

Trend Analysis on Inbound and Domestic Tourism Expenditure of the Philippines

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Abstract: *This study presents a comprehensive trend analysis of inbound and domestic tourism expenditure in the Philippines, utilizing secondary data sourced from the Department of Tourism spanning the years 2000 to 2022. Employing statistical tools such as mean and standard deviation calculations, alongside linear regression analysis, the research unveils intricate patterns within the dataset. The analysis underscores the economic significance of local travel as domestic tourism expenditure consistently surpasses inbound spending. The upward trend in domestic spending, particularly evident from around 2010, signifies a growing inclination among Filipinos to explore their own nation. In contrast, inbound expenditure displays fluctuations but exhibits a substantial growth spurt from 2010 to 2019, indicating a burgeoning international allure. The regression analysis substantiates the consistent upward trajectory in tourism spending over the years, underlining the need for targeted strategies to foster sustainable growth in both domestic and international tourism. This synthesis of graphical trends and statistical insights offers a comprehensive understanding of the evolving tourism landscape, empowering informed decision-making and strategic planning for the Philippines' tourism sector.*

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

I. INTRODUCTION

In an era marked by ever-evolving global dynamics, the tourism industry stands as a cornerstone of economic growth, cultural exchange, and societal development. As nations seek to harness the potential of their natural beauty, historical significance, and diverse attractions, understanding the patterns that govern tourism expenditures becomes a vital pursuit.

Expenditure in the realm of tourism is not merely dictated by economic considerations; it's intricately woven with an array of psychological, emotional, cultural, and social influences (Nayak, Sahoo, & Mahalik, 2022). These underlying motives represent powerful inclinations that guide consumers, often bypassing rational analysis or logical justification. The act of purchasing is driven by a spectrum of factors, including emotions, beliefs, and the desire for social prestige. The allure of consumption arises from fulfilling sentiments of pride, cultivating a sense of identity, stimulating social interactions, and the quest for individual distinctiveness. The context of one's economic circumstance becomes entwined with social comparisons, shaping individual buying choices. Individuals tend to emulate others' consumption patterns as a mechanism to validate their choices and seek acceptance. The choices span a spectrum, from opting for popular commodities to convey affluence, to selecting items that diverge from the norm as a marker of refined taste. In the modern landscape, consumers exhibit a responsive adaptability to shifts in the goods and services market.

A striking illustration comes from the phenomenon observed in impoverished households in India, where constrained budgets lead to trade-offs in caloric intake in favor of conspicuous consumption driven by relative deprivation (Sihra & Bellet, 2022). This dynamic underscores the rationale behind financially challenged households allocating a portion of their resources to tourism. Notably, tourism expenditure encompasses an array of objectives, ranging from business and leisure to social interactions (such as visiting relatives or attending weddings), religious pilgrimages, education, healthcare, and even shopping. This encompasses diverse outlays, including accommodations, sustenance, transportation, recreation, cultural experiences, and more. It's essential to recognize that while tourism spending can enrich experiences, it also holds the potential to push a household towards financial instability, mirroring the impact of any other discretionary expenditure.

The Philippines, renowned for its stunning landscapes, rich cultural heritage, and warm hospitality, has witnessed the interplay of domestic and international tourism with unique dynamics. In the quest to comprehend the financial landscape of this sector, our study delves into two crucial dimensions: inbound and domestic tourism expenditures. The juxtaposition of these distinct but interconnected elements unveils a comprehensive picture of the nation's tourism economy, offering insights into the preferences and behaviors of both local travelers and foreign visitors.

This study traversed through years of data, scrutinizing line graphs, delving into statistical models, and deciphering trends that have shaped the nation's tourism expenditure patterns. By combining qualitative insights drawn from graphical representations with the quantitative rigor of regression analysis, this research aims to provide a holistic understanding of the factors propelling the growth of both inbound and domestic tourism spending. Through such an exploration, we not only contribute to the academic discourse on tourism economics but also offer valuable insights to policymakers, industry stakeholders, and enthusiasts, fostering informed decisions that can sustainably nurture the Philippines' vibrant tourism sector. This research endeavors to unravel the intricate tapestry of tourism economics in the Philippines through a meticulous exploration.

II. LITERATURE REVIEW

Recovery and Transformation of Tourism Industry Post-Pandemic

The resurgence of the global tourism industry has come into sharp focus, as indicated by the latest findings from the UNWTO World Tourism Barometer. In a span of seven months from January to July 2022, international tourist arrivals witnessed a staggering nearly threefold increase of 172%, a testament to the sector's remarkable rebound from the depths of the pandemic. This resurgence is particularly noteworthy in light of the fact that it signifies a robust recovery to nearly 60% of pre-pandemic levels. This trajectory of steady recovery is a reflection of both the pent-up demand for international travel and the gradual relaxation or removal of travel restrictions. Notably, the report highlights that, as of September 19, 2022, an encouraging 86 countries had effectively eliminated COVID-19-related travel constraints, providing a conducive environment for tourism resurgence. The numbers tell a compelling story: an estimated 474 million global travelers embarked on international journeys during this period, in stark contrast to the 175 million during the corresponding months of 2021. Of significant interest is the robust surge in international arrivals during the months of June and July 2022, collectively accounting for an impressive 44% of the total arrivals recorded in the first seven months of the year. This resurgence was particularly pronounced in Europe, which welcomed a substantial 309 million arrivals, signifying a substantial 65% of the global total.

Multi-Faceted Influences on Tourism Expenditure

The intricate tapestry of factors shaping tourism expenditure emerges vividly through extant empirical research. A comprehensive analysis by Park, Woo, and Nicolau (2020) categorizes these influences into a diverse array of socio-economic, demographic, psychological, behavioral, financial, and trip-related determinants. Socio-demographic and economic factors encompass elements such as age, gender, marital status, education, income, family size, residential location, and occupation. These factors interplay with household and tourist characteristics, wherein travel characteristics also assert their significance in shaping expenditure patterns, as elucidated by Brida et al. (2018). Factors such as the purpose of travel, the size of the travel party, first-time visitor status, mode of transportation, and the length of stay wield considerable influence over spending decisions. Beyond the realm of individual consumption, the profound impact of tourism on income distribution and poverty alleviation takes center stage. The complex dynamics are exemplified by Incera and Fernández (2015), illustrating the dual potential of tourism consumption to both narrow income inequality through redistribution and exacerbate it through earned revenue and taxation effects. Fang et al. (2021) extend this discourse, unveiling how tourism development plays a pivotal role in attenuating income inequality gaps in developing economies, while exhibiting comparatively limited influence in developed nations. This intricate interplay between tourism and socio-economic dynamics provides a nuanced perspective on expenditure patterns that shapes the industry's future trajectory.

III. METHODOLOGY

The methodology employed in this study aims to comprehensively analyze the trends in inbound and domestic tourism expenditure in the Philippines over the period spanning from 2000 to 2022. This trend analysis delves into secondary data obtained from the Department of Tourism, serving as a rich repository of information that encapsulates the dynamics of the nation's tourism landscape. The chosen statistical tools, including mean and standard deviation calculations, along with linear regression analysis, collectively provide a robust framework to uncover insights and patterns within the data. To initiate the study, secondary data from the Department of Tourism for the years 2000 to 2022 were meticulously collected and collated. This dataset serves as the foundation for comprehending the financial dimensions of inbound and domestic tourism. The chosen years reflect a significant timeframe that encapsulates pre-pandemic, pandemic, and post-pandemic periods, allowing for an in-depth understanding of how tourism expenditure trends have evolved in response to various socio-economic and global factors.

In analyzing the data, the mean and standard deviation were calculated for both inbound and domestic tourism expenditure. The mean provides an essential measure of central tendency, offering an average expenditure figure that encapsulates the overall spending pattern for each category. The standard deviation, on the other hand, highlights the degree of dispersion or variability around the mean, offering insights into the consistency or fluctuations in expenditure trends. These statistical measures offer a snapshot of the expenditure trends' central tendencies and variations, enriching the understanding of the data's distribution. Furthermore, linear regression analysis was employed to uncover the relationships between the years and tourism expenditures. This analytical approach allows for the quantification of the relationship's strength and direction. By evaluating the coefficients and significance levels, the study identifies whether there is a significant correlation between the passage of time and tourism expenditures. This facet of the methodology sheds light on how time has influenced the expenditure patterns, offering a dynamic perspective on the trends.

IV. RESULTS AND DISCUSSION

Table 1 presents the average inbound and domestic tourism expenditures in the Philippines from 2000 to 2022. The data is summarized in terms of the mean (average) and standard deviation (SD) for both types of tourism.

Over this period, the average inbound tourism expenditure stood at approximately 212,804 Philippine pesos. This value signifies the average spending of foreign tourists visiting the country. It's noteworthy that the standard deviation of around 141,733.49 indicates a moderate level of variability in the spending patterns of inbound tourists. This suggests that there might be some fluctuations in the amounts spent by different groups of foreign visitors, potentially influenced by factors like economic conditions, exchange rates, and travel preferences. On the other hand, the average domestic tourism expenditure was significantly higher at about 969,201.30 Philippine pesos. This figure reflects the average spending of local residents within the country while engaging in tourism activities. The standard deviation of approximately 867,502.67 suggests a substantial degree of variance in the spending behavior of domestic tourists. This variance could be attributed to diverse factors such as travel destinations, socio-economic backgrounds, and vacation purposes among local travellers.

Examining the trends over the years, it's important to consider factors that might have influenced these expenditures. Inbound tourism, for instance, might have been influenced by global economic conditions, geopolitical factors, and marketing efforts by the Philippines as a tourist destination. Domestic tourism spending could be influenced by factors like changes in disposable income, local travel trends, and the development of tourism infrastructure within the country. The results underscore the contrasting patterns between inbound and domestic tourism expenditures in the Philippines. The higher average spending of domestic tourists compared to inbound tourists reflects the potential economic significance of local tourism. The standard deviations for both types of tourism expenditures indicate varying spending habits within each group, suggesting the need for targeted strategies to cater to these diverse preferences and behaviors.

TABLE 1. AVERAGE INBOUND AND DOMESTIC TOURISM EXPENDITURE IN THE PHILIPPINES 2000-2022

Type	Mean	SD
Inbound	212804.00	141733.49
Domestic	969201.30	867502.67

Figure 1 outlines the trends in Inbound and Domestic Tourism Expenditure in the Philippines from the year 2000 to 2022. By examining the line graphs of these expenditures over this period, several noteworthy insights can be gleaned.

The line graph depicting the inbound tourism expenditure showcases both fluctuations and growth patterns. From 2000 to around 2009, the values remained relatively steady, with minor variations. However, a more pronounced upward trend became evident from 2010 onwards. This increase in inbound expenditure suggests that the Philippines attracted more foreign tourists, possibly due to enhanced marketing efforts, improved infrastructure, and favorable economic conditions. A notable surge can be observed from around 2015 to 2017, where the expenditure nearly doubled. This period might have been influenced by factors such as increased international recognition, diversified tourism offerings, and the country's growing reputation as a desirable travel destination.

The line graph for domestic tourism expenditure displays a consistent growth trajectory over the years. From 2000 to around 2010, the expenditure remained on an ascending course with some fluctuations. Notably, a significant acceleration in domestic expenditure can be seen from around 2010 onwards, with a steep upward trend that continues until 2022. This suggests that Filipinos have been increasingly exploring their own country for leisure and travel purposes. The substantial rise in domestic expenditure could be attributed to factors like rising disposable incomes, improved transportation options, and greater awareness of domestic travel destinations.

Comparing the two graphs, a few patterns emerge. While both inbound and domestic expenditures show an upward trend in recent years, the scale of growth varies significantly. Domestic expenditure consistently surpasses inbound expenditure, indicating that local tourism contributes substantially to the country's economy. The sharp decline in inbound expenditure in 2020 is likely due to the global impact of the COVID-19 pandemic, which severely restricted international travel. The line graphs reflect a positive trajectory for both inbound and domestic tourism expenditure in the Philippines. The substantial increase in domestic spending underscores the potential of the local tourism market. The pronounced fluctuations in inbound expenditure could be influenced by external factors, while the steady rise in domestic expenditure reflects the growing interest of Filipinos in exploring their own country. These trends highlight the importance of continued investment in both domestic and international tourism to support economic growth and development.

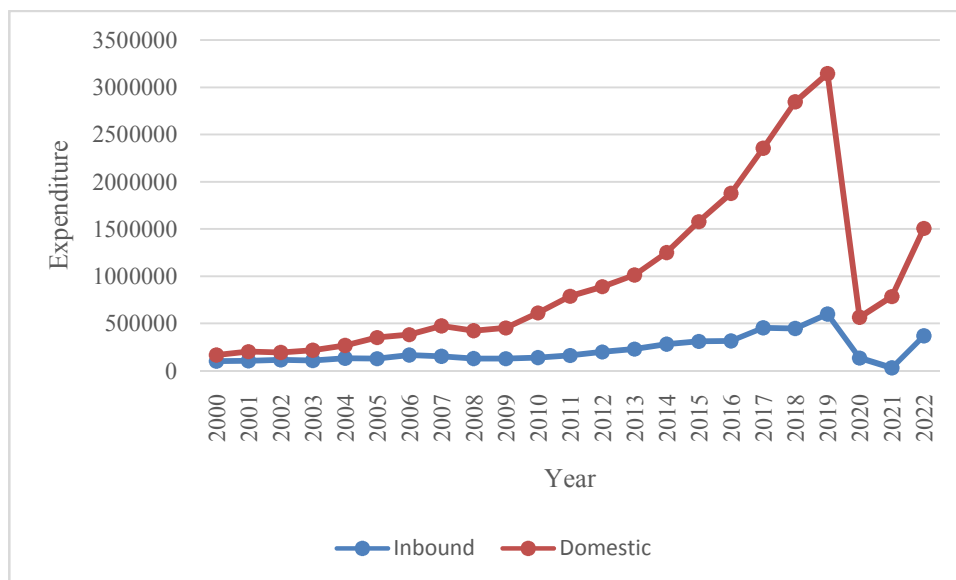


FIGURE 1. INBOUND AND OUTBOUND TOURISM TREND IN THE PHILIPPINES 2000-2022

Table 2 presents the results of a linear regression analysis conducted on the inbound and domestic tourism expenditures in the Philippines. The analysis aims to establish relationships between the year (time) and the respective expenditures. Let's delve into the insights and implications of these regression models.

The linear regression model for inbound tourism expenditure reveals important insights. The intercept, indicated by the "Constant" coefficient, is a negative value, suggesting that the initial expenditure was lower. The coefficient for "Year" is positive, specifically 12473.8, with a relatively small standard error of 3658.7. This coefficient signifies the increase

in inbound expenditure per year. The statistically significant t-value of 3.409 and a significance level of 0.003 ($p < 0.05$) imply that the increase in inbound expenditure over the years is not likely due to random chance. The R Square value of 0.356 suggests that the year explains about 35.6% of the variance in inbound expenditure. Overall, this indicates a moderate positive trend in inbound tourism spending, with each passing year contributing to a statistically significant increase.

The linear regression model for domestic tourism expenditure unveils similar trends. The "Constant" coefficient is a negative value, indicating a lower initial expenditure. The coefficient for "Year" is notably larger at 92149.3, with a standard error of 19357.0. This substantial coefficient underscores a significant yearly increase in domestic tourism expenditure. The highly significant t-value of 4.761 and an extremely low significance level of 0.0001 ($p < 0.001$) highlight the strong statistical evidence of a positive relationship. The R Square value of 0.519 suggests that the year accounts for around 51.9% of the variance in domestic expenditure. This indicates a robust upward trajectory in domestic tourism spending, with each year contributing significantly to the observed increase.

The outcomes of the linear regression analysis underscore a clear positive trend in both inbound and domestic tourism expenditures in the Philippines. The coefficients for the "Year" variable are statistically significant in both models, implying that the passage of time has a meaningful impact on tourism spending. These findings align with the earlier observations from the graphical trends, further solidifying the notion of a progressive growth in tourism expenditures. The R Square values signify that the year variable explains a substantial portion of the variance in both inbound and domestic expenditures, suggesting that time is a key factor in understanding and predicting these expenditures. The insights gained from this analysis provide valuable information for policymakers, businesses, and stakeholders in the tourism industry to make informed decisions and strategies for sustainable tourism growth.

TABLE 2. LINEAR REGRESSION ANALYSIS ON THE INBOUND AND OUTBOUND TOURISM EXPENDITURE IN THE PHILIPPINES

Model		Unstandardized Coefficients		R Square	t	Sig.
		B	Std. Error			
Inbound	(Constant)	-24872042.4	7357686.5	0.356	-3.380	0.003
	Year	12473.8	3658.7		3.409	0.003
Domestic	(Constant)	-184343065.6	38927042.6	0.519	-4.736	0.0001
	Year	92149.3	19357.0		4.761	0.0001

V. CONCLUSION

The comprehensive analysis of tourism expenditure sheds light on the dynamic landscape of tourism expenditures in the Philippines from 2000 to 2022. Domestic tourism expenditure consistently exceeded inbound spending, underlining the economic significance of local travel. The rising trend in domestic expenditure, with a surge from around 2010 onwards, reflects an increased desire among Filipinos to explore their own country. Conversely, the average inbound expenditure experienced fluctuations, with an evident growth spurt from 2010 to 2019, demonstrating the country's growing allure as an international destination. These underscore the importance of tailoring strategies to cater to the diverse preferences of both inbound and domestic tourists.

The regression analysis solidifies the understanding that year after year, tourism spending has shown an upward trajectory in the Philippines, irrespective of the type of tourism. These findings carry significant implications for policymakers and industry stakeholders, as they highlight the need for targeted efforts to foster sustainable tourism growth, both domestically and internationally. Ultimately, the synthesis of graphical trends and statistical analyses offers a well-rounded perspective on the evolving tourism landscape, serving as a foundation for informed decision-making and strategic planning in the Philippines' tourism sector.

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