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Urban Networks and Tourism Development: Analyzing the Relationship Between Globalization and World Cities (GaWC) Rankings and Travel and Tourism Development Index (TTDI)

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Abstract: Tourism is a key component of many global cities, contributing to their development. This paper examines the relationship between the Travel and Tourism Development Index (TTDI) and the Presence of Global Cities (PGC). Using linear regression models, we analyzed this relationship across different regions and income groups based on a sample of 119 countries, focusing on how variations in PGC are associated with changes in TTDI scores. We analyzed data and results from 2019 (pre-COVID-19), 2021 (during COVID-19), and 2024 (post-COVID-19). The analysis revealed a consistent positive relationship between the PGC and the TTDI across these years, suggesting that countries with higher PGC levels generally achieve higher TTDI scores, emphasizing the important role of global city performance in tourism development. Moreover, the results indicated that while the relationship between global city performance and tourism development is stable over time, it varies across regions and income groups. These findings underscore the importance of global city performance in boosting tourism development and competitiveness, offering valuable insights for policymakers and guiding future research.

Keywords: tourism; urban tourism; global cities; world cities; tourism development; Travel and Tourism Development Index; Globalization and World Cities

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1. Introduction

The concept of urban competitiveness has gained significant attention as a means to understand the factors that drive cities to compete both locally and globally. As cities are central to economic, social, and cultural development, there is an increasing need to identify their stages of growth and establish a system for ranking and positioning cities and regions within this development process [1].

Tourism plays a vital role in the development of many global cities, with policymakers often promoting its expansion due to the economic and social benefits it provides [2].

The Globalization and World Cities (GaWC) Research Network was established by Peter J. Taylor at Loughborough University in the UK in early 1998 [3]. The goal of the methodology is to shift the focus of world city studies from comparing internal similarities and differences within cities to examining the relationships between cities [4]. The GaWC network is well-known for its research on the roles of cities in the global economy, particularly through the use of rankings that assess the extent to which cities are integrated into global networks of finance, commerce, and culture.

The Presence of Global Cities (PGC), derived from GaWC rankings, is a key element in explaining the global competitiveness of cities, which significantly influences their overall tourism development score within the Travel and Tourism Development Index (TTDI) [5,6].

The TTDI evolved from the Travel and Tourism Competitiveness Index (TTCI) series, a key initiative of the World Economic Forum since 2007. It evaluates the factors and policies that support the sustainable and resilient growth of the travel and tourism sector [5].

In our research, we assume that the more globally connected and economically influential a city is, the more likely it is to improve a country's TTDI ranking, as these cities tend to attract larger numbers of international tourists and support more developed tourism infrastructure.

Global cities are often hubs of economic activity [7], attracting both business and leisure travelers. These cities typically feature advanced infrastructure, including airports, transportation networks, and hotels, which are essential components of a robust tourism sector [8]. As a result, countries with more global cities are likely to score higher on the TTDI, reflecting their ability to foster sustainable and resilient tourism development.

Global cities are major centers of international connectivity [9,10], attracting significant numbers of inbound and outbound tourists. The presence of these cities often drives higher international demand for travel and tourism services, contributing to the growth of the sector within the country [11,12]. This increased tourism activity supports the broader development of the travel and tourism industry, as reflected in the TTDI.

Global cities often serve as cultural and social epicenters, drawing a diverse range of visitors with their cultural offerings, events, and landmarks [7]. This cultural influence can enhance a country's appeal as a travel destination, positively impacting its TTDI score by fostering tourism development.

The presence of global cities often signals a country's commitment to policies that promote urban development, sustainability, and global integration [13–15]. These policies can align with those necessary to support tourism development, such as investments in sustainable tourism practices, infrastructure, and regulatory frameworks [16]. Therefore, countries with more global cities may have stronger governance and policies that support the travel and tourism sector, further linking the PGC with the TTDI.

In summary, the relationship between the PGC and the TTDI is likely driven by the synergies between global urbanization, economic development, cultural exchange, and supportive policies, all of which together foster a thriving travel and tourism sector.

The research question guiding this paper is as follows: How does the PGC influence the TTDI across different regions and income groups? Based on the mentioned postulates, the following research hypothesis was formulated:

Hypothesis 1. *There is a positive relationship between the TTDI and the PGC, where countries with higher PGC scores tend to have higher TTDI scores.*

The aim of this paper is to examine the relationship between the TTDI and the PGC. Using linear regression models, we analyze this relationship across different regions and income groups based on a sample of countries, with a focus on how variations in PGC are associated with changes in TTDI scores.

The structure of this paper is as follows: Section 2 reviews the relevant literature, Section 3 outlines the data and methods, Section 4 presents the results, Section 5 discusses the findings, and Section 6 concludes the paper.

2. Literature Review

In the age of globalization, tourism—an essential element of the modern world economy—is inevitably becoming deeply intertwined with this expansive process [17]. Cities have emerged as focal points of economic activity, innovation, and cultural exchange in the era of urbanization and globalization [1]. Contemporary perspectives view the city not merely as a concentration of people, but as a central hub for trade, culture, information,

and industry [18]. The body of literature on global cities (also referred to as world cities, globalizing cities, and global city-regions) is extensive, addressing not only economic factors but also the social, political, cultural, and symbolic aspects of these cities [19]. Cities increasingly play vital roles in their country's economic development and serve a critical function in global or regional networks [18].

Urbanism is a central concept in urban studies, focusing on how individuals engage with cities as spaces, their communities, and the built environment, whether they are visitors, workers, or residents [20]. One of the key roles of cities is functioning as tourist destinations. This role has grown in importance, as cities are increasingly selected as travel destinations for various reasons [21]. The rise of global cities, driven by urbanization, fosters economic opportunities, cultural exchanges, and events that attract tourists. This creates a dynamic relationship where tourism further stimulates urban growth, contributing to the development of more vibrant, diverse, and interconnected cities.

Urban tourism development is closely intertwined with globalization and the rise of world cities [22]. Globalization facilitates international travel and the exchange of cultural and economic activities, while world cities attract tourists through their global influence and status [23]. These cities continually adapt and evolve to meet the demands of an increasingly interconnected global population. A systematic literature review of urban tourism topics was conducted by Romero-García et al. [24], providing an in-depth examination of key research and developments in this field. Gladstone and Fainstein [25] argued that exploring the impact of tourism development expands key themes that have been central to urban studies.

World tourism cities serve multiple roles and possess various characteristics that shape tourism development within their borders. As primary entry points for tourists to a country, their success directly impacts the visitor economy of the destination [26]. Tourism-related activities, such as conferences and cultural events, help a city establish itself as a key center for art and culture. This, in turn, attracts the global business elite, contributing to the city's development as a prominent global hub [27]. Such activities play a crucial role in enhancing tourism and strengthening the presence of global cities within a country. Morrison and Maxim [28] explored the intersection of tourism and urban development, focusing on how cities around the world function as key destinations for tourism.

Numerous studies have explored the connection between global cities and tourism development. However, much of the existing literature has focused on examining tourism development within the context of a specific city or region, such as New York and Los Angeles [25], Hong Kong [29], Tokyo [11], Beijing [30], Dubai [31], African cities [32], Istanbul [18], London [26], Ljubljana [23], Bucharest [33], and Perth [34].

Several studies have explored the connection between globalization, tourism, and city rankings using various frameworks, including the GaWC methodology. While much of the research has focused on other aspects of globalization, the role of tourism in shaping global city rankings has received relatively less attention. Some studies, such as those by Kourtit et al. [35], Niemets et al. [36], and Rodríguez [37], have utilized the GaWC framework in diverse contexts, including COVID-19 vulnerability, sustainable development, and social inequality. However, limited attention has been given to the connection between tourism and GaWC rankings. The TTDI has also been referenced in multiple studies [6,38–46], but it has not yet been linked to the PGC indicator. This gap in the literature is addressed by the present study, which explores the relationship between the TTDI and the PGC.

This study contributes to the existing literature by extending the analysis of tourism development beyond individual cities or regions. It takes a broader approach by examining the relationship between the TTDI and the PGC across multiple countries, regions, and income groups, providing a more comprehensive understanding of tourism dynamics

on a global scale. The novelty of this study lies not only in its global scope, but also in the application of linear regression models to analyze the interplay between PGC and TTDI, allowing for a nuanced understanding of how variations in global city presence influence tourism development across different economic contexts. This methodology provides a clear framework that can be replicated in future studies, both within the same set of countries and in other global contexts. The findings can be applied to various regions and income groups, making the research adaptable and transferable to studies exploring tourism development in different countries or time periods. Moreover, the use of publicly available data sources on global cities and tourism indicators increases the study's replicability, allowing other researchers to reproduce the analysis and test the robustness of the results.

3. Materials and Methods

3.1. Data

The data were obtained from the TTDI 2024 database, released by the World Economic Forum in May 2024 [5]. We compare data and results from 2019 (pre-COVID-19), 2021 (during COVID-19), and 2024 (post-COVID-19). This period was selected because the TTDI 2024 database includes data for these three years. Specifically, the GaWC Research Network provides the input values for the PGC indicator. The GaWC ranking results are based on the activities of 175 top firms offering advanced producer services (such as accounting, advertising, banking/finance, and law) across 707 cities globally, leading to the ranking of 394 cities. These results should be understood as reflecting the role of cities as key nodes in the global city network, facilitating corporate globalization. To calculate the PGC indicator, each country's score is the total of the points from all ranked cities within that economy, with points assigned based on the city's classification. A logarithmic transformation is then applied to the final point values [5]. Within the TTDI, these values were converted to a scale from 1 to 7. It is important to note that the PGC indicator scores are the same for both 2021 and 2024. The second indicator represents the TTDI score, also on a scale from 1 to 7.

Data are available for 119 countries, which are categorized into two groups based on region (Asia–Pacific, Europe and Eurasia, Middle East and North Africa, Sub-Saharan Africa, the Americas) and income group (high, upper-middle, lower-middle, and low-income economies). These categories are also based on the TTDI database. The countries are organized by region and income group in Appendix A (Tables A1 and A2).

Tables 1 and 2 present the descriptive statistics of the PGC by region and income group, while Figures 1 and 2 display boxplots of the PGC by region and income group.

Table 1. Descriptive statistics of the PGC according to region.

	Asia–Pacific (19)			**Europe and Eurasia (44)**			**Middle East and North Africa (14)**			**Sub-Saharan Africa (19)**			**The Americas (23)**		
	2019	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**
Mean	3.66	3.67	3.67	2.91	2.95	2.95	2.65	2.74	2.74	1.95	1.87	1.87	3.10	3.13	3.13
S.D.	1.85	1.87	1.87	1.60	1.62	1.62	0.90	0.91	0.91	0.91	0.91	0.91	1.76	1.80	1.80
Min	1.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Q1	2.27	2.27	2.27	1.93	1.89	1.89	2.21	2.37	2.37	1.25	1.25	1.25	2.06	2.06	2.06
Median	3.61	3.45	3.45	2.56	2.56	2.56	2.56	2.56	2.56	1.73	1.86	1.86	2.56	2.56	2.56
Q3	4.40	4.45	4.45	3.37	3.80	3.80	2.89	2.89	2.89	2.16	1.91	1.91	3.45	3.20	3.20
Max	7.00	7.00	7.00	7.00	7.00	7.00	4.74	4.74	4.74	4.82	4.87	4.87	7.00	7.00	7.00

Source: own processing using R.

Table 2. Descriptive statistics of the PGC according to income group.

	High (46)			Low (4)			Lower-Middle (34)			Upper-Middle (35)		
	2019	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**
Mean	3.56	3.63	3.63	1.13	1.13	1.13	2.23	2.25	2.25	2.84	2.79	2.79
S.D.	1.70	1.74	1.74	0.15	0.15	0.15	1.14	1.13	1.13	1.47	1.51	1.51
Min	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25
Q1	2.56	2.42	2.42	1.00	1.00	1.00	1.73	1.73	1.73	1.91	1.86	1.86
Median	2.94	3.08	3.08	1.13	1.13	1.13	2.06	2.06	2.06	2.37	2.37	2.37
Q3	4.64	4.67	4.67	1.25	1.25	1.25	2.51	2.51	2.51	3.45	3.20	3.20
Max	7.00	7.00	7.00	1.25	1.25	1.25	7.00	7.00	7.00	7.00	7.00	7.00

Source: own processing using R.

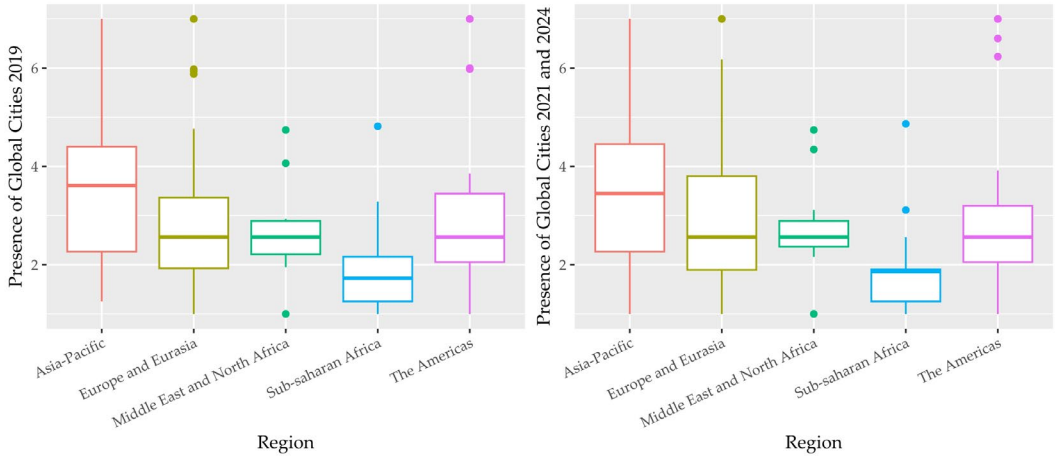


Figure 1. Boxplots of the PGC according to region. Source: own processing using R.

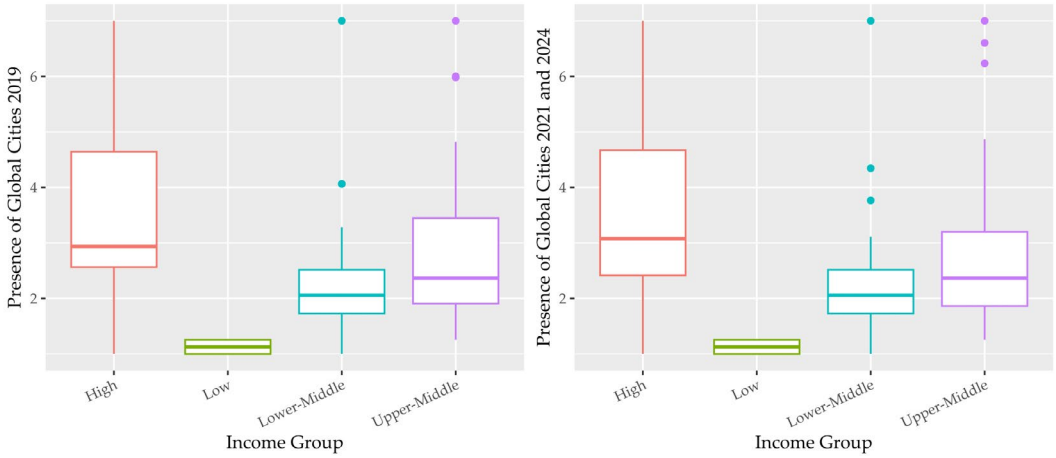


Figure 2. Boxplots of the PGC according to income group. Source: own processing using R.

We observe in Table 1 and Figure 1 that the highest median PGC is in the Asia–Pacific region across all analyzed years (3.61 in 2019, and 3.45 in 2021 and 2024). The lowest median PGC is found in the Sub-Saharan Africa region (1.73 in 2019, and 1.86 in 2021 and 2024). Additionally, several outliers are noted. In 2019, these include Germany (7), the United Kingdom (7), Spain (5.98), and France (5.94) in the Europe and Eurasia region; the United Arab Emirates (4.74), Saudi Arabia (4.06), and Iran (1) in the Middle East and North Africa region; South Africa (4.82) in Sub-Saharan Africa; and Canada (7), the United States (7), Brazil (6), and Mexico (5.98) in the Americas region. In 2021 and 2024, the outliers are

Germany (7) and the United Kingdom (7) in Europe and Eurasia; the United Arab Emirates (4.74), Saudi Arabia (4.35), and Iran (1) in the Middle East and North Africa; South Africa (4.87) and Nigeria (3.11) in Sub-Saharan Africa; and Canada (7), the United States (7), Brazil (6.60), and Mexico (6.23) in the Americas.

Based on income group, we observe in Table 2 and Figure 2 that the highest median PGC is found in high-income economies (2.94 in 2019, and 3.08 in 2021 and 2024), while the lowest median is seen in low-income economies (1 across all analyzed years). Considering outliers, India (7 in all years analyzed) and Pakistan (4.06 in 2019, 4.35 in 2021 and 2024) are identified as outliers among lower-middle-income countries. In upper-middle-income countries, the outliers are China (7 in all years analyzed), Brazil (6 in 2019, 6.23 in 2021 and 2024), and Mexico (5.98 in 2019, 6.60 in 2021 and 2024).

Tables 3 and 4 provide the descriptive statistics of the TTDI, categorized by region and income group. Figures 3 and 4 present boxplots visualizing the distribution of the TTDI across these regions and income groups.

Table 3. Descriptive statistics of the TTDI according to region.

	Asia–Pacific (19)			Europe and Eurasia (44)			Middle East and North Africa (14)			Sub-Saharan Africa (19)			The Americas (23)		
	2019	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**
Mean	4.09	4.14	4.11	4.25	4.25	4.26	3.83	3.85	3.86	3.26	3.31	3.33	3.84	3.86	3.86
S.D.	0.64	0.62	0.61	0.48	0.45	0.45	0.29	0.31	0.32	0.35	0.36	0.34	0.51	0.51	0.51
Min	3.10	3.20	3.19	3.29	3.36	3.38	3.34	3.43	3.42	2.79	2.78	2.78	3.23	3.19	3.19
Q1	3.57	3.63	3.57	3.98	4.00	3.97	3.64	3.60	3.64	3.00	3.04	3.10	3.42	3.47	3.46
Median	4.23	4.25	4.12	4.25	4.26	4.29	3.78	3.83	3.84	3.16	3.21	3.24	3.77	3.82	3.79
Q3	4.61	4.62	4.60	4.56	4.52	4.53	3.98	4.05	4.00	3.50	3.58	3.55	4.06	4.12	4.09
Max	5.11	5.16	5.09	5.13	5.12	5.18	4.42	4.51	4.62	4.00	4.04	3.99	5.27	5.25	5.24

Source: own processing using R.

Table 4. Descriptive statistics of the TTDI according to income group.

	High (46)			Low (4)			Lower-Middle (34)			Upper-Middle (35)		
	2019	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**	**2019**	**2021**	**2024**
Mean	4.44	4.43	4.43	2.99	3.03	3.05	3.41	3.46	3.47	3.90	3.93	3.94
S.D.	0.43	0.41	0.43	0.27	0.28	0.30	0.31	0.30	0.29	0.34	0.35	0.35
Min	3.54	3.47	3.44	2.79	2.78	2.78	2.90	2.97	2.99	3.30	3.37	3.42
Q1	4.17	4.16	4.18	2.81	2.86	2.86	3.23	3.21	3.24	3.63	3.65	3.66
Median	4.43	4.40	4.41	2.90	2.95	2.98	3.38	3.42	3.42	3.92	3.94	3.96
Q3	4.76	4.77	4.75	3.08	3.12	3.16	3.66	3.69	3.67	4.14	4.17	4.13
Max	5.27	5.25	5.24	3.37	3.42	3.45	4.34	4.25	4.25	4.89	4.96	4.94

Source: own processing using R.

As shown in Table 3 and Figure 3, the highest medians of the TTDI are observed in the Europe and Eurasia region (4.25 in 2019, 4.26 in 2021, and 4.29 in 2024). The lowest median TTDI is found in the Sub-Saharan Africa region (3.16 in 2019, 3.21 in 2021, and 3.24 in 2024). Only a few outliers are observed: the United States in the Americas region (5.27 in 2019, 5.24 in 2021, and 5.24 in 2024) and the United Arab Emirates in 2024 (4.62).

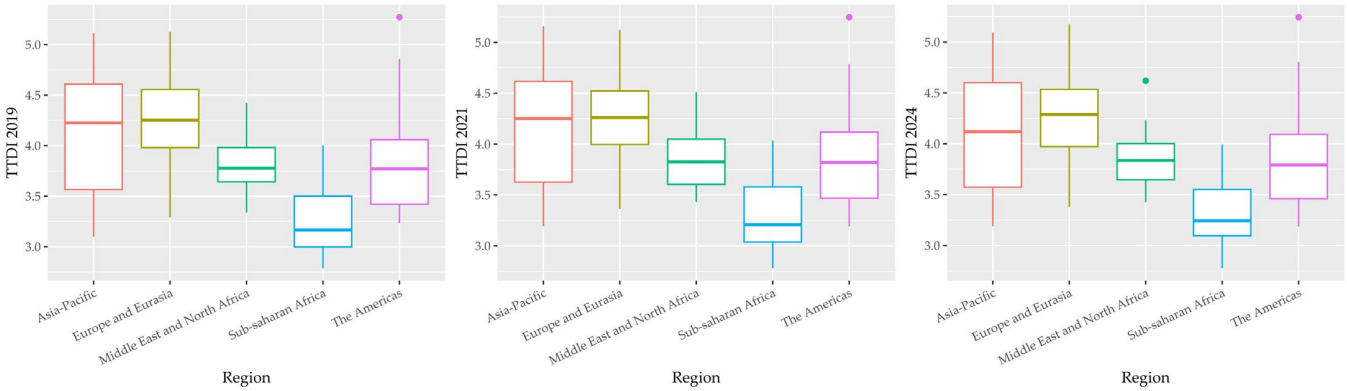


Figure 3. Boxplots of the TTDI according to region. Source: own processing using R.

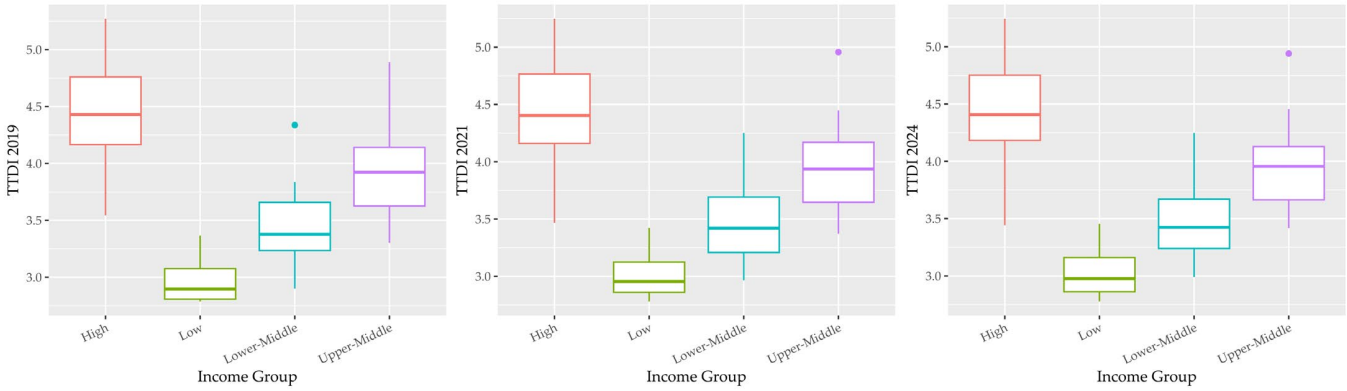


Figure 4. Boxplots of the TTDI according to income group. Source: own processing using R.

Based on income group, we observe in Table 4 and Figure 4 that the highest median TTDI is found in high-income economies (4.43 in 2019, 4.40 in 2024, and 4.41 in 2024), while the lowest median is seen in low-income economies (2.90 in 2019, 2.95 in 2024, and 2.98 in 2024). In this case, only a few outliers are identified: India among the lower-middle-income countries (4.34 in 2019), and China among the upper-middle-income countries (4.96 in 2021 and 4.94 in 2024).

The boxplots in Figures 1–4 summarize the distribution of the data. Each boxplot consists of several key components, each representing a specific aspect of the data's distribution. The box represents the interquartile range, which spans from the first quartile (Q1) to the third quartile (Q3). The interquartile range encapsulates the middle 50% of the data, providing insight into the spread and variability of values within each region (Figures 1 and 3) or income group (Figures 2 and 4) for the respective year. The line inside the box indicates the median, which provides an indication of the central tendency of the data. The whiskers extending from the box represent the range of the data, starting from the quartiles (Q1 and Q3) and extending to the maximum and minimum values within a defined threshold. The whiskers capture the spread of the data, excluding any extreme values. Outliers are represented as individual dots outside the whiskers, highlighting values that are significantly different from the rest of the data and may warrant further investigation.

3.2. Linear Regression Model

To meet the aim of this paper, the linear regression model used is as follows:

$$TTDI_i = \beta_0 + \beta_1 PGC_i + \varepsilon_i, \quad i = 1, \ldots, n \tag{1}$$

where β_0 is a constant, β_1 represents a regression coefficient, and ε_i denotes a residual. We assessed the presence of heteroscedasticity using the Breusch–Pagan test. If heteroscedasticity was detected in the regression model, we applied a paired bootstrap method to calculate the *p*-values. Additionally, we used the coefficient of determination R^2 to indicate how well the regression model fit the data. It measures the proportion of the variance in the *TTDI* (dependent variable) explained by the *PGC* (independent variable) in the model. We used RStudio (2024.09.1) to estimate the regression parameters of the model.

In addition to the regression models, we present correlation coefficients to enhance the understanding of the relationship between the TTDI and PGC. These coefficients provide a direct measure of the linear association between the two indicators.

4. Results

Initially, in Figure 5, we illustrate the relationship between the PGC and the TTDI for the years 2019, 2021, and 2024. The relationship between these variables is consistently positive across all three years, meaning that as the PGC increases, the TTDI tends to increase as well. This suggests that countries with higher levels of the PGC generally have higher TTDI scores. It implies that countries with a higher concentration of global cities tend to have more developed travel and tourism sectors. This finding highlights the importance of global cities as key drivers of national tourism development. In a broader context, this relationship underscores the significant role that urban centers with global reach have in advancing national economies through tourism. Countries with a higher presence of global cities may be better equipped to capture global tourism flows, foster economic growth, and integrate into international markets. Moreover, the scatterplots reveal a clear trend across all analyzed years, with the data points showing a similar distribution each year, further reinforcing the strength and consistency of the relationship between these two indicators. The estimated regression coefficients (β_0 and β_1), along with the results of tests used to evaluate the adequacy of the regression model—such as the R^2 value and the Breusch–Pagan (*BP*) test statistics and *p*-value—are shown in Table 5. All coefficients were statistically significant, and no evidence of heteroscedasticity in the residuals was found. As a result, the bootstrap method was not required to compute the *p*-value. The R^2 value around 0.5 indicates that approximately 50% of the variance in the TTDI is explained by the PGC in the model, suggesting a moderate level of fit.

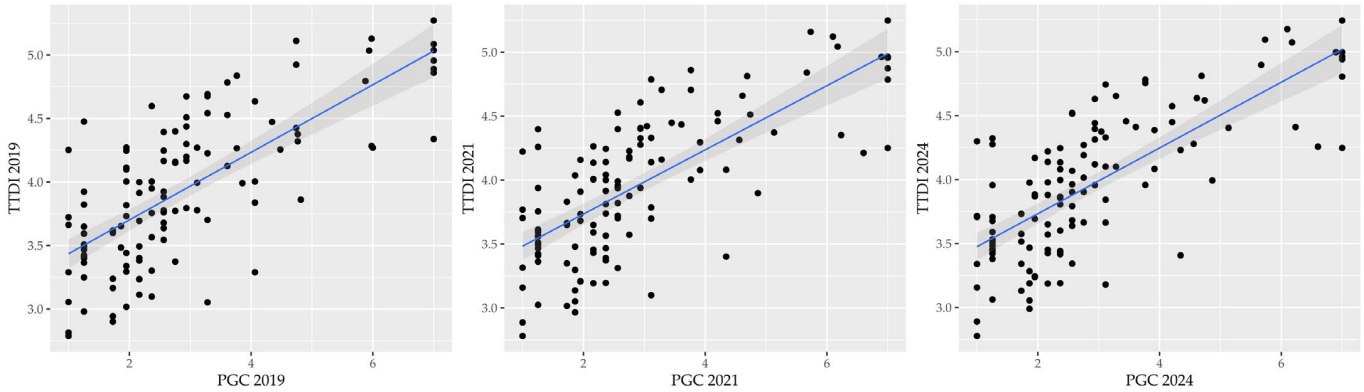


Figure 5. Relationship between *PGC* and *TTDI*. Source: own processing using R.

Table 5. Estimated parameters of regression models. Source: own processing using R.

Year		Coefficient	Std. Error	*t*-Ratio	*p*-Value	R^2	*BP* (Test Statistics)	*BP* (*p*-Value)
2019	Constant	3.1690	0.0780	40.6100	0.0000	0.5177	0.1394	0.7089
	PGC	0.2661	0.0237	11.2100	0.0000			
2021	Constant	3.2318	0.0741	43.6100	0.0000	0.5189	0.0294	0.8639
	PGC	0.2510	0.0223	11.2300	0.0000			
2024	Constant	3.2184	0.0721	44.6700	0.0000	0.5449	0.0379	0.8456
	PGC	0.2572	0.0217	11.8400	0.0000			

To further understand the results of the analysis, we present a SWOT analysis that highlights the strengths, weaknesses, opportunities, and threats related to the relationship between the PGC and the TTDI. This analysis provides a structured overview of the key insights derived from the regression model and the consistency of the relationship across the three years analyzed (2019, 2021, and 2024).

The key strengths identified in the analysis of the relationship between the PGC and the TTDI include the following:

- The relationship between the PGC and the TTDI was consistently positive across all three years (2019, 2021, and 2024), suggesting a robust trend that holds over time.
- All regression coefficients (β_0 and β_1) were statistically significant, reinforcing the reliability of the model.
- The R^2 value of around 0.5 indicates that the model explains about 50% of the variance in TTDI, which is a solid moderate fit for the data.

Despite the strengths identified, there are several weaknesses in the analysis that should be considered:

- While the R^2 value is moderate, it also means that there is still 50% of the variance in the TTDI unexplained by the PGC, suggesting that other factors might be influencing the TTDI scores.
- The analysis is based on only three years of data (2019, 2021, and 2024), which limits the ability to draw broader conclusions over time or to account for possible long-term changes in the relationship.

There are also several opportunities for further research and practical applications of the findings:

- Exploring other variables that might explain the remaining 50% of the variance could improve the model and provide a more comprehensive understanding of the TTDI.
- Countries with higher levels of PGC could be targeted for policies aimed at improving TTDI scores, as the consistent relationship suggests potential for interventions in PGC-related areas.
- Extending the analysis to additional years could strengthen the findings and allow for a deeper understanding of temporal trends.

It is important to acknowledge potential threats that could impact the validity and reliability of the results:

- The model assumes no heteroscedasticity and that the regression coefficients are stable across the three years. If the assumptions do not hold in the future, it could undermine the reliability of the results.
- Other external, unaccounted-for factors might be affecting the TTDI scores, making it difficult to predict future trends accurately using only the PGC as a predictor.

Figures 6 and 7 show scatterplots illustrating the relationship between the PGC and the TTDI in 2019, 2021, and 2024 in a different way. The countries (represented as dots) are color-coded by region in Figure 6 and by income group in Figure 7. The regression lines, with 95% confidence intervals indicated by region or income group, vary across the groups. In all cases, the relationship is positive, with countries exhibiting low levels of PGC also showing low levels of TTDI, and vice versa. The slopes of the regression lines remain nearly identical across the years analyzed. The estimated regression coefficients (β_0 and β_1) and the results of tests used to assess the adequacy of the regression model, including the R^2 value and the Breusch–Pagan (*BP*) test statistics and *p*-value, for each regression line are presented in Tables 6 and 7. All coefficients are statistically significant, and no evidence of heteroscedasticity in the residuals was found, except for one case (the model for Europe and Eurasia in 2024). As a result, the bootstrap method was used once to compute the *p*-value. We considered the model with the highest R^2 to be the best one. The models for 'The Americas' in 2019 and 'Europe and Eurasia' in 2024 were the top performers among the regions. The models for low-income economies were the top performers among the income groups. This could be due to the fact that the standard deviations of the PGC and TTDI variables were the lowest for this group, and that the model included data from only four countries (see Tables 2 and 4).

Table 6. Estimated parameters of regression models according to region. Source: own processing using R.

Year		Coefficient	Std. Error	*t*-Ratio	*p*-Value	R^2	*BP* (Test Statistics)	*BP* (*p*-Value)
Asia–Pacific								
2019	Constant	3.1931	0.2437	13.1000	0.0000	0.4971	0.2317	0.6302
	PGC	0.2449	0.0597	4.0990	0.0007			
2021	Constant	3.2844	0.2351	13.9700	0.0000	0.4916	0.5084	0.4758
	PGC	0.2327	0.0574	4.0540	0.0008			
2024	Constant	3.2439	0.2233	14.5200	0.0000	0.5247	0.6312	0.4269
	PGC	0.2361	0.0545	4.3320	0.0005			
Europe and Eurasia								
2019	Constant	3.5445	0.0912	38.8800	0.0000	0.6479	3.3000	0.0693
	PGC	0.2418	0.0275	8.7910	0.0000			
2021	Constant	3.5846	0.0818	43.8100	0.0000	0.6698	3.6659	0.0555
	PGC	0.2248	0.0244	9.2300	0.0000			
2024	Constant	3.5790	0.0801	44.6600	0.0000 *	0.6931	4.0230	0.0449
	PGC	0.2324	0.0239	9.7380	0.0000 *			
Middle East and North Africa								
2019	Constant	3.2320	0.1840	17.5600	0.0000	0.4908	0.2579	0.6115
	PGC	0.2243	0.0659	3.4010	0.0053			
2021	Constant	3.1864	0.1981	16.0800	0.0000	0.5066	0.3333	0.5637
	PGC	0.2415	0.0688	3.5100	0.0043			
2024	Constant	3.0892	0.1814	17.0300	0.0000	0.6240	1.6232	0.2026
	PGC	0.2811	0.0630	4.4630	0.0008			
Sub-Saharan Africa								
2019	Constant	2.8502	0.1696	16.8100	0.0000	0.2901	0.1705	0.6797
	PGC	0.2083	0.0790	2.6360	0.0173			
2021	Constant	2.9909	0.1779	16.8100	0.0000	0.1919	0.0968	0.7558
	PGC	0.1731	0.0861	2.0090	0.0607			

Table 6. *Cont.*

Year		Coefficient	Std. Error	*t*-Ratio	*p*-Value	R^2	*BP* (Test Statistics)	*BP* (*p*-Value)
2024	Constant	2.9570	0.1616	18.3000	0.0000	0.2740	0.1392	0.7091
	PGC	0.1982	0.0782	2.5330	0.0214			
The Americas								
2019	Constant	3.0772	0.1202	25.6000	0.0000	0.7156	0.0712	0.7895
	PGC	0.2463	0.0339	7.2690	0.0000			
2021	Constant	3.1652	0.1328	23.8400	0.0000	0.6351	0.2634	0.6078
	PGC	0.2237	0.0370	6.0460	0.0000			
2024	Constant	3.1320	0.1253	25.0000	0.0000	0.6800	0.2527	0.6152
	PGC	0.2333	0.0349	6.6810	0.0000			
High								
2019	Constant	3.7476	0.0956	39.2200	0.0000	0.5924	1.5370	0.2151
	PGC	0.1943	0.0243	7.9970	0.0000			
2021	Constant	3.7650	0.0907	41.4900	0.0000	0.6006	1.4869	0.2227
	PGC	0.1840	0.0226	8.1340	0.0000			
2024	Constant	3.7159	0.0924	40.2000	0.0000	0.6244	3.7563	0.0526
	PGC	0.1971	0.0230	8.5530	0.0000			

Note: * denotes the *p*-value calculated using the bootstrap method.

Table 7. Estimated parameters of regression models according to income group. Source: own processing using R.

Year		Coefficient	Std. Error	*t*-Ratio	*p*-Value	R^2	*BP* (Test Statistics)	*BP* (*p*-Value)
Upper-Middle								
2019	Constant	3.4039	0.0859	39.6400	0.0000	0.5582	0.0034	0.9532
	PGC	0.1738	0.0269	6.4570	0.0000			
2021	Constant	3.4807	0.0915	38.0500	0.0000	0.4851	0.8232	0.3642
	PGC	0.1614	0.0290	5.5760	0.0000			
2024	Constant	3.4617	0.0859	40.2900	0.0000	0.5426	0.4088	0.5226
	PGC	0.1701	0.0272	6.2560	0.0000			
Lower-Middle								
2019	Constant	3.0831	0.1005	30.6800	0.0000	0.2940	0.1777	0.6734
	PGC	0.1467	0.0402	3.6500	0.0009			
2021	Constant	3.1452	0.1012	31.0800	0.0000	0.2753	0.1236	0.7252
	PGC	0.1408	0.0404	3.4870	0.0014			
2024	Constant	3.1628	0.0962	32.8700	0.0000	0.2863	0.0859	0.7694
	PGC	0.1376	0.0384	3.5830	0.0011			
Low								
2019	Constant	1.3392	0.8615	1.5540	0.2603	0.6494	1.9609	0.1614
	PGC	1.4618	0.7595	1.9250	0.1942			
2021	Constant	1.2996	0.9198	1.4130	0.2932	0.6414	1.5093	0.2193
	PGC	1.5336	0.8109	1.8910	0.1991			
2024	Constant	1.1622	0.9098	1.2770	0.3297	0.6846	1.4358	0.2308
	PGC	1.6713	0.8021	2.0840	0.1726			

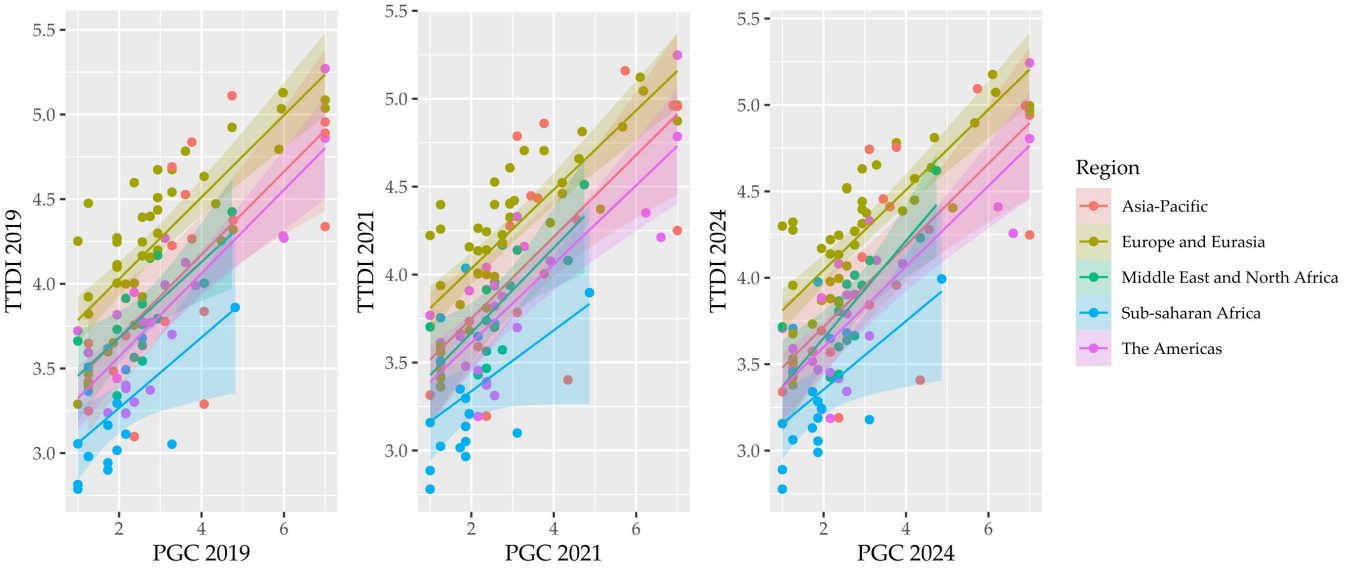


Figure 6. Relationship between *PGC* and *TTDI* according to region. Source: own processing using R.

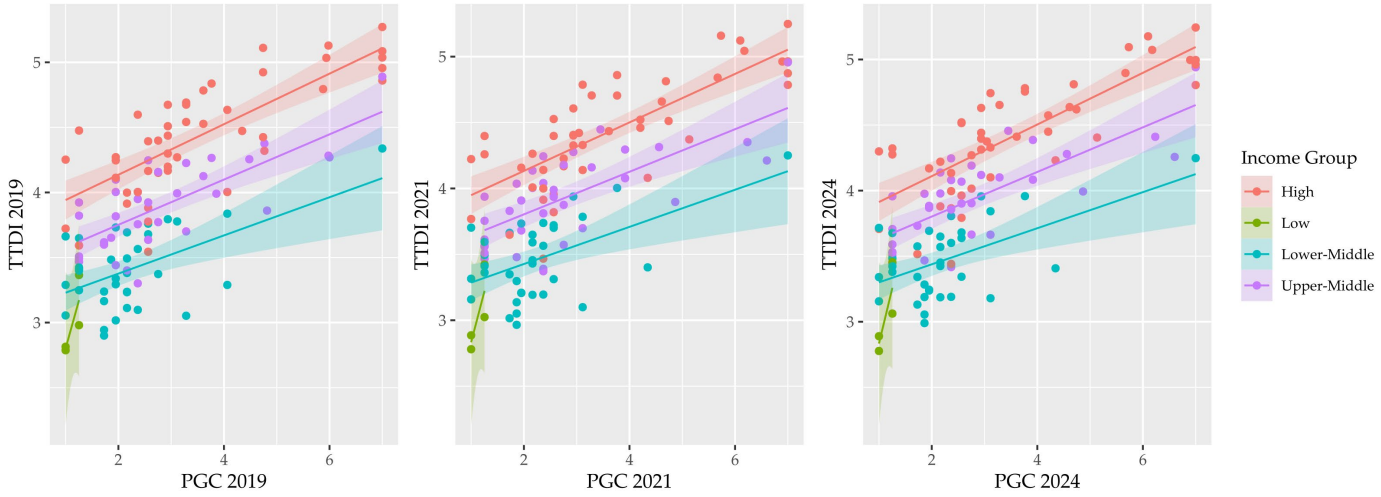


Figure 7. Relationship between *PGC* and *TTDI* according to income group. Source: own processing using R.

We also present correlation coefficients (see Table 8) to complement the regression models and provide a deeper understanding of the relationship between the TTDI and the PGC. The correlation coefficients offer a straightforward measure of the linear association between the indicators. By presenting both, we aim to provide a more comprehensive analysis, highlighting not only the predictive relationship but also the degree to which changes in the PGC are related to changes in the TTDI. The *p*-values for all correlation coefficients are effectively 0, indicating statistical significance.

Table 8. Correlation between *PGC* and *TTDI* for all presented models.

	2019	2021	2024
All countries	0.7195	0.7203	0.7382
Region			
Asia–Pacific	0.7051	0.7011	0.7243
Europe and Eurasia	0.8049	0.8184	0.8325
Middle East and North Africa	0.7006	0.7118	0.7899
Sub-Saharan Africa	0.5386	0.4381	0.5235
The Americas	0.8459	0.7969	0.8246
Income group			
High	0.7697	0.7750	0.7902
Upper-Middle	0.7471	0.6965	0.7366
Lower-Middle	0.5422	0.5247	0.5351
Low	0.8058	0.8009	0.8274

5. Discussion

In comparing the previous study by Weng et al. [47] with the current research, both aim to explore key relationships that shape urban tourism dynamics, yet they focus on different aspects of this complex field. The prior study [47] examined the relationship between local demand and urban tourism competitiveness, with a specific focus on how the quality of place mediates the connection between urban wealth and tourism outcomes. It found that the quality of place significantly mediated the relationship between urban wealth and tourist arrivals, but not between urban wealth and per capita tourism spending. This suggests that wealthier cities may attract more tourists due to a higher perceived quality of place, but this does not necessarily lead to higher per capita spending by those tourists. In contrast, the present study shifts the focus to a broader measure of urban competitiveness, specifically examining the relationship between the TTDI and the PGC, as derived from the GaWC Research Network rankings. Unlike the previous study [47], which focused on local demand and tourism competitiveness, this research explores how the PGC correlates with the overall development of the tourism sector across countries. Additionally, the previous research did not directly examine the global competitiveness of cities, whereas this study specifically explores how the presence of global cities correlates with national tourism development, as indicated by TTDI scores.

There are a few articles that have explored the connection between tourism and the GaWC framework [34,48–52]. Most studies have focused on other aspects of globalization, but the role of tourism in shaping global city rankings and dynamics has received relatively less attention. Although the GaWC indicator was referenced in several studies, it was used as an input value in only a few. Kourtit et al. [35] utilized it to identify particular locations for analyzing COVID-19 vulnerability and subsequent market dynamics in the global hospitality sector. Niemets et al. [36] cited the GaWC methodology as one of the approaches used to create world city rankings in the context of analyzing sustainable development. The GaWC metric was also utilized in the assessment of Brisbane (as a New World City) [53]. Zheng and Liao [54] applied the GaWC concept to study the evolving patterns of city brand impact in the top ten global cities. Rodríguez [37] used the concept of the GaWC indicator to identify and analyze global cities. The author focused on examining social inequality and residential segregation trends in three major Spanish cities—Madrid, Barcelona, and Valencia—through a comparative analysis. Da Silva Corrêa and Perl [55] examined the relationship between globalization, hypermobility, and the transmission of COVID-19 during the first wave of the pandemic in 2020. Their analysis confirmed a positive correlation between the GaWC city rankings and the spread of the virus.

Similarly, the TTDI has been mentioned in several studies [6,38–46], but none have linked it to the PGC indicator. Therefore, our study is unique in that it establishes a connection between the TTDI and the PGC indicator.

The results of this analysis illustrated a consistent positive relationship between the PGC and the TTDI across the years 2019, 2021, and 2024. This finding suggests that countries with higher levels of PGC tend to experience higher TTDI scores, indicating that the global status and performance of cities within these countries contribute significantly to their overall tourism development. The consistency of this relationship across multiple years emphasizes the enduring influence of global cities on the tourism sector, aligning with the growing importance of urban areas as key drivers of both national and international tourism trends.

When comparing the models across regions, the models for 'The Americas' in 2019 and 'Europe and Eurasia' in 2024 exhibited the highest R^2 values, suggesting that these regions have the strongest relationship between the PGC and the TTDI. This may reflect the relatively well-established infrastructure and tourism policies in these regions, which support a more predictable connection between global city performance and tourism development. Similarly, the models for low-income economies demonstrated the best performance among the income groups, likely due to the lower variability in both the PGC and TTDI scores within this group. Notably, the small number of countries (only four) in this group may have contributed to the model's strong performance, as smaller datasets often lead to higher R^2 values due to the reduced complexity.

The positive correlation between the PGC and the TTDI implies that global cities are not only pivotal to economic, cultural, and political exchanges but also serve as central hubs for tourism development. As such, policies and strategies aimed at enhancing the competitiveness and performance of global cities could have broader benefits for the national tourism sector. This finding also aligns with broader theories of urbanization and globalization, where cities act as critical nodes in the global economy, linking countries to international markets, knowledge networks, and cultural exchange. As such, global cities are not only drivers of economic growth but also pivotal in shaping the success of the tourism industry within their respective nations. Moreover, the findings highlight the importance of investing in infrastructure, innovation, and sustainable practices within these cities to further enhance their attractiveness as tourist destinations. Countries that invest in enhancing the infrastructure and connectivity of their global cities may experience improvements in travel and tourism development, thereby boosting national economic resilience and competitiveness in the global tourism market. As stated by Senkova et al. [56], sustainable tourism development is closely associated with innovations, which play a crucial role in boosting the competitiveness of countries.

An important consideration in the analysis of the relationship between the PGC and the TTDI is the role of sustainability approaches in shaping tourism development outcomes. As the global tourism industry continues to grow, there is an increasing focus on sustainable tourism practices [57], which aim to balance economic, environmental, and social factors in the development of tourism [58]. Sustainability approaches can indeed influence the relationship between the PGC and the TTDI, potentially altering how global cities contribute to or hinder tourism development.

In global cities, sustainability initiatives can significantly enhance the long-term attractiveness of these destinations [59]. These efforts are increasingly important to travelers who prioritize sustainability [60], and they can influence a city's ability to maintain or improve its position on the TTDI.

On the other hand, the absence of sustainability policies in global cities may have a negative effect on the TTDI in the long run. Cities that fail to implement responsible tourism practices may experience diminished tourist appeal due to environmental degradation [61], social unrest [62], or a decline in the overall quality of life [63]. This could lead to a decline in the PGC and, by extension, the TTDI, as countries or regions with poorly managed tourism may struggle to compete in the global tourism market.

The results have important implications for both theory and practice. They suggest that the relationship between global city performance and tourism development is not only stable over time but also varies across different regions and income groups.

For policymakers, the results underscore the need to focus on improving the performance of global cities, as this could translate into higher tourism development indices. Investments in infrastructure, cultural capital, sustainable practices, and digital transformation should be prioritized to maintain and enhance the global appeal of these cities. Additionally, given the positive link between the PGC and the TTDI, governments may consider integrating tourism development strategies into broader urban planning and international positioning efforts.

Moreover, for policymakers, this indicates that tailored strategies may be needed to enhance tourism development based on regional and income-specific factors. For instance, countries in high-income regions or those with more developed global cities may benefit from reinforcing their competitive advantages in tourism, while low-income economies could focus on reducing variability and building infrastructure to enhance their global city performance.

Bodolica et al. [64] pointed out that the global tourism sector must respond to the swiftly evolving expectations of tourists by adopting effective strategies to fully capitalize on the advantages of innovation. The authors stated that, in its ambitious effort to establish itself as a global tourism destination, a country should leverage innovative strategies to transform its inherent challenges into unique points of differentiation. The major attractions must cater to a diverse array of visitors from various cultural and ethnic backgrounds, providing comfortable and varied experiences that offer the best value for money. Innovative combinations of services, multi-product packages, special deals, and integrated visitor management strategies are essential for increasing tourists' interest and enhancing their sensory experience.

Future research could extend this study by conducting a longitudinal analysis that includes more years, allowing for the capture of long-term trends and variations in the relationship between the PGC and the TTDI. Additionally, incorporating the specific values of the GaWC, rather than relying solely on the recalculated PGC derived from the TTDI, would be valuable. Using the direct GaWC indicator would provide a more precise understanding of global city performance and its impact on tourism development, offering a clearer picture of how specific dimensions of globalization and world city status influence the tourism sector across different regions and income groups. This approach could enhance the accuracy and depth of the analysis, enabling more targeted insights into the factors driving the relationship between global city performance and tourism development.

6. Conclusions

This paper examines the relationship between the TTDI and the PGC. Using linear regression models, we analyzed this relationship across different regions and income groups, drawing on data from 119 countries and focusing on how changes in PGC are linked to variations in TTDI scores. This study compared data from 2019 (pre-COVID-19), 2021 (during COVID-19), and 2024 (post-COVID-19). The findings revealed a consistent positive correlation between the PGC and the TTDI, suggesting that countries with higher

PGC levels tend to have higher TTDI scores, highlighting the important role of global city performance in tourism development. Additionally, the results showed that while this relationship remains stable over time, it varies across different regions and income groups.

A significant contribution of this paper is its unique establishment of a connection between the TTDI and the PGC indicator. While numerous studies have used the GaWC indicator and the TTDI separately, our research bridges these two indicators, offering a fresh perspective on the relationship between global city performance and tourism development. This study adds to the existing literature by expanding the analysis of tourism development beyond specific cities or regions. By examining the relationship between the TTDI and PGC across multiple countries, regions, and income groups, this research provides a more comprehensive understanding of global tourism dynamics.

There are several potential limitations to this study that should be acknowledged. First, while the study found that regional and income group differences influence the relationship between PGC and TTDI, it did not fully explore the underlying factors driving these differences. The variation in results across regions or income groups may be influenced by factors beyond global city performance, such as political instability, economic shocks, or local tourism policies, which could be explored further in future research. Second, the findings may not be fully generalizable to all countries or regions, particularly those that are underrepresented in the dataset. The models, especially for low-income economies, may show strong performance due to the limited number of countries in the group, potentially skewing the results.

In conclusion, the consistent and significant positive relationship between the PGC and the TTDI across different regions and income groups underscores the crucial role of global cities in shaping national tourism development. These findings suggest that global city performance is a critical driver of tourism competitiveness, offering valuable insights for policymakers and future research.

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Conflicts of Interest: The author declares no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript:

BP	Breusch–Pagan test
GaWC	Globalization and World Cities
PGC	Presence of Global Cities
Q1	First quartile
Q3	Third quartile
R2	Coefficient of determination
S.D.	Standard Deviation
TTDI	Travel and Tourism Development Index

Appendix A

Table A1. Countries according to region.

Asia–Pacific		Europe and Eurasia				Middle East and North Africa		Sub-Saharan Africa		The Americas	
AUS	MNG	ALB	EST	KGZ	ROU	DZA	LBN	AGO	NAM	ARG	CHL
BGD	NPL	ARM	FIN	LVA	SRB	BHR	MAR	BEN	NGA	BRB	JAM
KHM	NZL	AUT	FRA	LTU	SVK	EGY	OMN	BWA	RWA	BOL	MEX
CHN	PAK	AZE	GEO	LUX	SVN	IRN	QAT	CMR	SEN	BRA	NIC
IND	PHL	BEL	DEU	MLT	ESP	ISR	SAU	CIV	SLE	CAN	PAN
IDN	SGP	BIH	GRC	MDA	SWE	JOR	TUN	GHA	ZAF	COL	PRY
JPN	LKA	BGR	HUN	MNE	CHE	KWT	ARE	KEN	TZA	CRI	PER
KOR	THA	HRV	ISL	NLD	TJK			MWI	ZMB	DOM	TTO
LAO	VNM	CYP	IRL	MKD	TUR			MLI	ZWE	ECU	USA
MYS		CZE	ITA	POL	GBR			MUS		SLV	URY
		DNK	KAZ	PRT	UZB					GTM	VEN
										HND	

Source: own processing. Note: countries' codes are according to Alpha-3.

Table A2. Countries according to income group.

High				Upper-Middle			Lower-Middle			Low
AUS	FRA	LVA	SVK	ALB	SLV	MNE	DZA	IRN	SEN	MWI
AUT	DEU	LTU	SVN	ARG	GEO	NAM	AGO	JOR	LKA	MLI
BHR	GRC	LUX	ESP	ARM	GTM	MKD	BGD	KEN	TJK	RWA
BRB	HUN	MLT	SWE	AZE	CHN	PAN	BEN	KGZ	TZA	SLE
BEL	CHL	NLD	CHE	BIH	IDN	PRY	BOL	LAO	TUN	
CAN	ISL	NZL	TTO	BWA	JAM	PER	KHM	MNG	UZB	
HRV	IRL	OMN	ARE	BRA	KAZ	ROU	CMR	MAR	VEN	
CYP	ISR	POL	GBR	BGR	LBN	SRB	CIV	NPL	VNM	
CZE	ITA	PRT	USA	COL	MYS	ZAF	EGY	NIC	ZMB	
DNK	JPN	QAT	URY	CRI	MUS	THA	GHA	NGA	ZWE	
EST	KOR	SAU		DOM	MEX	TUR	HND	PAK		
FIN	KWT	SGP		ECU	MDA		IND	PHL		

Source: own processing. Note: countries' codes are according to Alpha-3.

References

1. Abdrabo, K.I.; Mabrouk, M.; Marzouk, A. Urban Competitiveness Assessment Using the Integration of the Global Power City Index and Multicriteria Decision-Making Methods. *J. Urban Plan. Dev.* **2024**, *150*, 04024025. [CrossRef]
2. Maxim, C. Trends and issues in world tourism cities. In *Routledge Handbook of Trends and Issues in Global Tourism Supply and Demand*; Morrison, A.M., Buhalis, D., Eds.; Routledge: New York, NY, USA, 2023.
3. Taylor, P.J. *World City Network: A Global Urban Analysis*; Routledge: New York, NY, USA, 2004.
4. Beaverstock, J.V.; Smith, R.G.; Taylor, P.J.; Walker, D.R.; Lorimer, H. Globalization and world cities: Some measurement methodologies. *Appl. Geogr.* **2000**, *20*, 43–63. [CrossRef]
5. Moore, A.; Phillips, C. *Travel & Tourism Development Index 2024*; World Economic Forum: Geneva, Switzerland, 2024.
6. Qazi, A. Exploring the interdependent drivers of tourism competitiveness: Insights from the Travel and Tourism Development Index. *Compet. Rev. Int. Bus. J.* **2024**. *ahead of print*. [CrossRef]
7. Maitland, R.; Newman, P. Developing world tourism cities. In *World Tourism Cities: Developing Tourism off the Beaten Track*; Maitland, T., Newman, P., Eds.; Routledge: New York, NY, USA, 2009; pp. 1–21.
8. Berdenov, Z.; Kakimzhanov, Y.; Arykbayeva, K.; Assylbekov, K.; Wendt, J.A.; Kaimuldinova, K.D.; Beketova, A.; Ataeva, G.; Kara, T. Sustainable Development of the Infrastructure of the City of Astana Since the Establishment of the Capital as a Factor of Tourism Development. *Sustainability* **2024**, *16*, 10931. [CrossRef]
9. Cantwell, J.; Zaman, S. International knowledge connectivity and the increasing concentration of innovation in major global cities. *J. Econ. Geogr.* **2024**, *24*, 415–440. [CrossRef]
10. Goerzen, A.; Asmussen, C.G.; Nielsen, B.B. Global cities, the liability of foreignness, and theory on place and space in international business. *J. Int. Bus. Stud.* **2024**, *55*, 10–27. [CrossRef]
11. Henderson, J. Global cities, Tokyo, urban tourism. *Int. J. Tour. Cities* **2017**, *3*, 143–157. [CrossRef]

12. Taylor, P.; Derudder, B. *World City Network: A Global Urban Analysis*; Routledge: New York, NY, USA, 2015.
13. Kutty, A.A.; Abdella, G.M.; Kucukvar, M.; Onat, N.C.; Bulu, M. A system thinking approach for harmonizing smart and sustainable city initiatives with United Nations sustainable development goals. *Sustain. Dev.* **2020**, *28*, 1347–1365. [CrossRef]
14. Rodrigues, M.; Franco, M. Measuring the urban sustainable development in cities through a Composite Index: The case of Portugal. *Sustain. Dev.* **2020**, *28*, 507–520. [CrossRef]
15. Ahvenniemi, H.; Huovila, A. How do cities promote urban sustainability and smartness? An evaluation of the city strategies of six largest Finnish cities. *Environ. Dev. Sustain.* **2021**, *23*, 4174–4200. [CrossRef]
16. Spirou, C. *Urban Tourism and Urban Change: Cities in A Global Economy*; Routledge: New York, NY, USA, 2011; pp. 73–104.
17. Zhao, W.; Li, X. Globalization of tourism and third world tourism development: A political economy perspective. *Chin. Geogr. Sci.* **2006**, *16*, 203–210. [CrossRef]
18. Alvarez, M.D.; Yarcan, Ş. Istanbul as a world city: A cultural perspective. *Int. J. Cult. Tour. Hosp. Res.* **2010**, *4*, 266–276. [CrossRef]
19. Vind, I.; Fold, N. City networks and commodity chains: Identifying global flows and local connections in Ho Chi Minh City. *Glob. Netw.* **2010**, *10*, 54–74. [CrossRef]
20. Page, S.J.; Duignan, M. Progress in Tourism Management: Is urban tourism a paradoxical research domain? Progress since 2011 and prospects for the future. *Tour. Manag.* **2023**, *98*, 104737. [CrossRef]
21. Panasiuk, A. Policy of sustainable development of urban tourism. *Pol. J. Sport Tour.* **2020**, *27*, 33–37. [CrossRef]
22. Edwards, D.; Griffin, T.; Hayllar, B. Urban tourism research: Developing an agenda. *Ann. Tour. Res.* **2008**, *35*, 1032–1052. [CrossRef]
23. Grah, B.; Dimovski, V.; Peterlin, J. Managing sustainable urban tourism development: The case of Ljubljana. *Sustainability* **2020**, *12*, 792. [CrossRef]
24. Romero-García, L.E.; Aguilar-Gallegos, N.; Morales-Matamoros, O.; Badillo-Piña, I.; Tejeida-Padilla, R. Urban tourism: A systems approach–state of the art. *Tour. Rev.* **2019**, *74*, 679–693. [CrossRef]
25. Gladstone, D.L.; Fainstein, S.S. Tourism in US global cities: A comparison of New York and Los Angeles. *J. Urban Aff.* **2001**, *23*, 23–40. [CrossRef]
26. Maxim, C. Challenges faced by world tourism cities–London's perspective. *Curr. Issues Tour.* **2019**, *22*, 1006–1024. [CrossRef]
27. Liu, C.; Sun, S.; Piao, J.; Mao, W. Unveiling the dynamics and determinants of world city network: Insights from global airline data. *Cities* **2025**, *157*, 105613. [CrossRef]
28. Morrison, A.M.; Maxim, C. *World Tourism Cities: A Systematic Approach to Urban Tourism*; Routledge: New York, NY, USA, 2021.
29. Tai, A.C.; Wong, D.W.; Lee, H.F.; Qiang, W. Tourism's long-and short-term influence on global cities' economic growth: The case of Hong Kong. *PLoS ONE* **2022**, *17*, e0275152. [CrossRef] [PubMed]
30. Zhang, J. A Study on the Tourism Construction in Beijing from the Perspective of Global City. *Tour. Trib./Lvyou Xuekan* **2013**, *28*, 42–49.
31. Zaidan, E.A. Tourism shopping and new urban entertainment: A case study of Dubai. *J. Vacat. Mark.* **2016**, *22*, 29–41. [CrossRef]
32. Rogerson, C.M.; Rogerson, J.M. Africa's capital cities: Tourism research in search of capitalness. *Afr. J. Hosp. Tour. Leis.* **2021**, *10*, 654–669. [CrossRef]
33. Zamfir, A.; Corbos, R.A. Towards sustainable tourism development in urban areas: Case study on Bucharest as tourist destination. *Sustainability* **2015**, *7*, 12709–12722. [CrossRef]
34. Jones, C.; Newsome, D. Perth (Australia) as one of the world's most liveable cities: A perspective on society, sustainability and environment. *Int. J. Tour. Cities* **2015**, *1*, 18–35. [CrossRef]
35. Kourtit, K.; Nijkamp, P.; Östh, J.; Turk, U. Airbnb and COVID-19: SPACE-TIME vulnerability effects in six world-cities. *Tour. Manag.* **2022**, *93*, 104569. [CrossRef]
36. Niemets, K.; Kravchenko, K.; Kandyba, Y.; Kobylin, P.; Morar, C. World cities in terms of the sustainable development concept. *Geogr. Sustain.* **2021**, *2*, 304–311. [CrossRef]
37. Rodríguez, Á.M. Social inequality and residential segregation trends in Spanish global cities. A comparative analysis of Madrid, Barcelona, and Valencia (2001–2021). *Cities* **2024**, *149*, 104935. [CrossRef]
38. Marti, L.; Puertas, R. Relationship between tourism development and the socioeconomic progress of tourist destinations. *Compet. Rev. Int. Bus. J.* **2025**, *35*, 175–189. [CrossRef]
39. Štilić, A.; Puška, A.; Božanić, D.; Đurić, A. Ranking European Countries Using Hybrid MEREC-MARCOS MCDA Based on Travel and Tourism Development Index. *Tour. Int. Interdiscip. J.* **2024**, *72*, 592–608. [CrossRef]
40. Pantović, D.; Kostić, M.; Veljović, S.; Luković, M. Evaluation Model of Environmental Sustainable Competitive Tourism Based on Entropy. *Probl. Ekorozwoju* **2023**, *18*, 193–203. [CrossRef]
41. Thao, H.T.P. Tourism policy in Vietnam: An evaluation using the difference-in-differences model. *J. Policy Res. Tour. Leis. Events* **2023**, 1–24, *ahead of print*. [CrossRef]
42. Vašaničová, P.; Bartók, K. Exploring the Nexus between Employment and Economic Contribution: A Study of the Travel and Tourism Industry in the Context of COVID-19. *Economies* **2024**, *12*, 136. [CrossRef]

43. Vašaničová, P.; Jenčová, S.; Kiseľáková, D.; Nebeský, Ľ. Do travel and tourism competitiveness determine international tourism inbound receipts? A quantile regression model for 125 countries. *J. Tour. Serv.* **2023**, *14*, 137–152. [CrossRef]
44. Agostinho, M.N.; Dias, A.; Pereira, L.F. Tourism direct GDP: Configuration of antecedents and tourism future performance in high-income countries'. *J. Tour. Futures* 2024. *ahead of print*. [CrossRef]
45. Purwono, R.; Esquivias, M.A.; Sugiharti, L.; Rojas, O. Tourism Destination Performance and Competitiveness: The Impact on Revenues, Jobs, the Economy, and Growth. *J. Tour. Serv.* **2024**, *15*, 161–187. [CrossRef]
46. Dzurov Vargová, T.; Matušíková, D.; Šaffová, I. Aspects of Tourism Performance in V4 Countries under the Influence of the Covid 19 Pandemic for Future Management and Quality. *GeoJournal Tour. Geosites* **2024**, *52*, 231–238. [CrossRef]
47. Weng, J.; Xiao, J.; Yu, L. Local demand, quality of place, and urban tourism competitiveness. *Front. Psychol.* **2022**, *12*, 817805. [CrossRef]
48. Feng, X.; Derudder, B.; Wang, F.; Shao, R. Geography and location selection of multinational tourism firms: Strategies for globalization. *Tour. Rev.* **2022**, *77*, 190–208. [CrossRef]
49. Faure, A.; Lauermann, J. Are Mega-Events Only for Global Cities? Analyzing Host Cities through the Global and World Cities Framework, 1990–2020. *J. Olymp. Stud.* **2023**, *4*, 31–55. [CrossRef]
50. Chen, J.; Ma, C.; Chen, S. Determinant of the tourism economy in Chinese cities: From an urban centrality perspective. *Tour. Econ.* **2024**, *30*, 44–66. [CrossRef]
51. Safaei, M.; Elhadary, T.; Ziaei, M. Investigating, measuring and comparing the characteristics of recreational and religious tourism in Iran and Turkey (Case Study: "Istanbul and Isfahan" metropolises). *Talent Dev. Excell.* **2020**, *12*, 4148–4173.
52. Tang, H. Regional patterns and hierarchical tendencies: Analysis of the network connectivity of 63 service-oriented tourist cities in China. *Sustainability* **2020**, *12*, 6532. [CrossRef]
53. Insch, A.; Bowden, B. Possibilities and limits of brand repositioning for a second-ranked city: The case of Brisbane, Australia's "New World City", 1979–2013. *Cities* **2016**, *56*, 47–54. [CrossRef]
54. Zheng, C.; Liao, S. Evolutionary dynamics of the city brand influence of top ten global cities: Characteristics analysis driven by global news big data and intelligent semantic mining. *Cities* **2023**, *141*, 104481. [CrossRef]
55. da Silva Corrêa, L.; Perl, A. Global cities, hypermobility, and COVID-19. *Cities* **2022**, *122*, 103537. [CrossRef]
56. Senkova, A.; Kolesarova, S.; Kosikova, M. Innovative Activity of SPA Companies in the Slovak and Czech Republic in the Context of the COVID-19 Pandemic. *Mark. Manag. Innov.* **2024**, *15*, 80–89. [CrossRef]
57. Arya, V.; Auruskeviciene, V.; Agarwal, S.; Kokatnur, P.; Kumar, H.; Verma, R. Let us take a walk to the sustainable tourism practices: A qualitative study through the lens of tourism experts. *Environ. Sci. Pollut. Res.* **2024**, *31*, 12892–12915. [CrossRef]
58. Yang, Y.; Wani, G.A.; Nagaraj, V.; Haseeb, M.; Sultan, S.; Hossain, M.E.; Kamal, M.; Shah, S.M.R. Progress in sustainable tourism research: An analysis of the comprehensive literature and future research directions. *Sustainability* **2023**, *15*, 2755. [CrossRef]
59. MacKenzie, N.; Gannon, M.J. Exploring the antecedents of sustainable tourism development. *Int. J. Contemp. Hosp. Manag.* **2019**, *31*, 2411–2427. [CrossRef]
60. Mamula Nikolić, T.; Pantić, S.P.; Paunović, I.; Filipović, S. Sustainable travel decision-making of Europeans: Insights from a household survey. *Sustainability* **2021**, *13*, 1960. [CrossRef]
61. Guo, Y.; Jiang, J.; Li, S. A sustainable tourism policy research review. *Sustainability* **2019**, *11*, 3187. [CrossRef]
62. Baloch, Q.B.; Shah, S.N.; Iqbal, N.; Sheeraz, M.; Asadullah, M.; Mahar, S.; Khan, A.U. Impact of tourism development upon environmental sustainability: A suggested framework for sustainable ecotourism. *Environ. Sci. Pollut. Res.* **2023**, *30*, 5917–5930. [CrossRef]
63. Su, L.; Huang, S.; Huang, J. Effects of destination social responsibility and tourism impacts on residents' support for tourism and perceived quality of life. *J. Hosp. Tour. Res.* **2018**, *42*, 1039–1057. [CrossRef]
64. Bodolica, V.; Spraggon, M.; Saleh, N. Innovative leadership in leisure and entertainment industry: The case of the UAE as a global tourism hub. *Int. J. Islam. Middle East. Financ. Manag.* **2020**, *13*, 323–337. [CrossRef]

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