus variants, breakthrough infections and vaccine hesitancy. *Journal of Autoimmunity*, 127, 102792. <https://doi.org/10.1016/j.jaut.2021.102792>
- Ismail, I. H. M., Khatib, S. F. A., Abbas, A. F., Khan, M. N. A. A., Sulimany, H. G. H., & Bazhair, A. H. (2024). Crisis and environmental governance decisions amidst the COVID-19 pandemic: Lessons from European countries. *Heliyon*, 10(4). <https://doi.org/10.1016/j.heliyon.2024.e25673>
- Jabeen, S., Khan, N., Bhatti, S. H., Falahat, M., & Qureshi, M. I. (2025). Towards a sustainable halal tourism model: A systematic review of the integration of islamic principles with global sustainability goals. *Administrative Sciences*, 15(9), 335. <https://doi.org/10.3390/admsci15090335>
- Kosack, E., Stone, M., Sanders, K., Aravopoulou, E., Biron, D., Brodsky, S., Al Dhaen, E. S., Mahmoud, M., & Usacheva, A. (2021). Information management in the early stages of the COVID-19 pandemic. *The Bottom Line*, 34(1), 20–44. <https://doi.org/10.1108/BL-09-2020-0062>
- Kurniawan, -, Maulana, A., & Iskandar, Y. (2023). The effect of technology adaptation and government financial support on sustainable performance of MSMEs during the COVID-19 pandemic. *Cogent Business & Management*, 10(1), 2177400. <https://doi.org/10.1080/23311975.2023.2177400>
- Loayza, N. (2020). Costs and trade-offs in the fight against the COVID-19 pandemic: A developing country perspective. *World Bank Research and Policy Briefs*, 148535. <https://doi.org/10.1596/33764>
- Naidich, J. J., Boltyenkov, A., Wang, J. J., Chusid, J., Hughes, D., & Sanelli, P. C. (2020). Impact of the coronavirus disease 2019 (COVID-19) pandemic on imaging case volumes. *Journal of the American College of Radiology*, 17(7), 865–872. <https://doi.org/10.1016/j.jacr.2020.05.004>
- Narula, R. (2020). Policy opportunities and challenges from the COVID-19 pandemic for economies with large informal sectors. *Journal of International Business Policy*, 3(3), 302. <https://doi.org/10.1057/s42214-020-00059-5>
- Nižetić, S. (2020). Impact of coronavirus (COVID-19) pandemic on air transport mobility, energy, and environment: A case study. *International Journal of Energy Research*, 44(13), 10953–10961. <https://doi.org/10.1002/er.5706>
- Olivia, S., Gibson, J., & Nasrudin, R. an. (2020). Indonesia in the Time of Covid-19. *Bulletin of Indonesian Economic Studies*, 56(2), 143–174. <https://doi.org/10.1080/00074918.2020.1798581>
- Ruiz-Muñoz, D., Sánchez-Sánchez, A. M., & Sánchez-Sánchez, F. J. (2025). Challenges and opportunities for halal tourism. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-07-2024-0276>

- Shadmi, E., Chen, Y., Dourado, I., Faran-Perach, I., Furler, J., Hangoma, P., Hanvoravongchai, P., Obando, C., Petrosyan, V., & Rao, K. D. (2020). Health equity and COVID-19: global perspectives. *International Journal for Equity in Health*, 19(1), 104. <https://doi.org/10.1186/s12939-020-01218-z>
- Singhal, T. (2020). A review of coronavirus disease-2019 (COVID-19). *The Indian Journal of Pediatrics*, 87(4), 281–286. <https://doi.org/10.1007/s12098-020-03263-6>
- Sparrow, R., Dartanto, T., & Hartwig, R. (2020). Indonesia under the new normal: Challenges and the way ahead. *Bulletin of Indonesian Economic Studies*, 56(3), 269–299. <https://doi.org/10.1080/00074918.2020.1854079>
- Subandi, M. R. (2023). *Tourism and COVID-19 pandemic: Experiences from Indonesia*. Wageningen University and Research.
- Valaskova, K., Gajdosikova, D., & Lazaroiu, G. (2023). Has the COVID-19 pandemic affected the corporate financial performance? A case study of Slovak enterprises. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 18(4), 1133–1178. <https://doi.org/10.24136/eq.2023.036>
- Wunsch, K., Kienberger, K., & Niessner, C. (2022). Changes in physical activity patterns due to the COVID-19 pandemic: a systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*, 19(4), 2250. <https://doi.org/10.24136/eq.2023.036>

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