

Articles - Tourism Management

Factors associated with tourism segment choice in Brazil

Fatores associados à escolha de segmentos turísticos no Brasil

Factores asociados a la elección de segmentos turísticos en Brasil

Ákeson Helder Rosa de Alcântara¹, Paulo Henrique Cirino Araujo¹, Luana Cássia Miranda Ribeiro¹

¹Federal University of Goiás (UFG), Goiás, GO, Brazil.

Keywords:

Tourism demand;
Consumer behavior;
Regional tourism;
Econometrics;
Market segmentation.

Palavras-chave:

Demanda turística;
Comportamento do consumidor;
Turismo regional;
Econometria;
Segmentação do mercado.

Palabras clave:

Demanda turística;
Comportamiento del consumidor;
Turismo regional;
Econometría;
Segmentación del mercado.

Abstract

The empirical literature lacks quantitative evidence on how logistical infrastructure and budget constraints segment domestic tourism demand. Therefore, this study examines how demographic, socioeconomic, geographic, and structural factors influence the choice of tourist destinations in Brazil. Drawing on data from the PNAD Turismo (2023-2024) and employing a Multinomial Probit econometric model, the research estimates the probability of travelers selecting specific segments: Nature and Adventure; Sun and Beach; and Culture and Gastronomy. The findings reveal distinct regional profiles: residents of the South show a 25.6 p.p. probability of choosing Culture and Gastronomy; the Northeast exhibits the highest propensity for Sun and Beach (51.7 p.p.); and the Midwest leads in Nature and Adventure (33.2 p.p.). Furthermore, the results indicate that air travel, higher income, and advanced education levels increase the likelihood of choosing cultural tourism, whereas the Nature and Adventure segment remains heavily dependent on land transport, suggesting significant logistical barriers. Consequently, the study suggests that sector development must integrate transportation infrastructure with social inclusion policies that target lower-income and less-educated demographics.

Resumo

A literatura empírica carece de evidências quantitativas sobre como a infraestrutura logística e as restrições orçamentárias segmentam a demanda turística doméstica. Diante disso, o presente estudo tem como objetivo analisar os fatores demográficos, socioeconômicos, geográficos e estruturais que influenciam a escolha de destinos turísticos no Brasil. Utilizando dados da PNAD Turismo (2023-2024) e uma abordagem quantitativa a partir do modelo econométrico *Probit Multinomial*, estimou-se a probabilidade de escolha de segmentos turísticos de Natureza e Aventura, Sol e Praia, e Cultura e Gastronomia. Os resultados evidenciam perfis distintos e regionalizados: residentes do Sul apresentam probabilidade de 25,6 p.p. para o segmento de Cultura e Gastronomia; o Nordeste detém a maior propensão para Sol e Praia (51,7 p.p.); e o Centro-Oeste lidera a escolha por Natureza e Aventura (33,2 p.p.). Ademais, revela-se que o uso do modal aéreo e maiores níveis de renda e escolaridade elevam a probabilidade de escolha pelo turismo cultural, enquanto o segmento de Natureza e Aventura apresenta forte dependência do modal terrestre, sugerindo barreiras logísticas. Como implicação, o estudo indica que o fomento ao setor deve integrar a infraestrutura de transportes a políticas sociais de inclusão para perfis de menor renda e instrução.

Resumen

La literatura empírica carece de evidencias cuantitativas sobre cómo la infraestructura logística y las restricciones presupuestarias segmentan la demanda turística doméstica. Por lo tanto, el presente estudio analiza cómo los factores demográficos, socioeconómicos, geográficos y estructurales influyen en la elección de destinos turísticos en Brasil. A partir de los datos de la PNAD Turismo (2023-2024) y mediante un enfoque cuantitativo basado en el modelo econométrico *Probit Multinomial*, se estimó la probabilidad de elección de los segmentos turísticos de Naturaleza y Aventura, Sol y Playa y Cultura y Gastronomía. Los resultados evidencian perfiles distintos y regionalizados: los residentes

Peer-reviewed.

Received:: 16/10/2025

Approved: 29/07/2026

Editor: Glauber Eduardo de Oliveira Santos.

del Sur presentan una probabilidad de 25,6 p.p. para el segmento de Cultura y Gastronomía; el Nordeste posee la propensión más alta hacia Sol y Playa (51,7 p.p.); y el Centro-Oeste lidera la elección de Naturaleza y Aventura (33,2 p.p.). Además, se revela que el uso del transporte aéreo y niveles más altos de ingresos y escolaridad elevan la probabilidad de optar por el turismo cultural, mientras que el segmento de Naturaleza y Aventura presenta una fuerte dependencia del transporte terrestre, lo que sugiere barreras logísticas. Como implicación, el estudio indica que el fomento del sector debe integrar la infraestructura de transporte con políticas sociales de inclusión para perfiles de menores ingresos y nivel educativo.



How to cite: Alcântara, A. H. R., Araujo, P. H. C., & Ribeiro, L. C. M. (2026). Factors associated with tourism segment choice in Brazil. *Revista Brasileira de Pesquisa em Turismo*, São Paulo, 20, e-3347, 2026. <https://doi.org/10.7784/rbtur.v20.3347>

1 INTRODUCTION

Tourism is a complex economic, social, and cultural phenomenon that involves the movement of people to places outside their usual environment (Camara, 2022). As a socioeconomic activity, this phenomenon holds significant relevance for national development, driving job creation, economic growth, and the promotion of leisure and culture for the population (Silva & Araujo, 2022). The economic report released by the World Travel and Tourism Council highlighted that, in 2023, tourism sector activities accounted for 9.1% of global GDP. Furthermore, it is estimated that over the next 10 years, tourism will be responsible for 11.4% of the global economy and 12.2% of the workforce (WTTC, 2024).

In Brazil, tourism plays an important role in both the economy and society. Based on data from the Ministry of Tourism (MTUR), it is observed that, in 2023, tourism accounted for 7.8% of Brazil's GDP and generated 8.1% of all jobs (MTUR, 2024). This substantial impact of tourism on the Brazilian economy is tied to the country's distinct characteristics, given its attractions geared toward the exploration of natural and cultural sites, alongside its immense ethnic diversity (Rabahy, 2019).

This variety of attractions provides the country with enormous potential to expand its presence within the tourism context. The specialized literature indicates that the tourist's decision-making process is conditioned by multiple factors, encompassing socioeconomic, demographic, and geographic dimensions. Consequently, tourist perception and preference are shaped by several variables, such as income, demographic profiles, and destination infrastructure (Fletcher et al., 2018; Moutinho, 1987; Sirakaya & Woodside, 2005). Within this framework, structural factors encompass the transport network and hotel supply. They define the logistical viability and the retention capacity of the destination (Chaves et al., 2024; Zucco et al., 2024).

Other determining variables that gain prominence are regional factors, given that the services offered are consistent with the tourism segment, which delimits products and services according to the geographic specificities and demand motivations of each locality (Rabahy, 2019).

Data from the Continuous National Household Sample Survey (PNAD Contínua), in its Tourism module, demonstrate that, in 2024, the Southeast, Northeast, and South regions concentrated over 83% of the national inbound tourism flow, notably the Southeast with 41.85% of domestic demand. The North and Midwest regions, in turn, account for an average of 8% of this flow each. The PNAD also reveals that among leisure-oriented tourism segments, Sun and Beach stand out, representing 47.27% of trips taken for this purpose, followed by Culture and Gastronomy at 22.19%, and Nature and Adventure at 21.80% (IBGE, 2024).

The asymmetry of tourism flow across Brazilian regions, coupled with the supply structure of each segment, highlights the need to investigate the drivers behind this high geographic concentration and the predominance of specific niches. In this sense, the aim is to move beyond a strictly quantitative analysis of the flow and proceed toward an investigation of the variables that guide the visitor's decision-making process and how this aligns with demand formation in the country. Therefore, this study seeks to answer: What demographic, socioeconomic, geographic, and structural factors influence the choice of tourism destinations in Brazil?

Given this context, the objective of this article is to analyze the factors that influence the choice of tourism destinations in the country, segmenting the demand by attraction groups (Nature and Adventure, Sun and Beach, Culture and Gastronomy). Through the application of a Multinomial Probit model to the 2023 and 2024 PNAD Tourism data,

this research seeks to identify the tourist profile for each segment, thereby providing evidence to support the formulation of more effective public policies that promote regional development and foster a more inclusive and economically diversified tourism.

2 LITERATURE REVIEW

An individual's choice of travel destination is a multivariable phenomenon, conditioned by a set of demographic, socioeconomic, geographic, and structural factors. Understanding these factors allows for improved destination management and the formulation of public policies aimed at partnerships and investments in regional development. Therefore, this section synthesizes the main literature findings on tourism destination choice, highlighting its primary determinants. Thus, by considering the specificities of the Brazilian context, this study delineates the literature gap it aims to address and outlines notes or guidelines for public policy formulation within the sector.

2.1. Factors related to the choice of tourist destination

The specialized literature lists several determining factors of tourism demand. Among them, psychological variables and external motivators stand out. According to Moutinho (1987), choosing a destination is not an isolated act, but a set of elements linked to motivation, risk perception, and prior learning, which together shape traveler preference.

Tourism decision-making derives from the interaction between intrinsic stimuli, such as escaping routine and seeking knowledge, and extrinsic constraints, such as available time and logistical barriers (Fletcher et al., 2018). In the sphere of consumer behavior, the application of the Tourism Motivation Scale by Schuster and Dias (2024) identifies recreation, culture, and escape factors as central axes in Brazil. This structure aligns with the results of Ferko et al. (2025) regarding proximity tourism, which reject the premise that classic demographic variables solely determine short-distance choices. These authors' findings indicate that rest and relaxation operate as primary factors, confirming the relevance of the escape dimension and demonstrating that the life cycle stage acts secondarily to these psychological motivations.

In this sense, Almeida et al. (2020) infer that, in developing economies, the demand for tourism activities is directly linked to household characteristics, both demographic and social. This is connected to the findings of Rabahy (2019), in which an individual's socioeconomic characteristics, such as financial income, stand out as determinants in tourism destination choice. Education levels, generally related to income, frequently appear as a driver of tourism consumption (Fletcher et al., 2018; Johnson & Ashworth, 1990; Le-Klähn et al., 2015).

Regarding geographic aspects, transport logistics influence destination choice, with proximity trips being one of the greatest predictors, justified by lower costs and travel time (Tavares & Leitão, 2017). The authors also emphasize that the configuration of origin hubs and physical distance explain the intensity of tourism flows. The study by Masi-ero and Zoltan (2013) complements this understanding by demonstrating a positive correlation between visiting multiple regions and using private transport, corroborating the hypothesis of an interconnection between travel patterns and transport mode choice. Aligned with this, the transport infrastructure of both the receiving and demanding hubs, especially for air travel, is important for flow dynamism, acting as a central element to enable regional economic integration and accelerate connectivity between geographically distant markets (Fernandes et al., 2020).

International literature reviews, such as that by Camara et al. (2022), offer an overview of tourism demand determinants and the variables used in traditional econometric modeling. The review confirms the high influence of demographic and socioeconomic variables, as well as the need to consider geographic and structural aspects, such as distance. Furthermore, income and travel costs are the most recurrent economic factors, with origin hub income being the most addressed factor in econometric studies.

Beyond the aspects discussed, within the general context of tourism choice determinants, it is relevant to bring the discussion to the specificities of the Brazilian scenario. Although not commonly addressed in the literature, social markers, such as gender, race, and/or color, can assist in understanding the asymmetries in tourism access within the country (Silva & Araujo, 2022). Additionally, the literature indicates the existence of specific characteristics tied to the main leisure-oriented segments in Brazil (Barbosa, 2024; Rabahy, 2019). Such particularities structure destination image formation and define whether the visitor's value perception will assume a utilitarian, hedonic, or affective character, requiring an isolated analysis of each niche.

In Nature and Adventure tourism, trips are driven by experiences focused on the environment and ecotourism (Lohmann et al., 2022). The research by Chaves et al. (2024) on natural tourism in the Amazon indicates that the affective component surpasses cognitive and infrastructural aspects in visit intention, dictating the choice categorically. In contrast, the analysis by Bolzan and Mendes Filho (2023) on Sun and Beach destinations points to predominantly utilitarian and hedonic evaluations; the objective is practical and pleasure-focused. Tourists seek comfort and rapid entertainment, ignoring the region's social reality. In the Culture and Gastronomy segment, the perception of heritage value is divided. The study by Zucco et al. (2024) on cultural festivals identifies distinct clusters, revealing that part of the demand rejects the intangible preservation bias. Similar results were reported by Amaral and Flores (2025) in wine routes, where tourists place higher value on product quality and good service, rather than the region's complex history.

The consumption dynamics of these segments are directly reflected in the sector's own structure, whose main hallmark is the absolute hegemony of the domestic market, presenting a demand that exceeds the international flow by almost tenfold (Rabahy, 2019). However, this type of macroeconomic structure exposes operational impacts that present dualities. On one hand, the study by Santos et al. (2026) points to the existence of significant induced multiplier effects in the Brazilian economy, where the expansion of labor income generates an economic impact greater than the sector's direct expenditures, especially regarding the leveraging capacity of the accommodation segment. On the other hand, from the perspective of productive interdependence, Santos et al. (2024) demonstrate that tourism activities are strictly oriented toward final demand, registering low linkages in the national input-output matrix. Furthermore, the authors highlight a specific vulnerability, as this economic structure ties the sector's success to household purchasing power, exposing food and land transport activities to risks in economic recession scenarios.

Another characteristic of this domestic market is the linkage of different segments to Brazilian regional specificities, where sociodemographic and structural attributes directly contribute to defining domestic demand. In this sense, Lohmann et al. (2022) highlight that Brazilian tourism demand for the coming decades will be defined according to the destinations' ability to adapt to changes in consumption profiles, where age and socioeconomic conditions tend to define new experiences. The study also notes that social inequalities and urban violence can act as geographic and structural filters. Such factors limit sector expansion, conditioning demand unlocking on the implementation of mitigating public policies.

2.2. The gap in the literature and the study's contribution

The national and international literature reveals several factors that influence the demand and choice of a tourism destination. However, in Brazil, structural challenges are observed, expressed in logistical infrastructure bottlenecks and asymmetries in income and education levels, clashing with the need for policies focused on the growth of this sector (Silva & Araújo, 2022). Conversely, the literature also reveals a high development potential, considering the country's natural and cultural attributes (Barbosa, 2024; Lohmann et al., 2022).

Aligned with this, Camara et al. (2022) point out a lack of studies on domestic tourism demand and its determinants in the Brazilian context, emphasizing the relevance of research addressing locational factors, such as the distance from origin hubs and destination access infrastructure.

In this sense, there is a scarcity of studies in the national literature that fill the gap proposed herein; research employing econometric models focused on destination choice drivers and explaining the dynamics of nature or culture segments, compared to traditional coastal and cultural destinations, is rare. Furthermore, it is observed that the academic literature explores the issues affecting tourism in an incipient manner through applied empirical models (Camara et al., 2022).

It is within this context, therefore, that this study is situated. The article proposes the application of a statistical model to identify the demographic, socioeconomic, geographic, and structural factors that determine the choice of tourism segment. Understanding such determinants constitutes a tool for the formulation of public policies aimed at enhancing sectoral performance, outlining pathways for a more inclusive, sustainable, and economically viable tourism.

3 METHODOLOGY

This study adopts a quantitative, exploratory, and descriptive approach to record and analyze the studied phenomena and delineate the conditions of the research object (Creswell; Creswell, 2021). To this end, the Multinomial Probit (MNP) econometric model is employed.

3.1. The multinomial Probit Model

The application of the Multinomial Probit model is justified by the nature of the dependent variable, which is a nominal categorical variable with more than two unordered categories (Greene, 2012). The procedure estimates the effect of explanatory variables on the probability of choosing among multiple possible outcomes, without assuming a hierarchy among the categories (Long & Freese, 2014). The MNP was chosen over the Multinomial Logit model because it does not require the Independence of Irrelevant Alternatives (IIA) assumption, allowing for more realistic correlations among alternatives (Greene, 2012).

The model estimates the probability of an individual i belonging to a category j , where $j \in U$, and $U = \{\text{Nature and Adventure, Sun and Beach, and Culture and Gastronomy}\}$, relative to the reference category k (Other Leisure Tourism Segment). The respective estimate is conditional on a vector of individual characteristics X_i . Formally, according to Greene (2012), the probability of choosing alternative j is given by:

$$P(X_i) = \Phi(X_i' \beta_j)$$

- $P(X_i)$ is the probability of individual i belonging to category j ;
- X_i is the vector of independent (explanatory) variables for individual i ;
- β_j is the vector of coefficients associated with category j , to be estimated; and
- Φ is the cumulative distribution function of the standard normal (multivariate).

Consider that individual i faces j a mutually exclusive alternatives for choosing a tourism segment in Brazil, where:

- $j = 1$: Nature or Adventure;
- $j = 2$: Sun and Beach;
- $j = 3$: Culture and Gastronomy; and
- $j = 4$: Other Tourism Segment.

The individual's choice is modeled based on a latent utility function U_{ij} associated with each alternative j :

$$U_{ij} = X_i' \beta_j + \epsilon_{ij}$$

Where:

- U_{ij} is the unobserved utility of individual i in situation j .
- ϵ_{ij} represents the random error term with a multivariate normal distribution.

It is assumed that individual i chooses alternative j that maximizes their satisfaction:

$$P(X_i) = P(U_{ij} > U_{il}, \forall l \neq j)$$

Substituting U_{ij} , we obtain:

$$P(X_i) = P(\epsilon_{il} - \epsilon_{ij} < X_i' \beta_j - X_i' \beta_l, \forall l \neq j)$$

Model validation incorporated statistical techniques suitable for complex sample designs, ensuring the correction of standard errors and the representativeness of the results. The overall and individual significance of the predictors

was assessed using Wald tests, while the model fit was verified through log-likelihood, pseudo- R^2 , and the Akaike (AIC) and Schwarz (BIC) information criteria (Long & Freese, 2014).

The model is based on Random Utility Theory, premised on the assumption that the tourist selects the alternative that maximizes their latent utility (Train, 2009). The categorical dependent variable was structured based on question S08013A, which asks the respondent: "What type of leisure did you seek on your trip?". According to the data in Table 1, the sample presents the highest relative frequency in the Sun and Beach segment (48.04%), followed by Culture and Gastronomy (21.38%), and Nature and Adventure (21.37%). Based on this distribution, the Multinomial Probit model captures the marginal probability of choosing each segment as a function of individual and geographic attributes, assuming that the error terms follow a multivariate normal distribution.

Table 1 - Classification Criteria of the Sought Tourism Segment

Dependent Variable (Tourism Segment)	Proportion (%)	Classification Criteria According to Conceptual Frameworks
Sun and Beach	48.04%	Recreation, entertainment, or rest activities in coastal environments, conditioned by the presence of sun and heat.
Culture and Gastronomy	21.38%	Experiences focused on engaging with elements of historical and artistic heritage, as well as events that value local identity and tangible and intangible assets.
Nature and Adventure	21.37%	Integrates Ecotourism, focused on the sustainable use of natural heritage and environmental awareness, and Adventure Tourism, which prioritizes recreational activities of physical challenge.
Other Leisure Tourism Segments	9.21%	Trips with residual leisure-driven motivations, such as sporting practices, specific events, or categories not classified in the previous groups.

Source: Authors' own elaboration based on PNAD Tourism (2023 and 2024 Compilation) and MTUR (2006).

By proposing these dependent variables, it is expected that the destination groups are directly related to the explanatory variables, with emphasis on the origin region variable, given the predominance of proximity tourism and the affinity for segments consistent with local culture (Cruz *et al.*, 2024), whose impact will be isolated by the model in relation to other socioeconomic and demographic drivers.

3.2 Data and variables

The analyses were conducted using secondary data from the 2023 and 2024 PNAD Tourism, provided by the IBGE. The microdata from these two survey editions were consolidated to increase sample robustness and mitigate potential specific annual distortions. The estimates were processed in Stata software using a sample of 40,282 observations, incorporating sample weights (V1032), sampling strata, and Primary Sampling Units (PSU), ensuring that the estimates and standard errors reflect the representativeness of the Brazilian population in the 2023-2024 biennium. Thus, the sample size reflects the strict filter of respondents, and the variable (V1032) corresponds to the calibrated sample weight provided by the IBGE, allowing statistical inferences to be expanded to the Brazilian population volume.

Several studies support the choice of independent variables used in the empirical model. The selection of variables (Table 2) is based on Johnson and Ashworth (1990), who suggest integrating economic and demographic factors, and on the review by Camara *et al.* (2022), which highlights the relevance of geographic and structural aspects, as well as physical distance, in demand modeling.

Table 2 – Description of the variables used in the model

(continue)

Category and Reference (Base = 0)	Reason for Choice	Dummy Variables Included in the Model (= 1; otherwise = 0)
Gender (Base: Male)	Identify gender disparities in segment choice.	Female
Age Group (Base: Youth up to 25 years old)	Assess the impact of the life cycle on tourist preferences.	Adult (26 to 59 years old)
		Elderly (60 years and over)
Color or Race (Base: White)	Analyze social asymmetries in access to leisure.	Yellow/Indigenous Peoples
		Pardo
		Black

Table 2 – Description of the variables used in the model

(conclusion)

Category and Reference (Base = 0)	Reason for Choice	Dummy Variables Included in the Model (= 1; otherwise = 0)
Origin Region (Base: North)	Measure the effect of distance and regional disparities.	Midwest
		Northeast
		Southeast
		South
Situation (Base: Urban)	Verify the behavioral contrast between urban and rural residents.	Rural
Income Bracket (Base: Up to 1 Minimum Wage - MW)	Estimate income elasticity and budget constraints.	1 to 2 MW
		2 to 3 MW
		3 to 5 MW
		More than 5 MW
Education Level (Base: No Formal Education)	Assess the effect of social capital on demand segmentation.	Completed Elementary School
		Completed High School
		Higher Education or more
Accommodation (Base: No Accommodation)	Control for stay patterns.	Commercial Accommodation
		Private Accommodation
Transport Mode (Base: Land)	Analyze the effect of the transport mode.	Air
		Maritime

Source: Authors' own elaboration based on PNAD Tourism (2023 and 2024 Compilation).

Notes: MW = Minimum Wage. All variables included in the model operate as dummy variables, assuming a value of 1 for the specified characteristic and 0 otherwise. The reference categories (Base) represent the control group omitted from the regression.

Because the empirical model is composed of categorical variables converted into binary indicators (dummies), as described in Table 2, it was necessary to omit a reference category for each group to avoid the dummy variable trap and perfect multicollinearity issues (Wooldridge, 2010). The data treatment included the exclusion of variables with low variability or statistical redundancy, ensuring the model's explanatory power (Gujarati & Porter, 2011).

4 RESULTS

This section presents the descriptive results and the proposed model, generating analyses that contribute to achieving the study's objective: to analyze how demographic, socioeconomic, geographic, and structural factors influence the choice of tourist destinations in Brazil.

4.1. Demographic, socioeconomic, geographic, and structural characteristics

Table 1 presents the comparative profile of the tourism segments, in which it can be observed that destinations are sought by audiences with multiple characteristics, such as age group, color or race, income, education level, and geographic origin. Such characteristics expose details that align with the proposed econometric model, highlighting the particularities of each regional market.

The profile of the tourist seeking the Culture and Gastronomy segment is concentrated in the white population (65.17%). Furthermore, the largest share has completed higher education (45.71%). This result may reflect the profile of visitors residing in the main urban and economic centers of the country. The majority is concentrated in the Southeast (52.89%) and South (20.68%) regions. Additionally, the urban population most frequently seeks this type of leisure (96.56%). A marked preference for air travel (35.37%) is observed, compared to the other segments, as well as for commercial accommodation (61.73%), values substantially higher than the overall averages of 20.23% and 57.60%.

Table 3 - Descriptive Statistics – Tourist Profile by Tourism Segment

	Culture and Gastronomy	Nature and Adventure	Sun and Beach	Other	Proportion of the Total
Gender					
Male	48.28%	48.85%	48.16%	50.71%	48.57%
Female	51.72%	51.15%	51.84%	49.29%	51.43%
Color or Race					
White	65.17%	57.73%	58.21%	57.16%	59.50%
Black	6.62%	7.74%	8.58%	8.57%	7.98%
Parda	26.60%	33.28%	32.05%	32.68%	31.21%
Yellow and Indigenous Peoples	1.60%	1.25%	1.15%	1.59%	1.31%
Origin Region					
North	3.44%	4.34%	3.93%	3.78%	3.90%
Northeast	16.43%	13.69%	18.60%	17.65%	17.00%
Southeast	52.89%	56.32%	53.91%	52.62%	54.09%
South	20.68%	14.69%	18.13%	16.84%	17.82%
Midwest	6.56%	10.97%	5.44%	9.10%	7.20%
Age Groups					
Youth (up to 25 years old)	28.53%	31.81%	34.01%	32.72%	32.25%
Adult (26 to 59 years old)	56.87%	54.79%	53.91%	52.17%	54.57%
Elderly (60 years and over)	14.60%	13.40%	12.09%	15.11%	13.18%
Situation					
Rural	3.44%	3.69%	4.00%	5.57%	3.96%
Urban	96.56%	96.31%	96.00%	94.43%	96.04%
Level of Education					
No Formal Education	7.11%	9.09%	10.40%	10.91%	9.46%
Completed Elementary School	29.04%	31.23%	34.62%	32.65%	32.51%
Completed High School	18.14%	23.68%	22.23%	25.91%	22.00%
Higher Education or more	45.71%	36.00%	32.74%	30.53%	36.03%
Income Bracket					
1 Minimum Wage - MW	6.35%	7.43%	9.21%	9.51%	8.24%
1 to 2 MW	13.73%	16.11%	18.45%	17.31%	16.84%
2 to 3 MW	10.34%	10.14%	9.82%	9.14%	9.94%
3 to 5 MW	11.83%	11.98%	10.76%	9.34%	11.12%
More than 5 MW	57.75%	54.34%	51.76%	54.70%	53.86%
Primary means of transport					
Air	35.37%	15.23%	16.42%	16.53%	20.23%
Maritime	0.91%	0.54%	0.73%	0.79%	0.73%
Land	63.73%	84.23%	82.85%	82.68%	79.04%
Accommodation					
Commercial	61.73%	57.38%	59.70%	37.56%	57.60%
Private	26.44%	33.58%	33.99%	51.02%	33.85%
No Accommodation	11.83%	9.04%	6.31%	11.43%	8.54%

Source: Data from the Continuous National Household Sample Survey (PNAD Contínua) - Tourism Module (Years 2023 and 2024, leisure trips).

Note: Due sample weights were considered. Population Size with Weights: 29,796,966, Number of Observations: 40,282, Number of Strata: 560.

In the Nature or Adventure segments, a diversified visitor profile is observed. The majority is composed of white individuals (57.73%) and individuals in age groups close to the national average. The Southeast region concentrates the largest share of visitors (56.32%). Education levels, transport modes, and accommodation types follow the pattern observed in the overall sample.

The Coastal segment presents characteristics similar to those of the other groups. Demand is concentrated among residents of the Southeast (53.91%) and South (18.13%) regions. Air travel is utilized by 16.42% of travelers. Furthermore, the proportion of tourists with an income of up to five minimum wages is lower than the national average.

Collectively, the groups exhibit a slight predominance of women (51.43%), adults (54.57%), and residents in urban areas (96.04%). Land transport is the primary means of travel (79.04%). Across all groups, the income bracket exceeding five minimum wages predominates (53.86%). This result indicates that higher income levels constitute a common characteristic among consumers of these tourism segments in Brazil.

Given the above, the results indicate that the tourist profile varies according to the chosen destination segment. The differences observed in income, education levels, origin region, age group, and transport mode support the classification of visitors into distinct groups. This segmentation provides the empirical basis for estimating the Multinomial Probit model. The model will allow for the analysis of how individuals' socioeconomic and demographic characteristics affect the probability of choosing each tourism segment.

4.2 Econometric result

The analysis of the Multinomial Probit model results identifies the socioeconomic and demographic factors associated with the choice of each tourism segment and contributes to understanding tourism dynamics in Brazil. The models were estimated sequentially, starting with a parsimonious specification and progressively incorporating new variables until obtaining the complete model, presented in Appendix A. This strategy allowed for the evaluation of coefficient stability and estimate robustness, as specified below:

- Model 1 (Baseline Specification): Encompasses only fundamental demographic and human capital characteristics.
- Model 2 (Test Specification): Incorporates the variables from the previous stage, plus socioeconomic indicators.
- Model 3 (Complete Specification): Complete specification, integrating tourism context variables (transport and accommodation).
- Model 4 (Alternative Specification): Estimation via Multinomial Logit (mlogit) to test for robustness and sensitivity to functional form. Given that the Probit model overcomes the Independence of Irrelevant Alternatives (IIA) assumption, it was retained as the preferred specification (Cameron & Trivedi, 2005; Long & Freese, 2014).

The model estimates (Appendix A) confirm the consistency of the drivers of tourism choice. The goodness-of-fit is attested by the Wald test (χ^2), which shows overall significance ($p < 0.001$) across all specifications. The sequential strategy demonstrates that Model 3 (complete specification) best describes the phenomenon, presenting the lowest values for the Akaike (AIC) and Schwarz (BIC) information criteria, dropping from 72.9 million in Model 1 to 67.2 million in Model 3. The robustness of the results is ratified by the comparison between Model 3 (Probit) and Model 4 (Logit), given that the maintenance of the signs, magnitudes, and significance levels of the coefficients indicates that the results are not sensitive to the choice of functional form. Finally, the use of sample weights and robust standard errors ensures that the estimators are efficient, reliable, and unbiased.

The results presented in this section correspond to the marginal effects estimated through the Multinomial Probit model. The estimates express the average variation in the probability of choosing each tourism segment relative to the reference category, conditioned on the observed characteristics of the individuals. Since this is an observational model, the results should be interpreted as statistical associations between the predictors and the choice of tourism segment, not as causal relationships. To facilitate interpretation, the marginal effects are presented in the form of predicted probabilities, as recommended by Williams (2012), and expressed in percentage points (p.p.). The coefficients and other statistics of the estimated models are found in Appendix A.

The analysis is divided into thematic sequences to facilitate data interpretation, starting with geographic, structural, socioeconomic, and demographic factors. The detailed results of the estimates for the 2023-2024 biennium are shown in Table 2. Graphs 1 to 3 display the interactions between the descriptive variables focused on the transport mode, which proved to be the most relevant among the tests conducted. As expected, a significant influence of geographic and structural factors on destination choice is observed, as evidenced by the proportion of tourists in regions with a coastline, led by the Northeast (51.7 p.p.), but closely followed by the North (49.3 p.p.), South (48.5 p.p.), and Southeast (47.5 p.p.). This indicates that the preference for beach destinations is a widespread trait in the country, with the Midwest region (36.7 p.p.) being the only exception. In comparative terms, the propensity of a Northeast resident to choose this segment is 40.87% higher than that of a Midwest inhabitant, reflecting the strong impact of the latter region's geographic inland location on decision-making.

Table 4 - Predicted Probabilities for Tourist Group Choice (2023 and 2024)

Dependent Variable		Culture and Gastro-nomy		Nature and Adventure		Sun and Beach	
Description/Descriptive Variable		Odds	Standard Errors	Odds	Standard Errors	Odds	Standard Errors
Gender	Male	21.8	(0.40)	21.4	(0.40)	47.1	(0.50)
	Female	21.4	(0.40)	21.3	(0.40)	48.4	(0.40)
Color or Race	White	22.3	(0.30)	20.9	(0.40)	47.5	(0.40)
	Black	20.3	(0.90)	20.5	(1.00)	49.6	(1.20)
	Parda	20.3	(0.50)	22.5	(0.50)	48.0	(0.60)
	Yellow and Indigenous Peoples	23.2	(2.40)	20.6	(2.30)	44.6	(2.80)
Origin Region	North	18.1	(1.00)	24.9	(1.30)	49.3	(1.40)
	Northeast	23.0	(0.60)	16.6	(0.50)	51.7	(0.70)
	Southeast	20.6	(0.40)	22.4	(0.40)	47.5	(0.50)
	South	25.6	(0.50)	17.4	(0.50)	48.5	(0.60)
	Midwest	17.8	(0.70)	33.2	(0.80)	36.7	(0.90)
Age Groups	Youth up to 25 years old)	21.8	(0.60)	20.3	(0.50)	49.0	(0.70)
	Adult (26 to 59 years old)	21.3	(0.40)	21.8	(0.40)	47.7	(0.50)
	Elderly (60 years and over)	22.3	(0.60)	22.0	(0.70)	45.6	(0.80)
Situation	Rural	21.2	(1.00)	19.6	(0.90)	47.1	(1.10)
	Urban	21.6	(0.30)	21.4	(0.30)	47.8	(0.30)
Level of Education	No Formal Education	17.7	(0.50)	22.9	(0.60)	49.0	(0.70)
	Completed Elementary School	17.2	(0.80)	20.7	(0.90)	52.0	(1.00)
	Completed High School	20.9	(0.50)	20.6	(0.50)	49.4	(0.60)
	Higher Education or more	25.5	(0.50)	21.4	(0.50)	44.5	(0.60)
Income Bracket	1 Minimum Wage - MW	18.9	(0.80)	19.6	(0.80)	51.6	(1.10)
	1 to 2 MW	18.8	(0.60)	20.2	(0.70)	51.7	(0.80)
	2 to 3 MW	21.9	(0.90)	21.4	(0.90)	47.9	(1.10)
	3 to 5 MW	20.2	(0.70)	23.0	(0.90)	48.1	(1.00)
	More than 5 MW	23.2	(0.40)	21.7	(0.40)	45.7	(0.50)
Primary means of transport	Air	36.5	(0.70)	15.0	(0.60)	39.2	(0.70)
	Maritime	22.1	(2.70)	15.2	(2.10)	53.7	(3.40)
	Land	17.6	(0.30)	23.2	(0.30)	50.0	(0.40)
Accommodation	Commercial	21.0	(0.30)	21.7	(0.40)	51.2	(0.40)
	Private	19.1	(0.40)	20.4	(0.50)	46.4	(0.60)
	Non- Accommodation	34.9	(1.00)	22.4	(0.90)	31.1	(1.00)

Source: Data from the Continuous National Household Sample Survey (PNAD Contínua) - Tourism Module (Years 2023 and 2024, leisure trips).

Notes: Predicted Marginal Probabilities from Model 3. The values represent the Predicted Probabilities for each category. Robust standard errors are presented in parentheses. It was decided not to use significance asterisks, prioritizing the analysis of the magnitude of effects and the precision of estimates. Due to the substantial sample size (N = 40,282), all estimated probabilities are statistically different from zero at $p < 0.001$.

Linked to the same logic of geographic influence, within the Nature or Adventure segment, a lower propensity of choice is observed for the Northeast and South regions, whose predicted probabilities stand at 16.6 p.p. and 17.4 p.p., respectively, levels approximately 50% lower than that of the Midwest region (33.2 p.p.). This regional dynamic is reiterated in the South region's preference for the Culture and Gastronomy segment (25.6 p.p.), whose probability is 43.82% higher than that observed in the Midwest (17.8 p.p.).

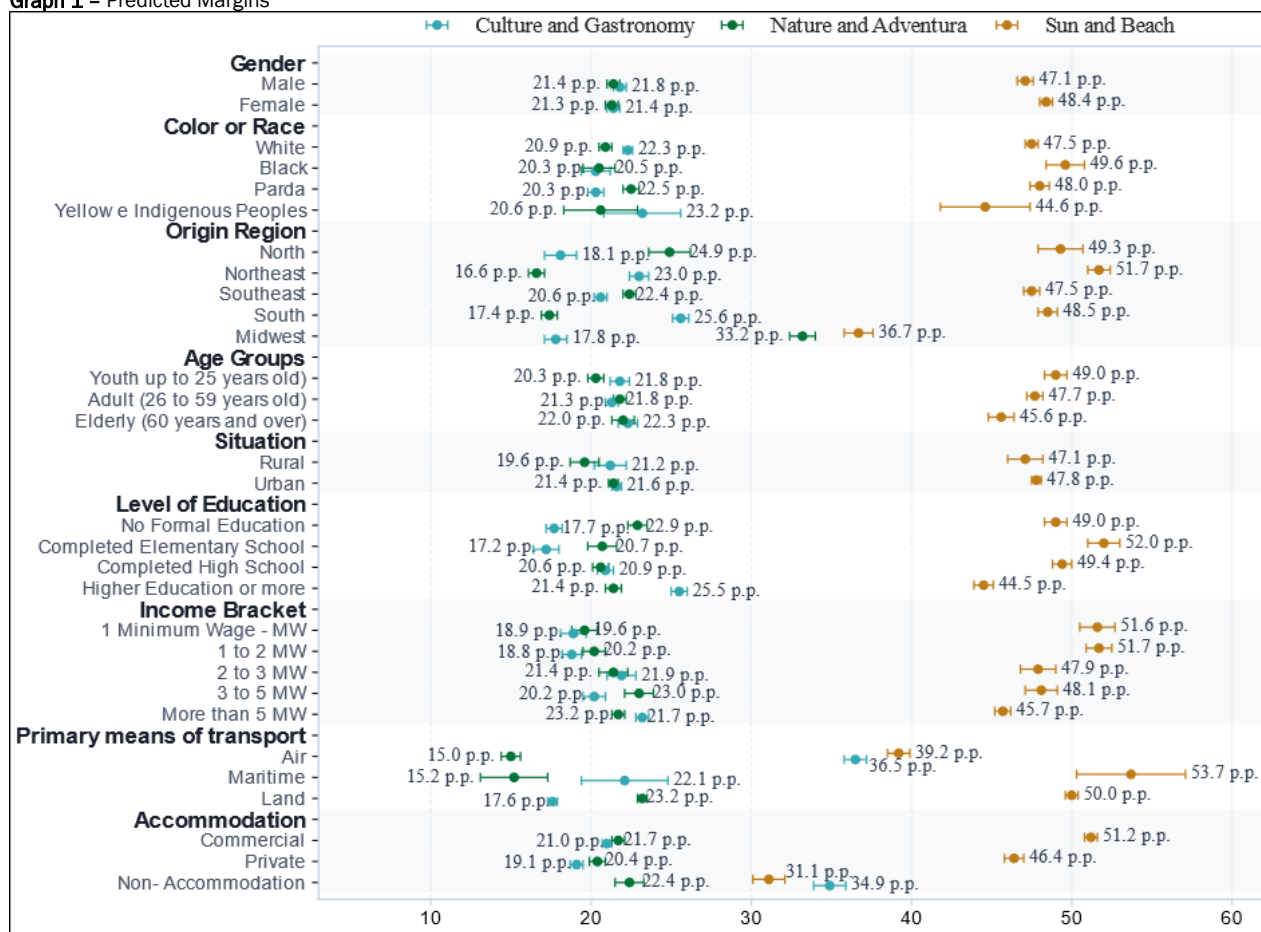
Residents of urban areas, compared to those in rural areas, presented discrete oscillations, with a tendency to choose Nature or Adventure 1.8 p.p. higher, that is, a relative increase of 10%, which suggests an escape movement from large urban centers in search of tourism segments integrated into the environment.

A propensity for air travel is observed in the Culture and Gastronomy segment (36.5 p.p.), in contrast to land transport (17.6 p.p.). This result demonstrates that the probability of using air travel doubles when the travel motivation is cultural.

However, in the Sun and Beach tourism segment, a contrary behavior is verified. Maritime transport presents a higher probability (53.7 p.p.) compared to air travel (39.2 p.p.), although the probabilities are also high for land

transport (50 p.p.). Land transport also prevails in Nature or Adventure destinations (23.2 p.p.), showing a propensity 54.66% higher compared to air travel (15 p.p.). This context suggests that nature tourism exhibits a high dependence on road infrastructure and geographic proximity, which may also reflect the limitations of accessing these destinations via other transport modes.

Graph 1 – Predicted Margins

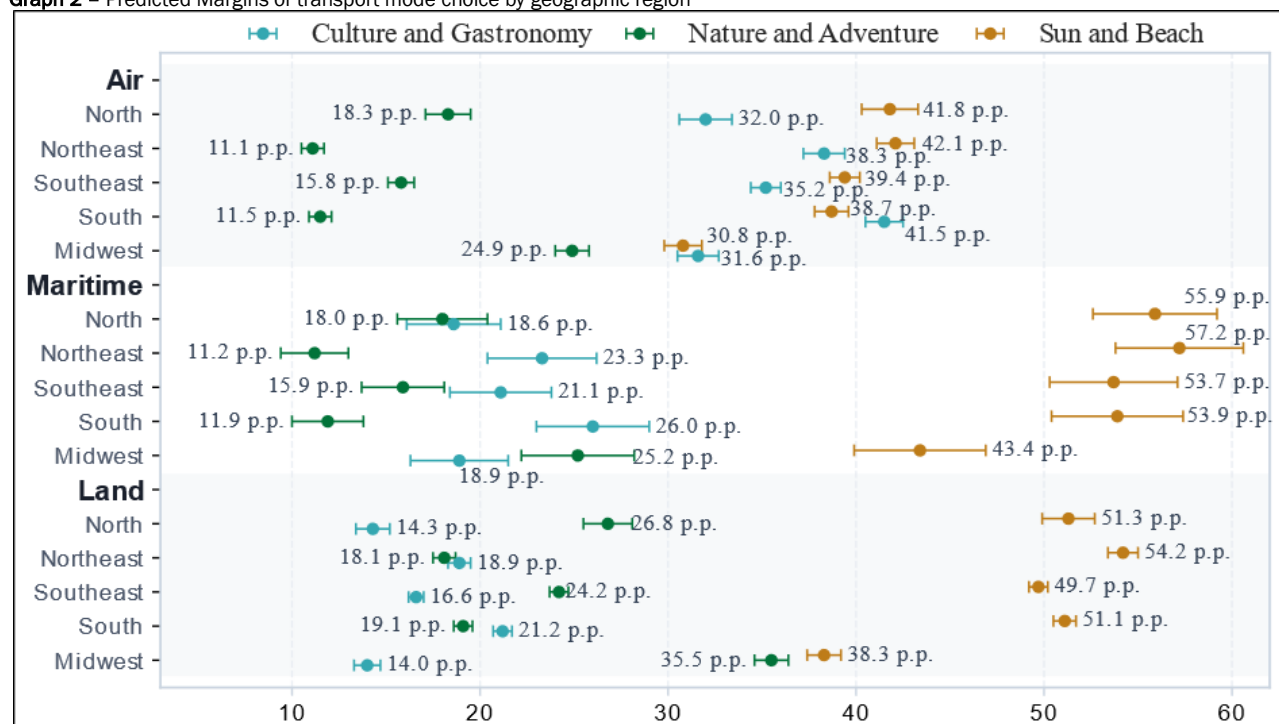


Source: PNAD Tourism (2023 and 2024). Authors' own elaboration.

Notes: Predicted Marginal Probabilities of Model 3. Values represent the Predicted Probabilities for each interaction between categories.

When interacting geographic origin with the transport mode (Graph 2), the relationship between land transport and the nature segment is concentrated in the Midwest. In this region, the probability reaches 35.5 p.p., a value 53% higher than the national average (23.2 p.p.) for this type of travel. The other transport modes also show higher probabilities in the Midwest when related to the Nature segment, indicating that the region possesses an identity geared toward this segment.

Another region that stands out is the South, specifically in the segment focused on Culture and Gastronomy, where the use of air travel presents regional variations, in which the probability of choosing this segment via air travel reaches 41.5 p.p., a rate 13.69% higher than that registered in the national scenario, configuring itself as the peak of preference for cultural tourism in the entire model. The other transport modes also proved to be more probable for the cultural segment when related to the South Region, surpassing the rates of the other macro-regions for these same means of transport. In the Sun and Beach segment, the South demonstrates, with the exception of air travel, an average similar to the other coastal regions.

Graph 2 – Predicted Margins of transport mode choice by geographic region

Source: PNAD Tourism (2023 and 2024). Authors' own elaboration.

Notes: Predicted Marginal Probabilities of Model 3. Values represent the Predicted Probabilities for each interaction between categories.

The Sun and Beach segment, on the other hand, exhibits greater stability in the Northeast, maintaining high probabilities in both land transport (54.2 p.p.) and maritime transport (57.2 p.p.), with the latter being about 5.5% higher than the former. However, while in land and maritime transport the Sun and Beach segment widely dominates in all coastal regions, the use of air travel retracts, such that other segments gain significant growth in all macro-regions, which begin to register probabilities above 31.6 p.p., reaching, in the cultural segment, a peak of 41.5 p.p. in the South and 38.3 p.p. in the Northeast. This dynamic indicates that air travel is associated with greater diversification across tourism segments.

Accommodation infrastructure is also associated with the choice of the Sun and Beach segment (Graph 1). The probability of choosing this segment is higher among tourists who use commercial accommodation (51.2 p.p.) than among those who do not use accommodation (31.1 p.p.), a difference of 20.1 percentage points, equivalent to an increase of 64.6%. Private accommodation also presents a high predicted probability (46.4 p.p.), indicating a longer stay in accommodation establishments during trips destined for this segment.

In the cultural segment, the trend reverses, given that the tourist's propensity to not use accommodation (34.9 p.p.) is 66.19% higher than to opt for commercial accommodation (21.0 p.p.), suggesting short-duration tourism types, such as day-trip excursions. In the Nature and Adventure segment, the probabilities are very close, demonstrating that there is a lower dependence of destination choice in relation to hotel services.

The analysis of the demographic and socioeconomic factors of the individuals' profiles reveals multidimensional dynamics. However, the gender variable presented a minimal variation in the coefficients, suggesting that this characteristic is not a primary driver in the choice of leisure modality.

Regarding socioeconomic aspects, education level presented significant effects. The probability of choosing the Culture and Gastronomy segment is higher among individuals with completed Higher Education (25.5 p.p.). Compared to individuals with no formal education (17.7 p.p.), an increase of approximately 44.06% in the propensity to choose is observed. Conversely, individuals with completed Elementary School display a greater affinity for the Sun and Beach segment (52.0 p.p.), a propensity 16.85% higher than that of individuals with higher education (44.5 p.p.)

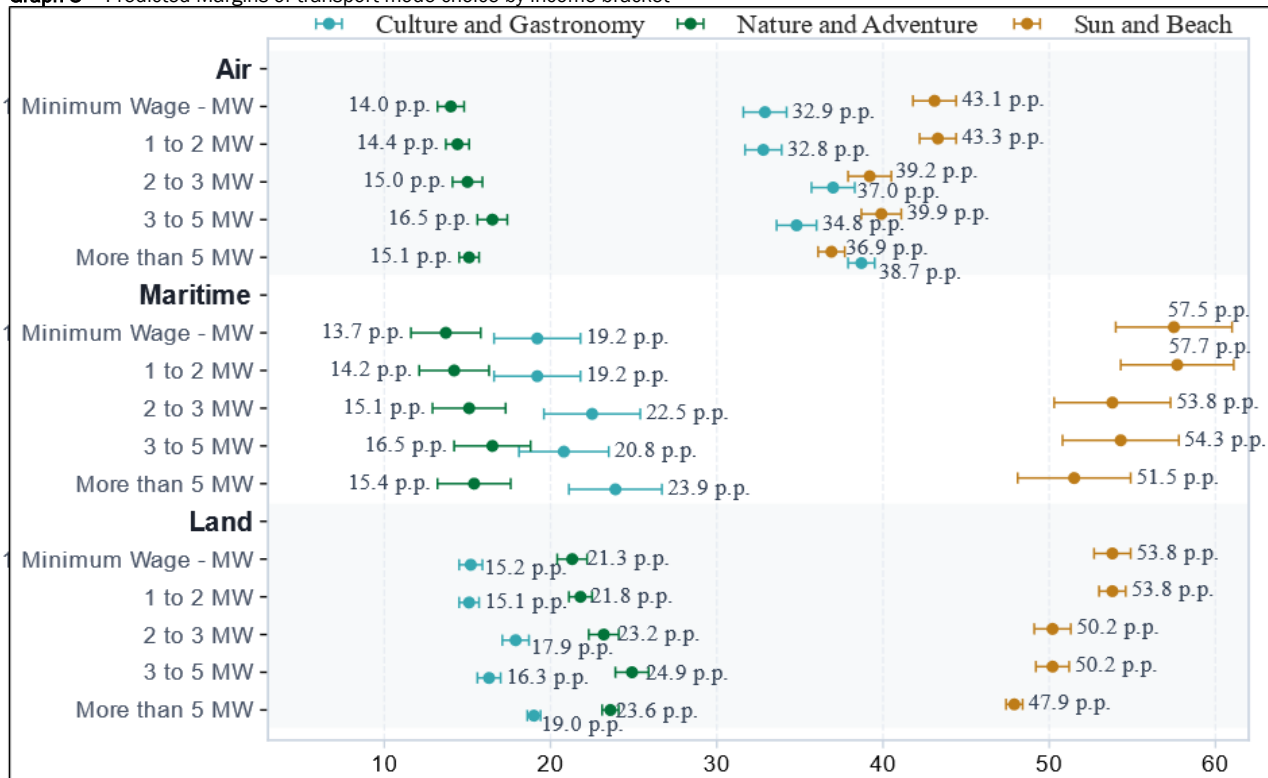
Income is also associated with the choice of tourism segment. It is verified that individuals with an income higher than five minimum wages present a higher probability of choosing the Culture and Gastronomy segment (23.2 p.p.) than those with an income of up to one minimum wage (18.9 p.p.), a difference of 22.8%. In the opposite direction,

the probability of choosing the Sun and Beach segment is higher among lower-income individuals (51.6 p.p.), indicating a greater concentration of this segment among tourists belonging to the lowest income brackets.

When interacting the income bracket with the transport mode (Graph 3), it is noted that the relationship between the income bracket and the transport mode indicates that air travel acts as a driver for the Culture and Gastronomy segment, regardless of the income level. Even for the bracket of up to 1 MW, the use of an airplane raises the probability of choice to 32.9 p.p., a value about 2 times that observed for land transport for this same social class (15.2 p.p.). At the top of the income pyramid (more than 5 MW), this propensity reaches 38.7 p.p., which represents a 17.6% increase compared to the lowest income base under the same transport mode. In the income bracket above 5 MW, across all transport modes, there is a prevalence of cultural consumption.

In the Nature and Adventure segment, a prevalence of land transport is observed across all income levels. For individuals with an income between 3 and 5 MW, the probability of opting for this segment via land travel is 24.9 p.p., a rate roughly 50.9% higher than that registered for air travel within the same bracket (16.5 p.p.). This income bracket remains higher than the others across all transport modes linked to the Nature and Adventure segment. There is an inclination towards an increase in the consumption of this segment across all transport modes, which loses momentum in the income bracket above 5 MW, indicating that an increase in income is directly related to greater consumption across all transport modes.

Graph 3 – Predicted Margins of transport mode choice by income bracket



Source: PNAD Tourism (2023 and 2024). Authors' own elaboration.

Notes: Predicted Marginal Probabilities of Model 3. Values represent the Predicted Probabilities for each interaction between categories.

The Sun and Beach segment remains the primary choice among users of land and maritime transport across all income brackets. However, the probability of choice decreases gradually as income increases. In air travel, for example, the predicted probability drops from 43.1 p.p. among individuals with an income of up to one minimum wage to 36.9 p.p. among those with an income higher than five minimum wages, a difference of 14.4%. These results indicate that higher income levels are associated with a lower probability of choosing the Sun and Beach segment, especially among tourists using air travel.

Regarding demographic factors (Graph 1), it is verified that the age variable presented effects of lesser magnitude. However, a 7.45% higher propensity to choose Sun and Beach is observed among young people (49.0 p.p.) compared to the elderly (45.6 p.p.). This pattern diverges from that observed in the Nature or Adventure segment, which reveals greater attractiveness for the adult (21.8 p.p.) and elderly (22.0 p.p.) demographics, surpassing the propensity of the young demographic (20.3 p.p.).

The race/color variable revealed significant asymmetries that reflect the social markers of access to leisure in the country. In the Culture and Gastronomy segment, Black (20.3 p.p.) and Pardo (20.3 p.p.) individuals present a propensity 2.0 p.p. lower when compared to White individuals (22.3 p.p.). In relative terms, the probability of choosing this segment is 9.85% higher for the White group. In contrast, the highest probability for cultural and gastronomic consumption is concentrated in the Yellow/Indigenous Peoples bracket (23.2 p.p.).

Regarding race/color, a similar distribution of the probability of choosing the Sun and Beach segment is observed among the main racial groups. The exception is the Yellow/Indigenous Peoples group, whose predicted probability (44.6 p.p.) is 10.1% lower than that observed among Black individuals (49.6 p.p.), who present the highest propensity for this segment. In the Nature and Adventure segment, Pardo individuals register the highest probability of choice (22.5 p.p.), a value 9.8% higher than that observed among Black individuals (20.5 p.p.) and also higher than that registered among White individuals (20.9 p.p.).

5 DISCUSSIONS OF RESULTS

This study examined the demographic, socioeconomic, geographic, and structural factors that shape destination choice in Brazil. The Multinomial Probit model results reveal that segment choices follow structured patterns, in which variables such as education levels, income, and geographic location exert a determining weight on the perceived utility of each segment, corroborating the understanding that tourism decision-making is a multivariable phenomenon, a construct of the interaction between sociodemographic characteristics and extrinsic constraints (Camara et al., 2022; Moutinho, 1987).

The analysis demonstrated that Brazilian tourism remains heavily influenced by regional concentration. The North-east region's high propensity for the Sun and Beach segment (51.7 p.p.) and the South region's for Culture and Gastronomy (25.6 p.p.) validates the thesis of Cruz, Paula and Théry (2024, p. 142) in which "The demographic, income, and circulation infrastructure concentration in Coastal States of the Southeast, South, and Northeast regions, for example, largely explains the concentration of tourism in this fragment of the national territory." This dynamic demonstrates that supply adapts to demand preferences, reflecting everything from eminently utilitarian and hedonic pursuits on the coast (Bolzan & Mendes Filho, 2023) to the strong linkage of domestic demand with regional cultural specificities (Lohmann et al., 2022).

The results corroborate this pattern, given that Northeast residents display a high probability of choosing destinations located within their own region, especially in the Sun and Beach segment. A similar trend is observed among South Region residents, who also show a greater propensity to opt for regional attractions. For a Midwest resident, for instance, physical distance acts as a geographic filter for coastal destinations, making the Nature and Adventure segments a higher utility option due to lower logistical costs, reaffirming the importance of proximity tourism and the reduction of travel time (Tavares & Leitão, 2017), in a scenario where the psychological dimension of escape and rest often overrides classic demographic determinants themselves (Ferko et al., 2025).

In this sense, the distance from origin hubs influences the choice of transport modes. The strong association between the Culture and Gastronomy segment and the propensity for air travel (36.5 p.p.) reveals that the tourist is willing to use this mode, even though it is considered more expensive, confirming the role of air transport as a fundamental element in accelerating connectivity between geographically distant markets (Fernandes et al., 2020).

However, in the Sun and Beach and Nature tourism segments, the transport modes maintained their primary characteristics, with the dominance of land and maritime transport. These findings are supported by the literature, which points to limited airport infrastructure in natural destinations as an access constraint, corroborating that distance and transport mode act as influencing factors for interregional trips, while land transport may have a greater predominance in proximity trips (Cruz et al., 2024; Masieiro & Zoltan, 2013; Santos et al., 2012), where the search for environmental immersion and the affective component generated by the destination compensate for infrastructure limitations (Chaves et al., 2024).

The association between higher education levels, higher income, and the choice of the Culture and Gastronomy segment indicates that this market is more frequent among individuals of a higher socioeconomic level. Individuals with completed higher education, for example, present a 48.3% higher probability of choosing this segment. One possible explanation lies in the costs associated with the tourism experience, given that cultural and gastronomic activities frequently involve expenses with tickets, dining, and other services, unlike part of the Sun and Beach destinations, which can be accessed through public spaces (Artal-Tur et al., 2018). This result converges with Silva

and Araújo (2022), who highlight the influence of socioeconomic inequalities on access to leisure and on tourism consumption patterns.

This asymmetry is also reflected in the diversification of consumption among higher classes, in which the decline in the probability of Sun and Beach trips in the income bracket above 5 minimum wages (where air travel drops to 36.9 p.p.) indicates the search for new niches (Fletcher et al., 2018), such as wine routes and cultural festivals, environments in which this share of demand consumes the experience in a strongly utilitarian manner, often valuing tangible quality and hospitality over the mere intangible absorption of heritage (Amaral & Flores, 2025; Zucco et al., 2024).

6 FINAL CONSIDERATIONS AND LIMITATIONS

This study analyzed the demographic, socioeconomic, geographic, and structural factors associated with the choice of tourism destinations in Brazil. The Multinomial Probit model results show that the choice of tourism segments is associated with the characteristics of individuals and the trips undertaken, revealing distinct demand patterns among the analyzed segments.

The study demonstrates that geographic and socioeconomic variables act as explicit drivers in destination choice, where the traveler's origin, education level, and income define the utility among the Sun and Beach, Nature, or Culture segments. The strong association between the cultural segment and air travel, in contrast to nature tourism's dependence on road transport, indicates that transport infrastructure is an inseparable component of destination choice, acting as a potential structural barrier to accessing segments such as Nature and Adventure.

The interaction of transport modes with regions and income brackets generated new findings, revealing that air travel maintains the characteristics of cultural consumption across income levels, while land transport sustains the preference for nature. Thus, the available infrastructure shapes the purpose of the trip in a more determining manner than the individual's position in the income pyramid.

These findings corroborate the geographic configuration of Brazilian tourism. For Northeast residents, physical proximity to the coast drastically reduces travel costs, consolidating the Sun and Beach segment as the highest utility choice. Conversely, for Midwest tourists, the distance from the coast increases the cost of accessing the sea, making Nature and Adventure destinations more attractive and competitive alternatives, functioning as direct substitutes for coastal leisure.

Connecting these lines of evidence to the central objective, it is concluded that the tourist profile is shaped by an interdependence between human capital and logistical viability. The strong association between the use of air travel and access to cultural destinations by higher-income and higher-education profiles reveals a historical bottleneck of social inclusion in the sector. Therefore, tourism promotion must move beyond mere marketing incentives and integrate the expansion of logistical infrastructure with effective public policies that reduce travel costs, allowing individuals with low income and lower education levels to also access higher value-added segments, breaking away from the elitization of specific niches.

Finally, the study presents limitations stemming from the observational nature of the PNAD microdata. The lack of a causal identification strategy restricts the interpretation of the results to statistical associations among the analyzed variables. Another limitation of the study arises from the aggregation of destinations into tourism segments, a procedure that simplifies the existing heterogeneity across localities. Future research could deepen this analysis through qualitative approaches focused on choice motivations and the psychological and affective dimensions associated with destination image. Furthermore, studies based on information disaggregated by municipality could broaden the understanding of territorial differences, although this possibility is limited by the anonymization of the PNAD microdata. Investigations that explore the perception of authenticity and cultural and hedonic engagement across different niches are also recommended, in order to complement the econometric perspective with the subjectivities of the tourism experience.

REFERENCES

Agência Gov. *Em 10 anos, Turismo contribuirá com US\$ 16 trilhões na economia dos países, estima WTTC*. Agência Gov, 2024. <https://agenciagov.ebc.com.br/noticias/202404/em-10-anos-turismo-contribuira-com-us-16-trilhoes-na-economia-dos-paises-estima-wttc>. Acesso em: 22 fev. 2025.

- Almeida, C.C.R, et al. (2020). Expenditure on cultural events: preferences or opportunities? An analysis of Brazilian consumer data. *Journal of Cultural Economics* 44, 451–480. <https://doi.org/10.1007/s10824-019-09370-3>.
- Amaral, M. M. & FLORES, L. C. S. (2025). Visitors' gastronomy experiences in a winescape. *Revista Brasileira de Pesquisa em Turismo*, 19, e-3008. <https://doi.org/10.7784/rbtur.v19.3008>.
- Artal-Tur, A., Briones-Peñalver, A. J. & Villena-Navarro, M. (2018). Tourism, cultural activities and sustainability in the Spanish Mediterranean regions: a probit approach. *Tourism & Management Studies*, 14(1), 7-18,. <https://doi.org/10.18089/tms.2018.14101>.
- Barbosa, J. W. Q. (2024). Segmentação turística: conceitos e realidades. *Revista Brasileira de Pesquisa em Turismo*, São Paulo, 18, e-2826. <https://doi.org/10.7784/rbtur.v18.2826>. Acesso em: 28 fev. 2025.
- Brasil. Instituto Brasileiro de Geografia e Estatística (IBGE). *Pesquisa Nacional por Amostra de Domicílios Contínua – Turismo*. 2023 e 2024. <https://www.ibge.gov.br>. Acesso em: 11 jan. 2025.
- Brasil. Instituto Brasileiro de Geografia e Estatística (IBGE). 2024. *Gastos com turismo nacional aumentam 11,7% em 2024*. <https://agenciadenoticias.ibge.gov.br/agencia-noticias/2012-agencia-de-noticias/noticias/44624-gastos-com-turismo-nacional-aumentam-11-7-em-2024>. Acesso em: 23 jan. 2026.
- Brasil. Ministério do Turismo. *Segmentação do Turismo: marcos conceituais*. Brasília: Ministério do Turismo, 2006. <https://www.gov.br/turismo/pt-br/centrais-de-conteudo/publicacoes/segmentacao-do-turismo/segmentacao-do-turismo-marcos-conceituais.pdf>. Acesso em: 05 abr. 2026.
- Brasil. Ministério do Turismo. *Turismo brasileiro: 2023 a 2026*. Brasília: Câmara dos Deputados. <https://www2.camara.leg.br/atividade-legislativa/comissoes/comissoes-permanentes/ctur/apresentacoes-em-eventos/celso-sabino-ministro-do-turismo-23-de-agosto>. Acesso em: 18 set. 2026.
- Bolzán, R. & Mendes Filho, L. (2023). Dimensiones subyacentes de experiencias turísticas en destinos de sol y playa a partir de memorias de viaje en comunidades virtuales: el caso de turistas argentinos que visitaron el destino Natal, RN (Brasil). *Turismo, Visão e Ação*, 25(3), 523-540. <http://doi.org/10.14210/rtva.v25n3.p523-540>.
- Camara. I. P. (2022). O turismo como contributo ao planeamento e desenvolvimento regional. *Revista Projetar - Projeto e Percepção do Ambiente*, 7(3), 75–88. <https://doi.org/10.21680/2448-296X.2022v7n3ID27426>.
- Camara, I. L. P., Monteiro, J. E. D. & Marques, O. (2022). Modelos e determinantes da demanda turística internacional: perspectivas a partir da revisão sistemática da literatura para o período de 2000-2020. *Revista Brasileira de Pesquisa em Turismo*, São Paulo, 16, e-2478. <http://doi.org/10.7784/rbtur.v16.2478>.
- Cameron, A. C. & Trivedi, P. K. (2005). *Microeconometrics: methods and applications*. Cambridge university press,. Disponível em: <https://doi.org/10.1017/CBO9780511811241>.
- Chaves, P. C. P. R, et al. (2024). Nature-Based Destination Image: an empirically validated multidimensional measurement model in the Brazilian Amazon destination. *Turismo, Visão e Ação*, 26, e19227,. Disponível em: <https://doi.org/10.14210/tva.v26.19227>.
- Creswell, J. W. & CRESWELL, J. D. (2021). *Projeto de Pesquisa: Métodos Qualitativo, Quantitativo e Misto*. 5. ed. Porto Alegre: Penso.
- Cruz, R. C. A., et al. (2024). Geografias do Turismo no Brasil: uma perspectiva socioterritorial. *Territorial*, Goiás, 13(2), 139-172, jul./dez. <https://www.revista.ueg.br/index.php/territorial/article/view/16019>.
- Ferko, G. P. da S. et al. (2025). Desvendando a motivação na decisão de fazer turismo de proximidade em Roraima. *Turismo, Visão e Ação*, 27, e20224. <https://doi.org/10.14210/tva.v27.20224>.
- Fernandes, V. A. et al. (2020). How does air transport impact employment in typical tourist industry activities in Brazil? *Current Issues in Tourism*, 24(22), 3151–3164. <https://doi.org/10.1080/13683500.2020.1863925>.
- Fletcher, J, FYALL, A; Wanhill, S & Gilbert, D. (2018). *Tourism: Principles and Practice*. 6. ed. Harlow: Pearson.
- Greene, W. H. *Econometric analysis*. (2012). 7. ed. Boston: Pearson.
- Gujarati, D. N. & Porter, D. C. *Econometria Básica*. (2011). 5. ed. Porto Alegre: AMGH.
- Le-Klähn, D. T., et al. (2015). Factors affecting tourists' public transport use and areas visited at destinations. *Tourism Geographies*, 17(5), 738–757. <https://doi.org/10.1080/14616688.2015.1084527>.
- Lohmann, G. et al. (2022). O Futuro do Turismo no Brasil a partir da análise crítica do período 2000-2019. *Revista Brasileira de Pesquisa em Turismo*, São Paulo, 16, e-2456. <http://doi.org/10.7784/rbtur.v16.2456>.

- Long, J. S. & Freese, J. (2014). *Regression models for categorical dependent variables using Stata*. 3. ed. College Station: Stata Press.
- Johnson, P. & Ashworth, J. (1990). Modelling tourism demand: A summary review. *Leisure Studies*, 9(2), 145-161. <https://doi.org/10.1080/02614369000390131>.
- Masiero, L. & Zoltan, J. (2013). Tourists intra-destination visits and transport mode: a bivariate probit model. *Annals of Tourism Research*, 43, 529–546. <http://doi.org/10.1016/j.annals.2013.05.014>.
- Moutinho, L. (1987). Consumer Behaviour in Tourism. *European Journal of Marketing*, 21(10), 5-44, <https://doi.org/10.1108/EUM00000000004718>.
- Rabahy, W. A. (2019). Análise e perspectivas do turismo no Brasil. *Revista Brasileira de Pesquisa em Turismo*, São Paulo, 14(1), p. 1-13, jan./abr. <http://doi.org/10.7784/rbtur.v14i1.1903>.
- Santos, G. E. de O. et al. (2026). Impactos Econômicos do Turismo Internacional no Brasil: Avaliação pelo Modelo Insumo-Produto. *Turismo, Visão e Ação*, 28, e21260. <https://doi.org/10.14210/tva.v28.21260>.
- Santos, G. E. de O., Ramos, V. & Rey-Maqueira, J. (2012). Determinants of Multi-Destination Tourism Trips in Brazil. *Tourism Economics*, 18(6), p. 1331-1349. <https://doi.org/10.5367/te.2012.0170>.
- Santos, F. R., et al. (2024). The productive interdependence of tourist activities in Brazil. *Revista Brasileira de Pesquisa em Turismo*, São Paulo, 18, e-2886. <https://doi.org/10.7784/rbtur.v18.2886>.
- Schuster, M. da S. & Dias, V. da V. (2024). Escala de Motivação Turística (EMT): Uma forma de mensuração para investigação em contextos brasileiros. *Turismo, Visão e Ação*, 26, e19807. <https://doi.org/10.14210/tva.v26.19807>.
- Silva, J. P. da & Araujo, C. P. de. (2022). Turismo no Brasil, desigualdade social e o discurso das políticas públicas. *Sociedade e Estado*, 37(3), p. 1051–1072. <https://doi.org/10.1590/s0102-6992-202237030013>.
- Sirakaya, E & Woodside, A. G. (2005). Building and Testing Theories of Decision Making by Travellers. *Tourism Management*, 26, 815-832. <https://doi.org/10.1016/j.tourman.2004.05.004>.
- Tavares, J. M. & Leitão, N. C. (2017). The determinants of international tourism demand for Brazil. *Tourism Economics*, 23(4), 834-845. <https://doi.org/10.5367/te.2016.0540>.
- Train, K. E. (2009). *Discrete choice methods with simulation*. 2. ed. Cambridge: Cambridge University Press, 2009.
- Williams, R. (2012). Using the Margins Command to Estimate and Interpret Adjusted Predictions and Marginal Effects. *The Stata Journal: Promoting Communications On Statistics And Stata*, 12(2), 308-331. <https://doi.org/10.1177/1536867X1201200209>.
- Wooldridge, J. M. (2010). *Introductory Econometrics: A Modern Approach*. 4. ed. Mason: South-Western College Pub.
- WTTC. (2024). World Travel & Tourism Council. *Travel & Tourism Economic Impact*. <https://wttc.org/research/economic-impact>.
- Zucco, F. D. et al. (2024). Segmentação de mercado em festivais turísticos: perspectivas de identidade social e cultural. *Turismo, Visão e Ação*, 26, e19968. <https://doi.org/10.14210/tva.v26.19968>.

Note

The initial translation of this article into English was performed with the assistance of large language model (LLM) technology. The resulting text was subsequently subjected to a careful review and refinement process by a professional academic translation service to ensure accuracy, linguistic fluency, and adherence to international academic standards. The article was submitted for approval; the authors reviewed it and maintain full responsibility for the final content.

Data Availability Statement

All relevant data are available in the text.

About the authors

Ákeson Helder Rosa de Alcântara

Ph.D. student in Business Administration at the Federal University of Goiás (UFG), with a research line focused on population aging, the labor market for the elderly, and public management. Master's degree in Public Administration in a National Network (PROFIAP/UFG) and Bachelor's degree in Accounting Sciences (UNIFASAM). Currently, he is an Accounting Analyst at the Clinical

Hospital of UFG/EBSERH, working with an emphasis on public sector accounting, hospital management, and financial sustainability in healthcare. He has technical and academic experience in public resource management, focusing on budget efficiency, higher education funding, and university autonomy. He conducts quantitative and econometric research applied to public policies, tourism economics, absorptive capacity, and the impact of artificial intelligence in the public sector, in addition to participating in social sustainability projects and institutional evaluation.

Contributions: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing.

E-mail: akeson@ufg.br

ORCID: <https://orcid.org/0009-0002-7747-336X>

Paulo Henrique Cirino Araujo

Professor in the Graduate Program in Economics (PPGECON) at the Federal University of Goiás (UFG), working in the areas of quantitative methods, econometrics, and applied economics. Economist from the Pontifical Catholic University of Minas Gerais (PUC-Minas), with a Master's and Ph.D. in Applied Economics from the Federal University of Viçosa (UFV). His academic output and advisorships focus on research regarding longevity, population aging, and their socioeconomic impacts, as well as the development of public policies tailored to the needs of the elderly population. He is also a member of the Interdisciplinary Center on Aging at UFG (NIPEE UFG 60+). Since 2017, he has served as an Associate Professor at UFG, also sitting on the Institutional Evaluation Commission (CPA), where he currently serves as President. He was Vice Dean of the Faculty of Science and Technology (FCT) and currently holds the position of Director of Strategic Studies at the Secretariat for Evaluation, Planning, and Institutional Information. In addition to teaching and research activities, he provides consulting services focused on the evaluation of public policies, with an emphasis on education and the labor market. With the National Fund for Educational Development (FNDE), he participated in evaluations of the National School Transportation Support Program (PNATE), *Caminho da Escola*, the National Textbook and Educational Material Program (PNLD), and the Direct Money in School Program (PDDE). At the Ministry of Health, he collaborated on evaluations focused on health education through the SIMAPES Project. His work involves the use of statistics, econometrics, and quantitative methods for data analysis, contributing to the improvement of programs and initiatives in various contexts.

Contributions: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Software, Validation, Visualization, Writing – original draft, Writing – review & editing.

E-mail: paulo.cirino@ufg.br

ORCID: <https://orcid.org/0000-0002-7792-0505>

Luana Cássia Miranda Ribeiro

Ph.D. in Nursing from the PPGENF program at FEN/UFG (2012–2016), including a Doctoral Internship at the Department of General and Specialized Nursing at EERP/USP. Master's degree in Nursing from PPGENF at FEN/UFG (2010–2012). Specialist in Occupational Health from FEN/UFG (2010–2011). Bachelor's degree and Teaching License in Nursing from FEN/UFG (2005–2009). Member of the Study Group on Management and Human Resources in Health and Nursing (GERHSEN) (2017–2021). Member of the Nursing Study Center for Health Institution Management and Patient Safety (NEGISP) (2022–present). Deputy Coordinator of Non-Degree Graduate Programs (*Lato Sensu*) at FEN/UFG (2017–2021). *Ad hoc* consultant for scientific journals. Subject Editor in the field of Nursing Management for the *Revista Eletrônica de Enfermagem* (ISSN 1518-1944) (2018–2021). Collaborator at the Regional Nursing Council of Goiás (2017–2020) and Member of the Technical Inspection Chamber of the Federal Nursing Council (2017–2020). She has experience in administration and management in health; professional ethics and legislation; scientific methodology; and infection prevention and control related to healthcare, focusing on biological risk and occupational health. Held a professional position at the Regional Nursing Council of the State of Goiás (2011–2017), holding management positions in the Inspection Department between 2012 and March 2017. Was a Tenured Professor at the Federal Institute of Goiás (Apr/2017–Sep/2017). Was Vice Dean of FEN/UFG (2019–2021). Associate Professor at FEN/UFG (September/2017–secondment/2021–2022–present). Executive Secretary of the Municipal Health Department of Goiânia (Mar/2021–Feb/2022) during the COVID-19 pandemic. Currently, Vice-President for Extension and Culture (*Pró-Reitora de Extensão e Cultura*) at UFG (Feb/2022–present).

Contributions: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Software, Validation, Visualization, Writing – original draft, Writing – review & editing.

E-mail: luaufg@ufg.br

ORCID: <https://orcid.org/0000-0002-4254-2030>