

Analysis on the Effects of COVID-19 Pandemic to the Tourist Arrival Trend in Caraga, Philippines through Linear Regression

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Abstract: *This study delves into the tourist arrival trends in Caraga, Philippines before and during the COVID-19 pandemic. The trends were compared using Linear Regression Analysis. Data were sourced from the Regional Social and Economic Trends 2022 in Caraga from the Philippine Statistical Authority-Caraga. The analysis of tourist arrivals in the Caraga Region, Philippines, from 2008 to 2021, reveals the dual impact of pre-pandemic growth and the COVID-19 pandemic. Linear regression models applied to domestic, foreign, and total tourist arrivals highlight distinct trends. Before the pandemic, strong relationships between the year and tourist arrivals were evident, particularly in the total arrivals model, reflecting robust growth. However, the pandemic shifted this dynamic, weakening the link between the year and arrivals in all categories. Lower coefficients and diminished R-squared values underscored the pandemic's disruptive influence, indicating external factors played a greater role. This emphasizes Caraga's tourism industry's resilience and adaptability, necessitating flexible strategies to navigate the complex interplay of global events and local tourism trends.*

Keywords: Tourism, Tourist Arrivals, Caraga Region, Linear Regression Analysis

REFERENCES

- [1]. Behsudi, A. (2020). Tourism-dependent economies are among those harmed the most by the pandemic. Retrieved from
- [2]. <https://www.imf.org/en/Publications/fandd/issues/2020/12/impact-of-the-pandemic-on-tourism-behsudi#:~:text=In%20the%20first%20half%20of,in%20a%20post%2Dpandemic%20world>.
- [3]. Lee, C. C., & Chen, M. P. (2021). Ecological footprint, tourism development, and country risk: International evidence. *Journal of Cleaner Production*, 279, 123671. Retrieved from <https://doi.org/10.1016/j.jclepro.2020.123671>
- [4]. Ma, D., Hu, J., & Yao, F. (2021). Big data empowering low-carbon smart tourism study on low-carbon tourism O2O supply chain considering consumer behaviors and corporate altruistic preferences. *Computers & Industrial Engineering*, 153, 107061. Retrieved from <https://doi.org/10.1016/j.cie.2020.107061>
- [5]. McCabe, S., & Qiao, G. (2020). A review of research into social tourism: Launching the Annals of Tourism Research Curated Collection on Social Tourism. *Annals of Tourism Research*, 85, 103103. Retrieved from <https://doi.org/10.1016/j.annals.2020.103103>
- [6]. Rassy, Dunia, and Richard D. Smith. 2013. The economic impact of H1N1 on Mexico's tourist and pork sectors. *Health Economics* 22: 824–34. Retrieved from <https://doi.org/10.1002/hec.2862>
- [7]. Sigala, Marianna. 2020. Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research* 117: 312–21. Retrieved from <https://doi.org/10.1016/j.jbusres.2020.06.015>
- [8]. Ulak, Nimesh. 2020. A preliminary study of novel coronavirus disease (COVID-19) outbreak: A pandemic leading crisis in tourism industry of Nepal. *Journal of Tourism and Hospitality Education* 10: 108–31. Retrieved from <https://doi.org/10.3126/jthe.v10i0.28763>

- [9]. UNWTO. 2020. Impact Assessment of the Covid-19 Outbreak on International Tourism. Available online: <https://www.unwto.org/impact-assessment-of-the-covid-19-outbreak-on-international-tourism>
- [10]. Yu, Q., McManus, R., Yen, D. A., & Li, X. R. (2020). Tourism boycotts and animosity: A study of seven events. *Annals of Tourism Research*, 80, 102792. Retrieved from <https://doi.org/10.1016/j.annals.2019.102792>