

Trend Analysis on Share of Philippine Inbound Tourism Expenditures to Exports

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Abstract: *This study investigates the share of inbound tourism expenditure to exports in the Philippines from 2000 to 2022, drawing upon comprehensive secondary data from the Philippine Tourism Satellite Account of the Department of Tourism. The research employs linear regression analysis to analyze the dynamics of this vital economic indicator. The findings reveal a complex interplay of factors influencing the share, with fluctuations over the years and a notable decline in 2020 due to the global COVID-19 pandemic. While the linear regression analysis does not identify a statistically significant linear trend, the high R Square value underscores the significance of time in explaining variations in the share. This study underscores the importance of monitoring and adapting to the evolving tourism landscape as the Philippines strives for economic recovery and long-term growth in a post-pandemic world.*

Keywords: Philippine Tourism, Inbound Tourism, Domestic Tourism, Tourism Expenditures

I. INTRODUCTION

In an era marked by ever-evolving global dynamics, the tourism industry has emerged as a cornerstone of economic growth, cultural exchange, and societal development. The Philippines, with its stunning landscapes, rich cultural heritage, and warm hospitality, stands at the crossroads of this global phenomenon. This archipelagic nation has long recognized the economic potential of its tourism sector, which not only contributes significantly to the country's GDP but also plays a vital role in fostering international relations, cultural understanding, and social development.

One of the key indicators that encapsulates the economic importance of inbound tourism is the growth rate of the share of inbound tourism expenditures to exports. This metric reflects the proportion of revenue generated from inbound tourism compared to the total value of the country's exports. It is a telling sign of how the tourism sector contributes to the national economy and how it interacts with the global market. Over the years, this indicator has undergone notable fluctuations and trends, reflecting the complex interplay of factors that influence tourism expenditure patterns. These factors encompass a wide range of variables, including global economic conditions, geopolitical stability, marketing strategies, infrastructure development, and even unforeseen events like pandemics. Understanding the dynamics of this indicator is crucial not only for assessing the performance of the tourism sector but also for formulating effective policies and strategies to harness its potential for sustainable economic growth.

This research embarks on a comprehensive trend analysis spanning more than two decades, from 2000 to 2022, utilizing secondary data sourced from the Philippine Tourism Satellite Account of the Department of Tourism. Through the application of linear regression analysis, this study seeks to unravel the intricate patterns within this critical economic indicator. By doing so, it aims to offer valuable insights into the evolving landscape of Philippine tourism, shedding light on the sector's resilience, adaptability, and potential for recovery in the face of external challenges. In an increasingly interconnected world, where the tourism industry plays a pivotal role in shaping nations' economies and cultures, this research serves as a contribution to the ongoing discourse on tourism economics and offers a foundation for informed decision-making and strategic planning in the Philippines' tourism sector.

II. LITERATURE REVIEW

Various scholars have illuminated the multifaceted impact of tourism on both a national and global scale. Tourism has evolved into a formidable global economic sector, contributing significantly to exports and GDP (Tugcu, 2014; Balli et al., 2015). It constitutes a substantial portion of the world's total merchandise and service exports, comprising 6 percent of these exports in 2014, and exerts a considerable influence on international trade in services. The sector's economic

significance is further underscored by its contribution to global GDP, accounting for 9.8 percent during the same period. This growing influence of inbound tourism on national economies aligns with the Tourism-Led Growth Hypothesis (TLGH) proposed by Balaguer and Cantavella-Jordá (2002), which posits that expanding international tourism activities can stimulate economic growth, akin to the Export-Led Growth Hypothesis (ELGH).

However, the relationship between tourism and economic growth is multifaceted. Shahbaz et al. (2016) have explored this nexus in the context of Malaysia, revealing bidirectional causation between tourism and output per capita, financial development, and trade openness. This suggests that tourism acts not just as an outcome but also as a driver of financial development and trade openness, fostering a mutually reinforcing relationship among these variables. Additionally, the role of informal microfinance institutions in tourism entrepreneurship has been scrutinized by Ngoasong and Kimbu (2016). Their research highlights the pivotal role of collective action within these institutions, which enables the establishment of small tourism enterprises, contributing to economic development.

Furthermore, tourism's influence extends beyond economics. Ridderstaat and Croes (2015) have delved into the impact of money supply cycles on tourism demand cycles, demonstrating the interplay between economic indicators and tourism activity. This emphasizes the importance of understanding economic fluctuations when assessing tourism trends. Lastly, Hoshino Resorts (2021) has emphasized the transformative potential of inbound tourism in Japan. While the domestic market has been a pillar of the country's tourism industry, the shift toward inbound tourism is driven by global factors such as the growing middle-class population in developing countries. As the world's middle class expands, Japan and other nations must adapt to harness the opportunities presented by this burgeoning international tourism market, ensuring sustainable economic growth and development.

III. METHODOLOGY

The research methodology adopted for this study constitutes a thorough and data-driven approach to examining the growth rate of the share of inbound tourism expenditure to exports in the Philippines from 2000 to 2022. The study relies on secondary data obtained from the Philippine Tourism Satellite Account, an authoritative source of tourism statistics managed by the Department of Tourism. This choice of data source ensures the reliability and accuracy of the dataset, forming the foundation of the analysis. By utilizing data from 2000 to 2022, the study encompasses a significant temporal range that encompasses both pre-pandemic and pandemic periods. This extended timeframe allows for a comprehensive examination of trends, fluctuations, and the impact of major events on the relationship between inbound tourism expenditures and exports.

The central variable of interest in this study is the growth rate of the share of inbound tourism expenditure to exports, a key economic indicator that reflects the interplay between the tourism sector and the country's export performance. To analyze this relationship, the study employs linear regression analysis, a statistical technique known for its suitability in examining linear trends over time. This method quantifies the strength and direction of the relationship between years and the growth rate, providing insights into the changing dynamics. The inclusion of statistical measures such as coefficients, R-squared values, and p-values enhances the rigor of the analysis, ensuring that the findings are not merely anecdotal but grounded in robust data analysis.

IV. RESULTS AND DISCUSSION

The data on the Share of Inbound Tourism Expenditures to Exports in the Philippines from 2000 to 2020 in Figure 1 reveals several noteworthy trends and fluctuations. This figure represents the percentage of revenue generated from inbound tourism compared to the total exports of the country.

From 2000 to 2005, the share remained relatively stable, starting at 6.2% in 2000 and only experiencing minor fluctuations during this period. However, from 2006 to 2009, there was a more noticeable fluctuation in the percentage, with a peak of 6.1% in 2006 and a low of 4.7% in 2008. These variations could be attributed to a combination of global economic factors, marketing efforts, and changes in international travel patterns. The years 2010 to 2012 witnessed a declining trend, with the percentage decreasing from 4.4% in 2010 to 4.4% in 2011. However, in 2012, there was a significant upturn, reaching 6.5%. This rise could be indicative of successful tourism initiatives and increased international interest in the Philippines. The subsequent years, from 2013 to 2019, demonstrated a remarkable upward trajectory in the share of inbound tourism expenditures to exports. This period saw consistent growth, with the

percentage climbing from 7.2% in 2013 to a peak of 10.8% in 2019. This substantial increase could be attributed to various factors, including improved infrastructure, diversified tourism offerings, and effective marketing strategies. However, a notable decline occurred in 2020, with the percentage dropping to just 2.9%. This sharp decrease can be attributed to the global COVID-19 pandemic, which severely impacted international travel and tourism worldwide. In 2021, the percentage further plummeted to 0.6%, reflecting the continued challenges posed by the pandemic. However, there was a resurgence in 2022, with the percentage increasing to 5.9%. This rebound could be indicative of the gradual recovery of the tourism sector as travel restrictions eased and international tourism began to pick up again. This trend reflects a dynamic interplay of factors, including global economic conditions and the effects of the COVID-19 pandemic. While the percentage experienced fluctuations over the years, it demonstrated consistent growth in the pre-pandemic years, highlighting the importance of inbound tourism to the country's export revenues. The recent resurgence in 2022 suggests positive signs of recovery for the Philippine tourism sector.

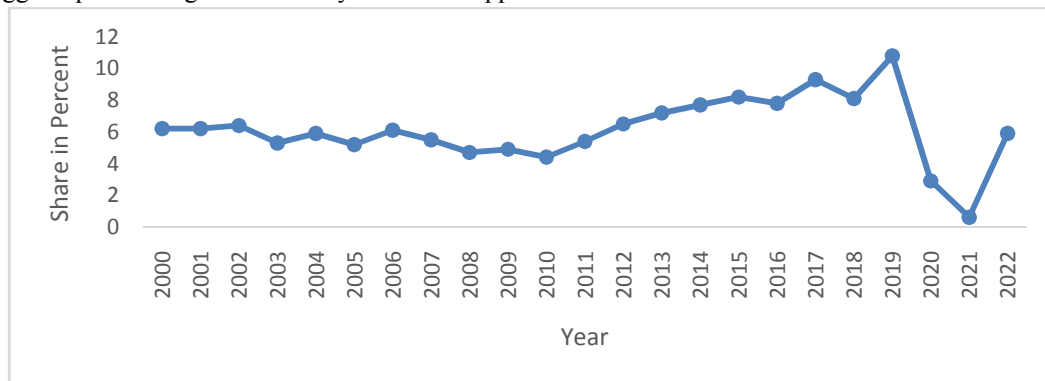


FIGURE 1. TREND ON SHARE OF PHILIPPINE INBOUND TOURISM EXPENDITURES TO EXPORTS 2000-2022

Table 1 presents the results of the linear regression analysis conducted on the Share of Philippine Inbound Tourism Expenditures to Exports. This analysis aimed to examine the relationship between time (represented by the "Year") and the share of inbound tourism expenditures to exports.

The "Constant" coefficient in the model is -49.899, with a standard error of 135.167. This coefficient represents the intercept of the regression equation. However, it's important to note that its t-value is -0.369, and the associated p-value is 0.716, indicating that the intercept is not statistically significant. This suggests that at the start of the period (Year 2000), the share of inbound tourism expenditures to exports was not significantly different from zero. The coefficient for "Year" is 0.028, with a standard error of 0.067. This coefficient measures the change in the share of inbound tourism expenditures to exports for each year. The associated t-value is 0.090, and the p-value is 0.415. These values suggest that the coefficient for "Year" is not statistically significant at conventional significance levels (e.g., $p < 0.05$). Therefore, there is no strong evidence to suggest a statistically significant linear relationship between the passage of time (in years) and the share of inbound tourism expenditures to exports.

The R Square value, which represents the proportion of variance in the dependent variable (share of inbound tourism expenditures to exports) explained by the independent variable (Year), is 0.683. This value suggests that the year explains approximately 68.3% of the variance in the share of inbound tourism expenditures to exports. However, this high R Square value should be interpreted with caution, as the coefficient for "Year" itself is not statistically significant. The linear regression analysis on the Share of Philippine Inbound Tourism Expenditures to Exports does not indicate a statistically significant linear relationship between time (in years) and this share. The coefficients for both the intercept and "Year" are not statistically significant, suggesting that other factors not included in the model may be influencing the changes in this share over time.

TABLE 1. LINEAR REGRESSION ANALYSIS ON THE SHARE OF PHILIPPINE INBOUND TOURISM EXPENDITURES TO EXPORTS

Model	Unstandardized Coefficients		R Square	t	Sig.
	B	Std. Error			
(Constant)	-49.899	135.167		-0.369	0.716
Year	0.028	0.067	0.090	0.415	0.683

V. CONCLUSION

The analysis of the Share of Inbound Tourism Expenditures to Exports in the Philippines spanning from 2000 to 2020 reveals a dynamic interplay of factors that significantly influenced this vital economic indicator. This percentage, which represents the revenue generated from inbound tourism in relation to the country's total exports, exhibited notable trends and fluctuations over the years. The early 2000s marked a period of stability, followed by more pronounced fluctuations from 2006 to 2009, likely influenced by various economic and marketing factors. Subsequently, from 2013 to 2019, the share witnessed substantial growth, highlighting the increasing economic importance of inbound tourism. However, the sharp decline in 2020 due to the global COVID-19 pandemic was a stark reminder of the sector's vulnerability to external shocks. The subsequent years, 2021 and 2022, displayed signs of recovery as travel restrictions eased.

The linear regression analysis, while not revealing a statistically significant linear trend, underscores the complexity of factors influencing this share. The high R Square value suggests that time explains a substantial portion of the variance in the share, but the non-significant "Year" coefficient implies that unaccounted factors play significant roles. In sum, the Share of Inbound Tourism Expenditures to Exports in the Philippines is a critical economic indicator that reflects the resilience of the tourism sector. It serves as a barometer of the industry's performance and underscores the need for adaptive strategies in response to external challenges. As the world continues to navigate the effects of the pandemic, monitoring and nurturing the tourism sector will be essential for the Philippines' economic recovery and long-term growth.

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