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Analysis on the Tourism Direct Gross Value Added and Share to Gross Domestic Productof the Philippines

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Abstract: *This study utilized secondary data from the Philippine Tourism Satellite Account of the Department of Tourism spanning the years 2000 to 2022 to investigate the Tourism Direct Gross Value Added and Share to Gross Domestic Product of the Philippines. The research employed two primary statistical techniques: descriptive statistics (mean and standard deviation) and linear regression analysis. It assessed two critical variables, Tourism Direct Gross Value Added (TDGVA) and the Share of TDGVA to Gross Domestic Product (GDP), to analyze the sector's economic impact and relative importance. Descriptive statistics revealed a steady growth trend in TDGVA until 2019, followed by a sharp decline in 2020 attributed to the COVID-19 pandemic, highlighting the sector's vulnerability to external shocks. Linear regression analysis found a robust and significant positive relationship between TDGVA and time, indicating consistent sector growth. However, the relationship between time and the share of TDGVA to GDP was weak and non-significant, emphasizing the need for strategic planning and resilience-building measures in the Philippine tourism industry, which plays a crucial role in the country's economy.*

Keywords: Philippine Tourism, Tourism Direct Gross Value Added, Gross Domestic Product

I. INTRODUCTION

Tourism has become an increasingly prominent sector in the global economy, transcending its role as a source of leisure and cultural exchange to become a cornerstone of economic development. This phenomenon is particularly evident in the Philippines, a nation renowned for its stunning natural landscapes, rich cultural heritage, and warm hospitality. Over the years, the Philippines has witnessed a burgeoning tourism industry that not only provides travelers with unique experiences but also contributes significantly to the country's Gross Domestic Product (GDP) and employment opportunities. This research project embarks on a comprehensive exploration of the symbiotic relationship between the tourism sector and the Philippine economy. By drawing upon an extensive dataset sourced from the Philippine Tourism Satellite Account of the Department of Tourism, spanning from 2000 to 2022, this study seeks to illuminate the intricate dynamics of Tourism Direct Gross Value Added (TDGVA) and its proportionate share of the national GDP.

The repercussions of this upheaval reach far beyond the tourism sector, profoundly affecting economies worldwide. According to the October World Economic Outlook by the International Monetary Fund (IMF), it was projected that the global economy would contract by 4.4 percent in 2020. However, for economies heavily dependent on tourism, the anticipated consequences were considerably more severe. African nations, where tourism plays a pivotal role, were forecasted to face a daunting contraction of 12 percent in real GDP. Similarly, Caribbean countries reliant on tourism were also expected to experience an economic decline of approximately 12 percent. Furthermore, Pacific island nations such as Fiji were confronted with an even more daunting challenge, with a potential real GDP contraction of a staggering 21 percent in the current year. These distressing statistics underscore the disproportionately adverse effects of the pandemic on regions heavily reliant on tourism and emphasize the urgent necessity for global collaboration and recovery strategies to mitigate these repercussions.

This research endeavors to uncover not only the historical performance of the tourism sector but also its resilience in the face of external disruptions, most notably the seismic impact of the COVID-19 pandemic. By doing so, this study aimed to provide critical insights that inform strategic planning and resilience-building strategies within the Philippine tourism industry, an industry that stands at the nexus of economic growth, cultural preservation, and sustainable development. This unravelled the growth patterns and challenges faced by the tourism sector, assess its ability to weather unforeseen crises, and underscore its pivotal role in shaping the economic landscape of the Philippines.

II. LITERATURE REVIEW

The Global Significance of the Tourism Industry

The tourism industry has garnered global attention for its multifaceted impact, driving consumption, fostering international trade, and facilitating cross-cultural exchanges (Qian et al., 2018). Evolving into an economic behemoth, it now rivals industries such as automobiles, food products, and oil exports, constituting 9% of the GDP and accounting for 1 out of every 11 direct, indirect, and induced jobs (Robaina-Alves et al., 2016). Beyond its financial prowess, tourism deeply resonates across social, cultural, economic, political, and environmental dimensions (Hitchcock et al., 2009). With its exceptional growth rate, tourism stands as a pivotal catalyst for economic resurgence, provided its potential is harnessed effectively (Shahzad et al., 2017). Operating as a colossal sector, it possesses the capacity to significantly influence earnings, employment, foreign exchange, and overall economic progress, thereby serving as a driving force in the growth narratives of emerging markets (Haller, 2012; Shahzad et al., 2017).

Southeast Asia's Rising Tourism Sector

Southeast Asia, characterized by market-driven economies and foreign exchange gains, has witnessed rapid development in its tourism sector, elevating the region's global prominence. The increasing influx of international tourists underscores the growing significance of tourism (Barker, 2013). Beyond economic metrics, Southeast Asia's appeal lies in its rich cultural heritage and natural beauty. As developing nations embraced tourism as a path to economic development, the sector's potential to alleviate poverty, nurture human resources, and foster peace has been recognized (Hall & Richards, 2002). A key impact of this phenomenon has been the contribution to local employment, ultimately enhancing living standards and reducing poverty (Oh, 2005).

Tourism's Macroeconomic Influence

From a macroeconomic perspective, tourism involves leisure travel beyond everyday routines, with substantial effects on local and national economies (Ayeni&Ebohon, 2012). Its role as an engine for economic growth is underlined by its ability to generate foreign exchange, create jobs, and boost local revenues (Steiner, 2006). The surge in sustainable tourism growth in countries like Nigeria has played a pivotal role in diversifying economies, catalyzing service sectors, and creating new revenue streams (Ayeni&Ebohon, 2012). While developed nations dominate the global tourism scene, the potential benefits for less developed nations remain substantial and ready to be harnessed.In the context of the Philippines, the resilience of its tourism sector is exemplified by its remarkable recovery from a staggering 80% drop in 2020. The sector surged by 129.5% in 2021, contributing 41 billion USD to the GDP and reinvigorating 1.3 million jobs. These impressive figures signify not only economic resurgence but also the promise of sustained long-term gains. Projections by the World Travel and Tourism Council indicate an annual growth rate of 3% over the next decade, generating around 3 million jobs, a testament to the sector's transformative potential in driving economic and employment growth.

III. METHODOLOGY

The research methodology employed in this study utilized secondary data sourced from the Philippine Tourism Satellite Account of the Department of Tourism, spanning the years from 2000 to 2022. This dataset was chosen as it provides comprehensive and reliable information regarding the tourism sector's performance and its contribution to the Philippine economy. The data analysis involved two key statistical techniques: descriptive statistics (mean and standard deviation) and linear regression analysis.

To begin, the research collected data on two critical variables: Tourism Direct Gross Value Added (TDGVA) and the Share of TDGVA to Gross Domestic Product (GDP). These variables were chosen to assess the economic impact and relative importance of the tourism sector in the Philippines over the study period. Descriptive statistics, including mean and standard deviation, were applied to the data on TDGVA and the share to GDP. The mean provided a measure of central tendency, allowing the research to gauge the average values of these variables over the years. Meanwhile, the

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standard deviation offered insights into the variability or dispersion of these values, highlighting the degree of fluctuation or stability in the data.

Linear regression analysis was the second major component of the research methodology. This statistical technique was employed to examine the relationships between time (in years) and both TDGVA and the share to GDP. In the case of TDGVA, the linear regression analysis aimed to uncover any linear trends in the sector's value added to the economy over the years. For the share to GDP, the analysis explored whether there was a statistically significant linear relationship between this ratio and time. The regression results, including coefficients, R-squared values, and p-values, allowed the research to quantify these relationships and assess their statistical significance.

IV. RESULTS AND DISCUSSION

Table 1 shows the tourism sector's direct gross value added and its share to the Gross Domestic Product (GDP) of the Philippines.

The average direct gross value added in the tourism sector is approximately 899,504.22 units, with a standard deviation of approximately 666,709.34 units. This means that, on average, the tourism sector contributes significantly to the country's economic output. However, the relatively high standard deviation suggests that there can be considerable variation in the direct gross value added from year to year or within the industry.

The average share of the tourism sector to the GDP is approximately 8.53%. This figure indicates the importance of tourism as a contributor to the overall economic activity in the Philippines. A higher share suggests a more significant reliance on tourism-related activities within the economy. The standard deviation of 4.30 indicates that this contribution can also vary over time, potentially impacting the stability of the country's economic growth.

These insights suggest that the tourism sector plays a vital role in the Philippines' economy, but its performance can be subject to fluctuations and external factors, such as global economic conditions or natural disasters, which can influence both the direct gross value added and its share in the GDP. Policymakers and stakeholders should consider these variations when formulating strategies to promote sustainable growth in the tourism industry.

TABLE 1. AVERAGE TOURISM DIRECT GROSS VALUE ADDED AND SHARE TO GROSS DOMESTIC PRODUCT OF THE PHILIPPINES

Variable	Mean	SD
Direct Gross Value Added	899504.22	666709.34
Share to Gross Domestic Product	8.53	4.30

Figure 1 displays the trend of Tourism Direct Gross Value Added (TDGVA) in the Philippines from 2000 to 2022. This data provides valuable insights into the evolution of the tourism sector's contribution to the country's economy over this time frame.

From 2000 to 2016, the TDGVA showed a relatively steady and consistent increase, indicating a healthy growth trajectory for the tourism sector in the Philippines. Notably, there was a significant uptick in TDGVA from 2010 onwards, with the value almost doubling by 2016. This period of robust growth can be attributed to various factors, such as increased tourist arrivals, improved infrastructure, and effective marketing strategies.

However, in 2020, there was a sharp decline in TDGVA, which can be primarily attributed to the COVID-19 pandemic, as it severely impacted global travel and tourism. Many countries, including the Philippines, implemented lockdowns and travel restrictions to curb the spread of the virus, resulting in a substantial drop in tourism-related economic activities. The data for 2021 and 2022 shows a rebound in TDGVA, which aligns with the gradual recovery of the global tourism industry as travel restrictions were eased and vaccination efforts intensified. While the TDGVA in 2022 is higher than in previous years, it's essential to note that it's still below the pre-pandemic levels observed in 2019.

The trend in Figure 1 underscores the significance of the tourism sector in the Philippines and its susceptibility to external factors like pandemics. As the country moves forward, strategies for sustainable tourism development and resilience in the face of global challenges will be crucial to ensure the long-term growth and stability of this vital industry.

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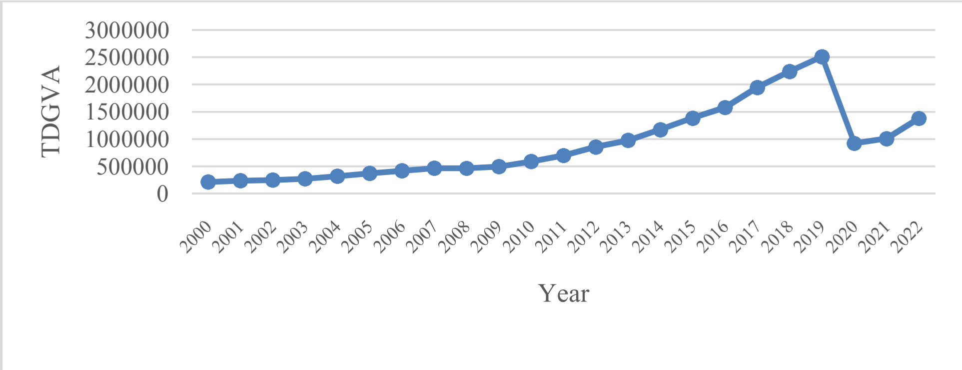

FIGURE 1. TREND OF TOURISM DIRECT GROSS VALUE ADDED IN THE PHILIPPINES 2000-2022

Figure 2 illustrates the trend of the share of Tourism Direct Gross Value Added (TDGVA) to the Gross Domestic Product (GDP) of the Philippines from 2000 to 2022. This data provides valuable insights into the tourism sector's contribution to the overall economy and its fluctuation over the years.

From 2000 to 2007, the share of TDGVA to GDP remained relatively stable, fluctuating within a relatively narrow range between approximately 8.1% and 12.8%. This suggests that the tourism sector was a consistent and significant contributor to the country's GDP during this period, reflecting its importance in the Philippine economy. However, the data indicates some fluctuations in the subsequent years. Notably, in 2009, there was a significant drop in the share to just 4.2%. This sharp decline can be attributed to the global economic crisis that year, which had a negative impact on many industries, including tourism.

The years 2010 and 2011 saw a rebound in the share of TDGVA to GDP, reaching 12% and 7.9%, respectively. This increase can be attributed to efforts to promote tourism, improved infrastructure, and increased tourist arrivals during that period. Starting from 2015, there was a noticeable decline in the share, hitting a low of 5.6% in the same year. This decline might be attributed to factors such as natural disasters, economic fluctuations, or changes in tourism policies.

In 2020, the share of TDGVA to GDP dropped significantly to -8%. This negative value suggests that the tourism sector's contribution to the GDP turned negative in that year, mainly due to the severe impact of the COVID-19 pandemic, which led to a contraction in the tourism industry. The data for 2021 and 2022 shows a rebound in the share, reaching 8.1% and 13.5%, respectively. This rebound likely reflects the recovery of the tourism sector as travel restrictions were eased and tourism activities resumed.

Figure 2 demonstrates the resilience and vulnerability of the tourism sector in the Philippines to various external factors, including economic crises and global pandemics. The data highlights the importance of effective policies and strategies to promote sustainable tourism and ensure its continued contribution to the country's GDP.

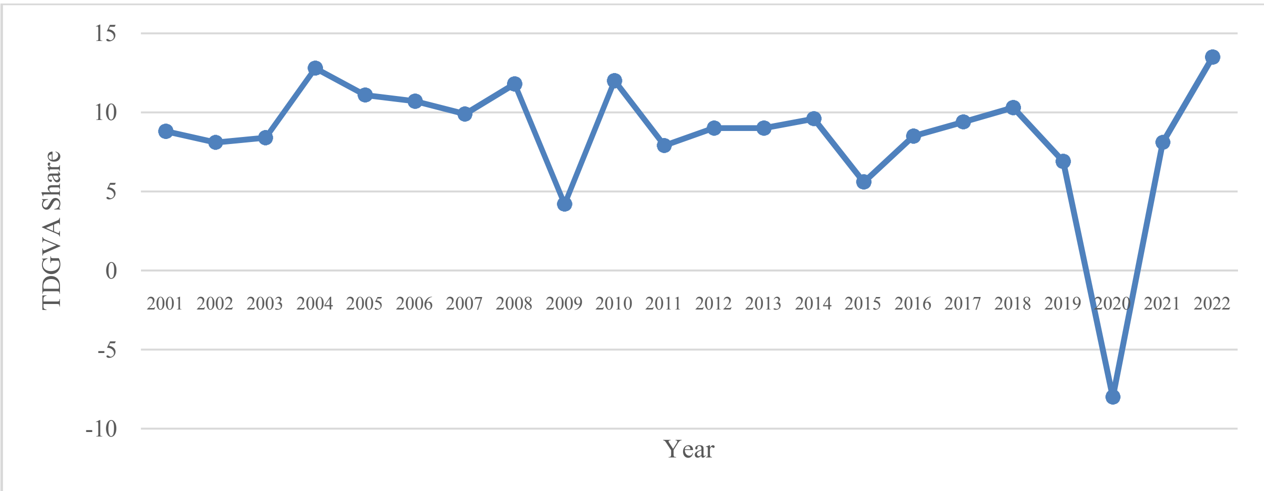

FIGURE 2. TREND OF SHARE OF TOURISM DIRECT GROSS VALUE ADDED TO GROSS DOMESTIC PRODUCT OF THE PHILIPPINES 2000-2022

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Table 2 presents the results of a linear regression analysis conducted on the employment of tourism in the Philippines. The linear regression analysis conducted on the employment of the tourism industry in the Philippines provides valuable insights into the relationship between time (represented by the "Year" variable) and employment levels. The model's coefficient of determination (R Square) indicates the proportion of the variance in employment that can be explained by the linear regression equation. In this case, the R Square value provides a significant insight into how well the "Year" variable predicts changes in employment.

The coefficient values for the constant and the "Year" variable offer further insights. The constant value (-273345.778) represents the estimated employment at the starting point (year zero), which is not practically meaningful in this context. The coefficient for the "Year" variable (137.997) implies the estimated change in employment for each additional year. This coefficient suggests a positive relationship between time and employment. The t-value (14.527) for the "Year" coefficient reflects the significance of the relationship. A higher t-value indicates that the coefficient is significantly different from zero, supporting the conclusion that the "Year" variable is a meaningful predictor of employment changes. Additionally, the associated significance level (Sig.) is nearly zero (0.000000000002), further reinforcing the statistical significance of the "Year" variable. The overall model fit is also assessed by the constant's t-value (-14.309). This t-value, along with its associated significance level (0.000000000003), indicates that the model, which considers the "Year" variable's linear effect, is statistically significant in predicting employment changes.

The linear regression analysis underscores the strong relationship between time (years) and employment within the tourism industry in the Philippines. The positive coefficient and its statistical significance suggest a consistent and meaningful upward trend in employment over the years covered by the data. However, it's important to note that while the analysis provides insights, further examination of underlying factors and potential limitations of the model would enrich the understanding of the dynamics between time and employment in the context of the Philippines' tourism industry.

TABLE 2. LINEAR REGRESSION ANALYSIS ON TOURISM DIRECT GROSS VALUE ADDED AND SHARE TO GROSS DOMESTIC PRODUCT OF THE PHILIPPINES

Model		**Unstandardized Coefficients**		**R Square**	**t**	**Sig.**
		B	**Std. Error**			
Direct Gross Value Added	(Constant)	-158634359.81	25474291.05	0.65	-6.23	0.000004
	Year	79330.61	12667.41		6.26	0.000003
Share to Gross Domestic Product	(Constant)	383.57	285.85	0.08	1.34	0.195
	Year	-0.19	0.14		-1.31	0.204

V. CONCLUSION

This study offers valuable insights into the dynamics of the tourism sector's role in the Philippine economy. It revealed a steady growth trajectory in Tourism Direct Gross Value Added (TDGVA) from 2000 to 2019, indicating the sector's increasing contribution to the country's economic output. However, the sharp decline in 2020, attributed to the COVID-19 pandemic, underscores the sector's vulnerability to external shocks. The subsequent rebound in 2021 and 2022 reflects the resilience of the tourism industry as global conditions improved. Meanwhile, the study highlighted fluctuations in the share of TDGVA to GDP over the years, with periods of stability interspersed with declines. Notably, the negative share in 2020 mirrored the pandemic's impact on tourism, while the recovery in 2021 and 2022 signifies the gradual revival of this crucial economic sector.

Furthermore, the linear regression analysis provided quantitative insights into the relationships between these variables. The analysis revealed a strong and statistically significant positive linear relationship between TDGVA and time, indicating consistent growth in the sector over the years. However, the relationship between time and the share of TDGVA to GDP was found to be weak and non-significant, suggesting that this proportion does not exhibit a clear linear trend. These findings emphasize the importance of strategic planning and resilience-building measures in the Philippine tourism industry, as it continues to be a significant driver of economic growth while remaining susceptible to external factors like pandemics and economic crises. Policymakers and stakeholders should focus on sustainable tourism development to ensure the long-term prosperity of this vital sector.

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REFERENCES

[1]. Ayeni, D. A., &Ebohon, O. J. (2012). Exploring sustainable tourism in Nigeria for developmental growth. European Scientific Journal, 8(20).

[2]. Baker, D.M.A (2013). Understanding the Economic Impact of Tourism in the Asian Pacifi c Region Using the Tourism Satellite Account (TSA). International Journal of Business and Social Science, 4(3),15-22.

[3]. Durbarry, R. (2004). Tourism and Economic Growth: The Case of Mauritius. Tourism Economics, 10(4), 389–401. https://doi.org/10.5367/0000000042430962

[4]. Hitchcock, M., King, V.T., &Parnwell, M. (2009). Introduction: 'Tourism in Southeast Asia' revisited. In M. Hitchcock, V. T. King & M. Parnwell (Eds.), Tourism in Southeast Asia: Challenges and new directions (pp. 1-42). Copenhagen, Denmark: NIAS Press.

[5]. Hwang, J., & Lee, J. J. (2019). Understanding customer-customer rapport in a senior group package context. International Journal of Contemporary Hospitality Management, 31(5), 2187-2204. Retrieved from https://www.emerald.com/insight/content/doi/10.1108/ijchm-02-2018-0128/full/html

[6]. Hwang, J., & Lee, J. (Jay). (2019). Relationships among Senior Tourists' Perceptions of Tour Guides' Professional Competencies, Rapport, Satisfaction with the Guide Service, Tour Satisfaction, and Word of Mouth. Journal of Travel Research, 58(8), 1331–1346. https://doi.org/10.1177/0047287518803199

[7]. Malik, S., Chaudhry, I. S., Sheikh, M. R., &Farooqi, F. S. (2010). Tourism, economic growth and current account deficit in Pakistan: Evidence from co-integration and causal analysis. European Journal of Economics, Finance and Administrative Sciences, 22(22), 21-31. Retrieved from https://www.researchgate.net/profile/Muhammad-Sheikh-4/publication/285977338_Tourism_economic_growth_and_current_account_deficit_in_Pakistan_Evidence_from_co-integration_and_causal_analysis/links/5a8ecb6e0f7e9ba4296704a9/Tourism-economic-growth-and-current-account-deficit-in-Pakistan-Evidence-from-co-integration-and-causal-analysis.pdf

[8]. Qian, J., Shen, H. & Law, R. (2018). Research in Sustainable Tourism: A Longitudinal Study of Articles between 2008 and 2017. Sustainability, 10(590), 1-13.

[9]. Rasul, G., &Manandhar, P. (2009). Prospects and problems in promoting tourism in South Asia: A regional perspective. South Asia Economic Journal, 10(1), 187-207. Retrieved from https://doi.org/10.1177/139156140901000108

[10]. Richards, G., & Hall, D. R. (Eds.). (2003). Tourism and sustainable community development (Vol. 7). Psychology Press. Retrieved from https://books.google.com.ph/books?hl=en&lr=&id=gWpeoeQ4Pn8C&oi=fnd&pg=PR8&ots=1TlxW8orBB&sig=o163PUF95tVqDp8KuJSorjt7w1Y&redir_esc=y#v=onepage&q&f=false

[11]. Robaina-Alves, M., Moutinho, V., & Costa, R. (2016). Change in energy-related CO2 (carbon dioxide) emissions in Portuguese tourism: a decomposition analysis from 2000 to 2008. Journal of Cleaner Production, 111, 520-528.

[12]. Shahzad, S.J.H., Shahbaz, M., Ferrer, R., & Kumar, R.R. (2017). Tourismled growth hypothesis in the top ten tourist destinations: New evidence using the quantile-on-quantile approach. Tourism Management, 60, 223-232.

[13]. Steiner, C. (2006). Tourism, poverty reduction and the political economy: Egyptian perspectives on tourism's economic benefits in a semi-rentier state. Tourism and Hospitality Planning & Development, 3(3), 161-177. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/14790530601132286

[14]. Wttc Travel & Tourism Economic Impact 2018 South East Asia. [(accessed on 8 September 2019)]; Available online: https://www.wttc.org/-/media/files/reports/economic-impact-research/regions-2018/southeastasia2018.pdf