

RESEARCH / INVESTIGACIÓN

Government tourism promotion programs: An analysis of its effects in thirty inland, beach and border destinations in Mexico

Programas de fomento turístico gubernamental: Un análisis de sus efectos en treinta destinos de interior, playa y frontera en México

Hugo Nathanael Lara Figueroa¹, Edith Miriam García-Salazar².

Resumen: El presente trabajo mide el impacto de los programas de fomento turístico gubernamental en la demanda turística de destinos de interior, playa y frontera en México. Se realizó un estudio transversal con información de los Anuarios Estadísticos y Geográficos publicados por el Instituto Nacional de Estadística y Geografía (INEGI) de 30 lugares y se elaboró un modelo de regresión logística condicional; se simularon escenarios para mostrar cambios en la probabilidad de la elección del tipo de destino, ante cambios en las variables de mayor impacto en el modelo. Se encontró que el número de establecimientos de alojamiento, alimentación, ocio y espacios culturales, así como variables climáticas tienen efectos en la demanda turística. Los resultados obtenidos sugieren implementar una política de fomento turístico diferenciada: promover la inversión en establecimientos para la alimentación en los destinos de interior y frontera; hospedaje, ocio y cultura en los destinos de playa, mientras que en los tres tipos de destino es necesario fortalecer programas ambientales que inhiban el cambio climático.

Palabras clave: Fomento turístico, políticas públicas, demanda turística, cambio climático.

Abstract: This study measures the impact of the government tourism promotion programs on the tourist demand of interior, beach and border destinations in Mexico. A cross-sectional study was realized with information from the Statistical Yearbooks published by the National Institute of Statistics and Geography (INEGI) of 30 places and a conditional logistic regression model was developed; scenarios were simulated to show changes in the probability of choosing the type of destination, before changes in the variables with the greatest impact in the model. It was found that the number of accommodation establishments, food, leisure and cultural spaces, as well as climatic variables have an effect on tourism demand. The results obtained suggest implementing a policy of differentiated tourism promotion: promoting investment in establishments for food in the interior and border destinations; lodging, leisure and culture in beach destinations, whereas in the three types of destination it is necessary to implement environmental programs that inhibit climate change.

KeyWords: Tourism promotion, public policies, tourism demand, climate change.

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¹ Doctor in Social Sciences, specializing in Political Science, Technological of Higher Studies of Ecatepec, Mexico. hugolarat@tese.edu.mx

² Doctor in Economic Sciences of the Autonomous Metropolitan University, Hidalgo State College. miriamedith72@yahoo.com.mx

INTRODUCTION

The interest among governments of different countries, the private sector and many social tourism organizations, is explained by the increasing amount of material and intangible resources related to the development of this activity and its constant growth. Globally, tourism has been the only economic activity that has continued to grow since the early 1950s. This has led to the implementation in our country of a set of strategies and lines of action that allow to detonate development poles in destinations considered strategic for the growth of this sector and thus generate an increase in the arrival and permanence of domestic and international tourists.

Among the main mechanisms implemented, the following can be mentioned: a gradual increase in the budget for the Ministry of Tourism (SECTUR), as well as the creation of various programs aimed at promoting tourism in national destinations with differentiated appeals in terms of climate, social, cultural, gastronomic and infrastructure in each destination. Since these aspects have yielded positive results, as will be seen below, the growth of the sector may be considered modest compared to other countries that have implemented similar strategies, and many of these may even be acting inhibitors in the arrival of tourists by making some destinations less attractive. From this perspective, this study helps to identify the impact that the Government Tourism Development Government Tourism Promotion (GTP) has as a strategy that promotes tourism demand in thirty national tourist destinations.

The results obtained contribute on the one hand, to improve public policies in terms of an increase in the influx of tourists and, on the other hand, to making the use of public resources more efficient in those infrastructure projects which, according to estimates, influence the tourist demand of each type of destination both in terms of the material characteristics of the destinations, and of environmental aspects that can affect tourism.

Tourism promotion and development in the world

In general, it can be affirmed that governments have two central instruments for tourism development: The Support and The Government Tourism Promotion (GTS and GTP, respectively). About the first, Ward & Gold (1994), define the promotion as the conscious use of advertising and marketing that allows to communicate selective images about specific locations or geographical areas in order to develop an advertising campaign that to attract as many visitors as possible. On other hand, Middleton & Clarke (2001) refer to it as the activity carried out by the Government to support those companies or organizations that attract foreign exchange to the country, whereas De Chernatory & McDonald (1992) conceive it as the set of actions that lead a buyer or user to perceive added values unique within what they seek to be promoted, and that they are more closely aligned to the needs sought or created. On the other hand, GTP refers to planning and development of tourist projects, this is: the location of areas that have the potential to become tourist sites, the investment for the construction of infrastructure, the development of management plans for tourist destinations and their natural resources, and collaboration with the private sector for the orderly and sustainable development of tourism investments.

About the latter, the GTP is the protection, relief or boost activity that the Government provides for the development of tourism activity in a specific locality, region or country, in order to generate an increase, improvement or diversification of the facilities that facilitate or allow tourists to complete the cycle of a tourist trip³. In addition, the following aspects are also considered: transport or roads so that a person or a family can reach their destination, meet their needs for lodging and food, use or enjoyment of the landscapes or services that motivated the trip, resolve eventualities (medical, legal, among others) and return to their place of departure. In this sense, both the GTS and the GTP are activities that allow the growth of tourist activity in a particular social space from the dissemination of tourist destinations and the generation of material and structural conditions in a country or specific region.

³ FTG is aimed to construction, conservation and maintenance of the tourist infrastructure: it ranges from highways, construction of hotels to complementary services (banks, malls, telephone service).

GTS and GTP in Mexico

In the Mexican case, the Ministry of Tourism (SECTUR) is the body responsible for the promotion and promotion of tourist destinations. The secretariat has two agencies: The Tourism Promotion Council of Mexico (CPTM) and the National Tourism Promotion Fund (FONATUR). Whereas the first is responsible for coordinating, designing and operating the tourism promotion strategies of the destinations and activities that Mexico offers at national and international level (advertising and country brand, among others), the second is composed of a committee study, it approves and finances, through a trust, those projects related to investment in infrastructure, maintenance and conservation of the spaces, Among the programs, the following can be mentioned: "Infrastructure Development Program for the Support and Promotion of Investment in the Tourism Sector", "Program for the Promotion and Development of Tourism Programs and Projects of The Federal Entities", "Tourism Infrastructure Projects", "Infrastructure Maintenance" and the "Conservation and Maintenance of Basic Infrastructure with other Public, Private and Social Authorities"⁴.

Regarding the way they operate, the financing of those projects linked to promoting tourism development and protecting and maintaining the landscape and environmental image of the destinations is common to them through the generation of infrastructure in five areas: a) services, b) tourist equipment, c) creation or strengthening of routes, circuits or tourist corridors and promotion to regional development, d) creation of sites of tourist interest, e) technical assistance and services related to Projects. Although what is intended with these programs is to detonate economic growth in tourist areas, in large part the design, process and consistency assessments and results that have been carried out on these programs can be observed. These include recommendations in feasibility terms; the possible duplication and overlap of program functions, as well as attention to the same potential and target populations (ITAM and Centro de Estudios de Competitividad, 2017; Secretaría de Gobernación, 2017 and Servicios Profesionales para el Desarrollo Económico, 2017).

Both positive and negative aspects are noted with regard to the achievements and results achieved in tou-

ris. On the first, it should be noted that, at present, Mexico has managed to climb eight positions ranking 22nd in the world tourism ranking in 2017. Among the negative aspects is that our country has lost important positions in the global competitiveness index in infrastructure quality by descending five positions, from the 57th place achieved in the 2016-2017 edition to 62nd position in the 2017-2018, as well as a decrease in posts in transport infrastructure, prices, and port infrastructure, items in which seats 82, 83 and 124 respectively are held (World Economic Forum, 2017).

Finally, and in accordance with the Sectoral Tourism Program 2013-2018, the performance of this country in the main international indicators has been moderate in nature compared to that of other countries. Examples include that, while in destinations such as Turkey, Hong Kong, Malaysia, Japan and Russia, growth rates of 8.6, 7.8, 4.8, 2.5 and 11.6%, respectively, were recorded during the period 2000-2012, Mexico grew 1.1% in the same period. With regard to international tourism revenues, although our country reached a record figure in 2012 with a growth rate of 7.3% with a market share of 1.25 and an average annual growth rate (TCMA) of 3.6% in the period 2000-2012, this positive trend was also recorded by other countries during the same period but with higher levels (Hong Kong, 15.5, Turkey 10.7, Japan 12.9, Malaysia 12.3 and Russia with 10.1%). In short, Mexico has grown in less proportion compared to other nations both in terms of tourist arrival and international tourism revenue.

Determinants of tourism

THEORETICAL-METHODOLOGICAL FRAMEWORK

The analysis and study of the demand and the tourism sector has been addressed from various approaches with economic theory (traditional consumer theory) being the most widely used. Crucially, this approach considers as a basis the assumptions of economic rationality, usefulness and preferences of individuals and households in the choice of available destinations. The explanatory power of this approach has been vital to understand the impact that economic aspects (income le-

⁴ According to the Expenditure Budget Program of the Federation for the Fiscal Exercise 2013, there are in the 21 branch, 13 public programs managed by the Secretariat of Tourism. Of these, five are directly related to promotion activities.

vel and expenditure) have on the decision of individuals or household so that, according to their characteristics, as well as their tastes and preferences choose, first, to go on a trip and, second, to which destination to go.

Although the contributions of these studies have been significant in identifying why there are changes in tourism demand, their contribution may be limited when it is intended to respond to why the choice of destinations is different between individuals or families with similar sociodemographic or economic profiles. Therefore, it can be assumed that their preferences are also influenced by random elements attributable to the characteristics of each place.

In order to complement these findings, modeling that consider non-observable components of the usefulness of individuals has been developed. These models are linked to the characteristics of available alternatives. These include conditional, nested logistical models and mixed-effect models, which can be considered a generalization of logit and probit regression models with the difference that, whereas the latter have assumed independence among the various possible alternatives, i.e. that the probabilities of conditional utility functions are not correlated through the alternatives. The former allow to identify those determinants that affect the choice of an individual among the options offered, but which may be considered dependent on each other (Alvarez et al., 2017; Alvarez-Díaz et al., 2016; Becker & Murphy, 1988; Ben-Akiva & Lerman, 1985; Lancaster, 1966; McFadden, 1973; Morley, 1992; Rugg, 1973).

The popularity of such models is due to the work carried out by McFadden (1973), where the main explanatory variables of the behavior of tourism demand are considered as the socio-economic characteristics of individuals and the attributes of the available alternatives. With the addition of certain attributes of the alternatives available to demand models, it has been possible to determine that, in addition to sociodemographic and economic variables (income-expenditure, sex, household size, and so on), the characteristics of places (climate, cultural areas, availability and type of

accommodation, type of food, etc.) have a similar weight and even, in some cases, greater than those related to economic aspects.

Tourist demand

Empirical evidence

The models used in much of the research in the tourism sector are based on the Lancaster Characteristics Theory (1966), later refined by Rugg (1973) and Morley (1992) where econometrics estimates of modal choice have been performed. These allow predicting variables that affect the decision to exit or not exit, as well as the probability of choosing some specific target type. In addition to previous works, there are other studies that have used the so-called life cycle of tourist destinations (CVDT) (Butler, 1980, 1996, 2001) and case methods. In both types of research, the main goal has been to identify and predict not only the variables that impact an individual's or household's decisions when they choose to leave for travel, but also on the factors that determine the choice of a destination, as well as the tourist potential that a place has.

Examples of the first can be highlighted: the disaggregated model made by Rodríguez-Feijoó et al. (2000), where a multinomial logistical model identifies the attributes that tourists consider during their stay in the Canary Islands of Spain; in the model developed by Guzmán-Soria et al. (2011), the direct relationship that tourism demand has with the behavior of the Canadian and U.S. economy to from the promotion that a tourist gives to future visitors, Likewise, Sánchez & Cruz (2016), associate the impact that macroeconomic variables (exchange rate) have on the development of tourist receiving destinations. On the other hand, the work by Cabrer-Borras et al. (2016), evaluate, through the method of difference in differences, the impact of public spending on the promotion of destinations in the Spanish domestic tourism demand. With regard to the second type of studies, a casework can be highlighted in various countries and destinations where the degree of development of the destinations is quantified based on the importance of population, business and

government participation (Gómez et al, 2017), competitiveness and sustainability (Shaadi-Rodríguez et al. 2017), the attractions and activities of recreational and cultural tourism (Milio, 2004; Rivera, 2015), the transport and housing systems (Kozak & Rimmington, 1999) and cultural features (Shaadi-Rodríguez et al., 2017 and 2018) that a place has in tourists.

Although all of these types of research have made important contributions to understanding the factors associated with changes in tourism demand, the use of case studies and not including the characteristics of destinations makes the results can only be representative of the destinations analyzed, and that the effect that tourism policy has on the arrival of tourists is unknown. However, there are works such as those carried out by Bujosa-Bestard & Roselló-Nadal (2011) and Olcina-Cantos & Vera-Rebollo (2016), where characteristics of the destinations are incorporated in climate terms to know the impact of these on tourist flows.

Due to the above and in order to contribute to the findings of the aforementioned studies, in this work 30 tourist destinations are analyzed considering the characteristics of the places in terms of infrastructure and climatic conditions, which identify the impact of these on tourism demand.

MATERIALS AND METHODS

In order to know the factors associated with tourism demand, a conditional logistical model was developed using modelling with discrete variables. In the conditional logit model that is presented, the utility that an individual n receives from the choice to go to the destination i, given an alternative set $i = 1, \dots, l$, is represented by an indirect function of linear utility represented as:

$$U_{ni} = \beta'X_{ni} + \varepsilon_{ni}$$

Where:

$\beta'X_{ni}$ is the non-stochastic part of the indirect utility obtained when the individual chooses the type of destination; X_{ni} are the observed attributes that characterize the places available to the user, and β' is the vector of estimated coefficients for each of the observed characteristics of

X_{ni} . Finally, ε_{ni} represents the error term indicating the variation in the preferences of different tourists.

Assuming that an individual will choose the type of destination where it maximizes its usefulness, the probability π_{ni} of the choice of this i will be greater than the rest. This can be presented as:

$$\pi_{ni} = \Pr [\beta'X_{ni} + \varepsilon_{ni} > \beta'X_{nj} + \varepsilon_{nj}] \quad \forall i \neq j$$

On the other hand and assuming an cumulative distribution of the extreme value of type I, the probability of choosing the type of destination I is expressed as follows:

$$\pi_{ni} = \frac{e^{\beta'X_{ni}}}{\sum_{j=1}^l e^{\beta'X_{nj}}}$$

With regard to the logarithm of the likelihood function of the β' parameter vector, there is:

$$LL(\beta) = \sum_{n=1}^N \sum_{i=1}^N y_{ni} \log X_{ni} (\beta)$$

Where:

N is the number of tourists of the sample, $X_{ni} (\beta')$ represents the probabilities of choice of the types of destination, y_{ni} is a variable that assumes value 1 when user n chooses the site I and zero, otherwise.

Once the modeling was carried out, the β parameter vector was used as an estimator to forecast changes in the chances of visiting some type of destination, in the face of changes in the characteristics of the different alternatives that affect the usefulness of the users.

Model specification

For the dependent variable, 30 tourist destinations were considered as priority in accordance with the document issued by the Institute of Tourism Competitiveness (IC-Tur) of the SECTUR published in the call of the Sectoral

Fund for the Research, Development and Technological Innovation in Tourism 2014. This document, established as destinations of interest for the following cities: Puebla, León, Mérida, Querétaro, Oaxaca, San Juan de los Lagos, Morelia, Tuxtla Gutiérrez, San Luis Potosí, Cuernavaca, Villahermosa, Hermosillo, Xalapa, Guanajuato, Aguascalientes y Zacatecas. In the case of beach destinations, the following destinations were taken into account: Acapulco, Cancún, Riviera Maya, Veracruz-Boca del Río, Mazatlán, Puerto Vallarta, Los Cabos, Nuevo Vallarta, Ensenada, Ixtapa-Zihuatanejo, Manzanillo and Cozumel. On the other hand, in the case of border destinations, the cities of Tijuana and Ciudad Juárez were included.

To know the differentiated effect of the attributes of

the destinations on tourist demand, the dependent variable was modeled with three possible values: 1) the tourist chooses to visit an internal destination, 2) chooses a beach place or 3) chooses to visit a border area.

With regard to explanatory variables and which for this study are considered as part of the GTP, it was chosen to include only those that had complete information of all the destinations analyzed. After a process of analysis and debugging of these, it was decided to incorporate climate and infrastructure variables into the model in terms of promotion with 2016 data obtained from INEGI. The structure of the variables incorporated into the model is described below:

VARIABLE	CODING
Hosting establishments	Continuous variable that indicates the number of hotels, motels, guest houses, cabins and suites available in each destination.
Food establishment	Continuous variable that indicates the number of restaurants and cafeterias available in each destination.
Leisure and recreation establishments	Continuous variable that indicates the number of bars and discotheques available in each destination.
Cultural establishments	Continuous variable that indicates the number of theaters and museums available in each destination
Rainfall	Continuous variable that indicates the average temperature in the destination site, measured in degrees Celsius.
Temperature	Continuous variable that indicates the average rainfall in the destination site, measured in liters of water per square meter of land (l/m ²).

Descriptive statistics of the study destinations

Climatic variables

It is important to note that the tourist activity is closely related to climate and environment, because most of the activities are carried out outdoors and in the best weather conditions (Sectur, 2014). According to the processed information, the beach destinations are the hottest and those that maintain a relatively constant temperature throughout the year (annual average of 26.00 degrees

Celsius). Similarly, these destinations present the highest annual rainfall level (1,086.98 mm annual average). Inland destinations, meanwhile, have an average temperature of 21.14 degrees Celsius and an average annual rainfall of 940.42 millimeters. On the other hand, border cities maintain an average temperature similar to that of destinations Inside. However, these types of destinations have, unlike inland destinations, drastic variations between summer and winter. In addition, they are the ones with the lowest average rainfall since the northern region of the country is characterized by a dry climate.

Tabla N° 1. Climatic variables by type of destination.

Type of destination	Average temperature	Average rainfall
Beach	26.00°C	1,086.98 mm
Inland	21.14°C	940.42 mm
Border	21.48°C	224.38 mm

Source: own with data from Conagua and geographic yearbooks by Inegi federative entity (2017).

Regarding the infrastructure variables, it can be observed that the difference in the availability of accommodation in beach and inland destinations is minimal. On the other hand, in food establishments there are differential issues greater than 40%. One of the charac-

teristics of inland destinations is the concentration of cultural spaces (museums, theatres, cultural centers, galleries and auditoriums), a case similar to that in terms of the availability of spaces for leisure and recreation activities (Table 2).

Table 2: Availability of establishments by type of destination.

Type of destination	Lodging	Food	Leisure and recreation	Cultural
Beach	2,382	5,171	1,371	186
Inland	2,363	9,118	2,043	970
Border	417	2,070	593	75

Source: own with data from Conagua and geographic yearbooks by Inegi federative entity (2017) and Cultural Information System (SIC).

Empirical results

As shown in Table 3, the results obtained show, except for the variable rainfall and lodging in the beach category, statistically significant values with coefficients of considerable magnitude. Thus, it is concluded that these they have an important weight in the arrival of tourists to each type of destination. On the other hand, since the results corroborate the findings in previous studies for the case of temperature and rainfall variables (Bujosa-Bestard & Ros-

selló-Nadal, 2011; Olcina-Cantos & Vera-Rebollo, 2016), the availability of infrastructure in lodging, food, leisure and recreation and cultural sites (museums and cultural centers) show that they are also factors that influence the choice in a differentiated way in the categories of destinations. Thus, the findings of other studies that have used case methods is complemented and corroborated (Gómez et al., 2017; Kozak and Rimmington, 1999; Milio, 2004; Shaadi-Rodríguez et al., 2017).

Table 3: Probability of visiting a tourist destination by type of climate and available infrastructure (inland destinations as reference category).

Variable	Beach destinations					Border destinations				
	Coefficient	Std. Err.	Z	P> z	[95% Conf. Interval]	Coefficient	Std. Err.	Z	P> z	[95% Conf. Interval]
Conditional logit Alternative variable: Visit Log likelihood = -392.39559 Number of obs = 90 Number of cases = 30 Alts per case: min = 3 Wald chi2(44) = 4294.0 Prob > chi2 = 0										
Climate variables										
Temperature	2.201096	0.8451809	2.6	0.009	0.544572 3.85762	-4.351539	0.1517061	28.68	0	-4.648878 -4.054201
Rainfall	0.0031084	0.0019429	1.84*	0.11	0.0006996 0.0069165	-0.1220963	0.0040352	30.26	0	0.1300052 0.1141874
Tourist promotion (establishments)										
Lodging	0.0229849	0.0392413	1.95*	0.558	0.0539266 0.0998965	0.3604443	0.0202222	17.82	0	0.3208095 0.4000791
Food consumption	-0.0054566	0.0069046	-1.98	0.0429	0.0189894 0.0080762	0.001814	0.0033084	1.97	0.05	0.0046704 0.0082984
Leisure and recreation	0.1888782	0.1119609	1.99	0.042	0.0305612 0.4083175	0.0374928	0.0352699	1.96	0.03	0.0316349 0.1066205
Cultural establishments	0.108453	0.0824264	1.96	0.0188	0.0530998 0.2700058	-2.707925	0.1457898	18.57	0	-2.993668 -2.422182
_cons	-70.76564	32.2406	-2.19	0.028	-133.9561 -7.575229	101.1494	5.27978	19.16	0	90.80118 111.4975

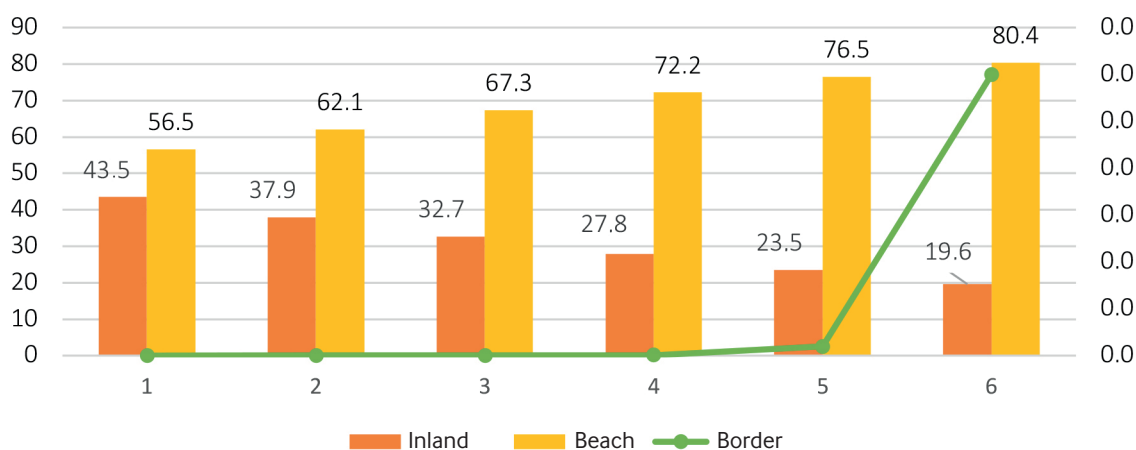
* Not significant.

Probability estimate

In order to facilitate the interpretation of the results, the coefficients were transformed into probabilities of the variables with the greatest impact on the model by varying the number of lodging establishments, the number of establi-

shments for the consumption of food; availability of places for leisure and recreation activities, number of cultural establishments and increase in temperature, keeping the other variables constant.

Figure 1: Probability of visiting inland, beach and border destinations against changes in the availability of lodging establishments (percentage).

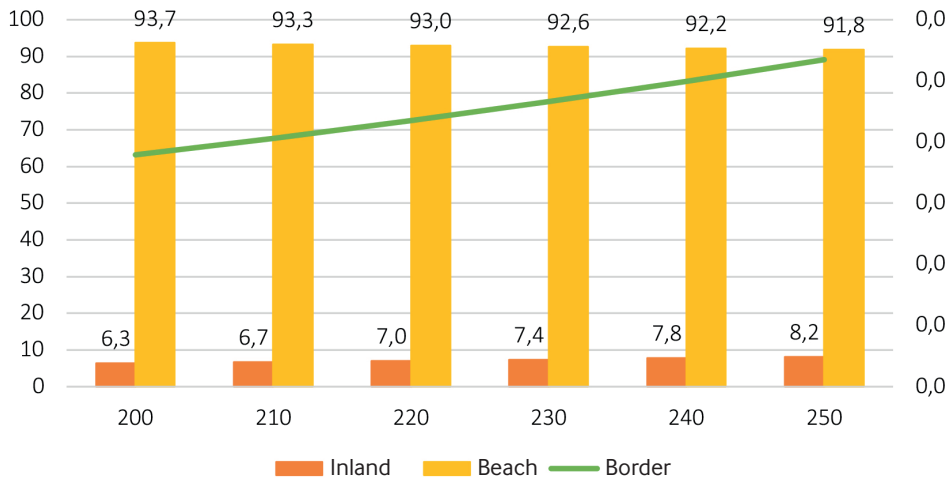


Source: Own

As shown in Figure 1, the effect of increasing lodging establishments has a positive relationship in beach destinations and, to a lesser extent, border, whereas the impact is negative for inland destinations. The results obtained suggest in the case of inland destinations that, in the face of a greater number of places of lodging, the chances of going tend to decrease due to two reasons. First, a large number of tourists who come to these destinations do so for rest and tranquility. Therefore, an increase in the number of accommodations could be perceived as a greater arrival of tourists, which

could affect rest than those who come for such purposes. Secondly, considering that inland destinations are mainly aimed at promoting cultural, historical and gastronomic tourism, an increase in the lodging infrastructure could jeopardize the architectural landscape of the place, which would reduce the incentive to visit such destinations. On the other hand, beach destinations have been characterized in our country by a strong influx of tourists aimed at leisure, leisure and recreation activities, in which the availability of accommodation plays a strong incentive.

Figure 2: Probabilities of visiting inland, beach and border destinations due to changes in the availability of food establishments (percentage).



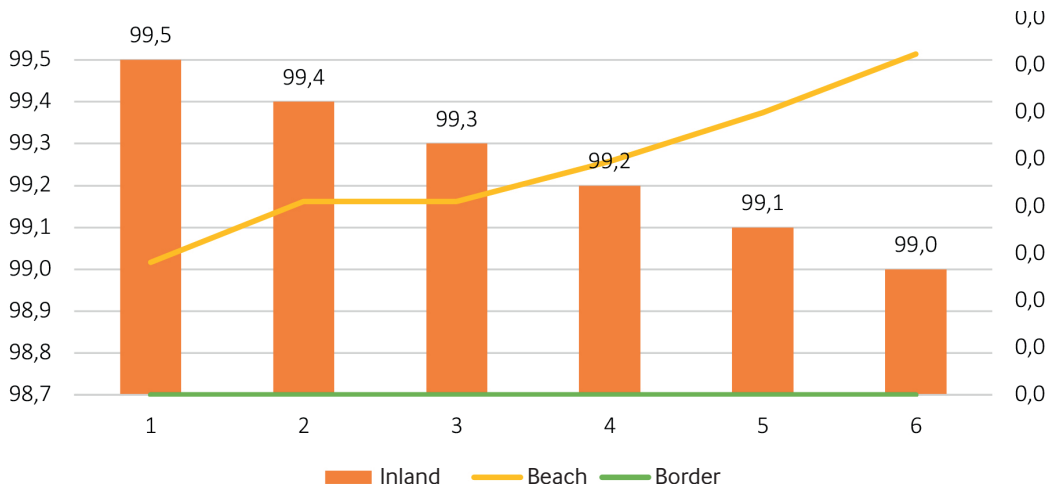
Source: own

With regard to the availability of food establishments, Figure 2 shows an increase in the likelihood of going to inland and border destinations, whereas, in the case of beach destinations, they have a negative relationship. This corroborates the findings obtained in previous studies around the role and weight of the architectural, cultural and gastronomic aspects in the inland destinations where these are attractive of great value to tourists who come (Hernandez-Mogollón & Di-Clemente, 2015; Prada et al., 2016).

In the case of beach destinations the effect is negative,

indicating that these attributes are a disincentive, either as a result of a large part of tourists coming to beach destinations, contracting all-inclusive services, or because in this type of the foods that are predominantly offered are sea. Then, a greater variety of dishes of another type is not an important element. Finally, and in the case of border sites, the availability of places to eat is vitally important because it is in these destinations that attractions are not associated with leisure or recreation activities, or the realization of cultural activities, but to spend a pleasant stay (Figure 3).

Figure 3: Probabilities of visiting inland, beach and border destinations due to changes in the availability of leisure and recreation establishments (percentage).

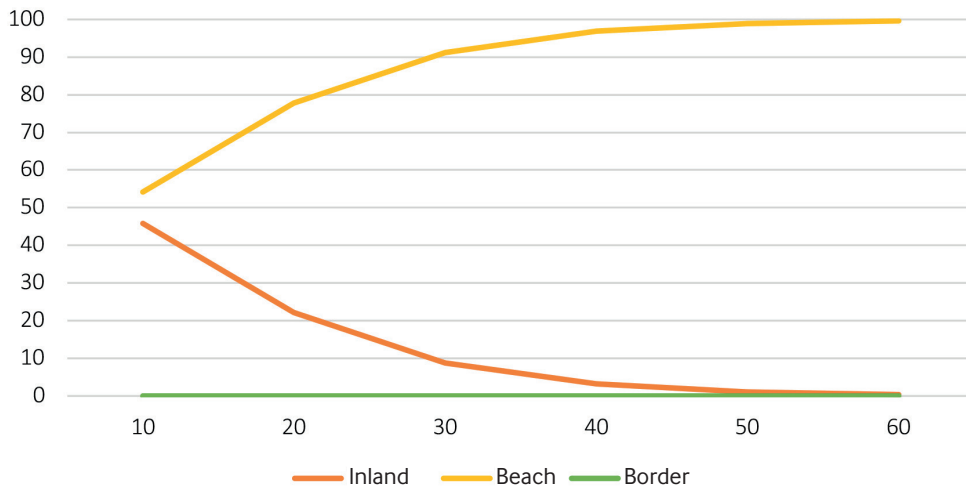


Source: own

In the case of the availability of rest, leisure and recreation establishments, it is noted that, since beach destinations play a leading role in the border places, no changes are observed; and in inland destinations, the impact is nega-

tive. These results suggest that, since beach tourists seek leisure and recreation activities, those of internal tourism seek more peaceful and quiet spaces; for border destinations, such establishments have virtually no weight.

Figure 4: Probabilities of visiting inland, beach and border destinations due to changes in the availability of cultural spaces (percentage).

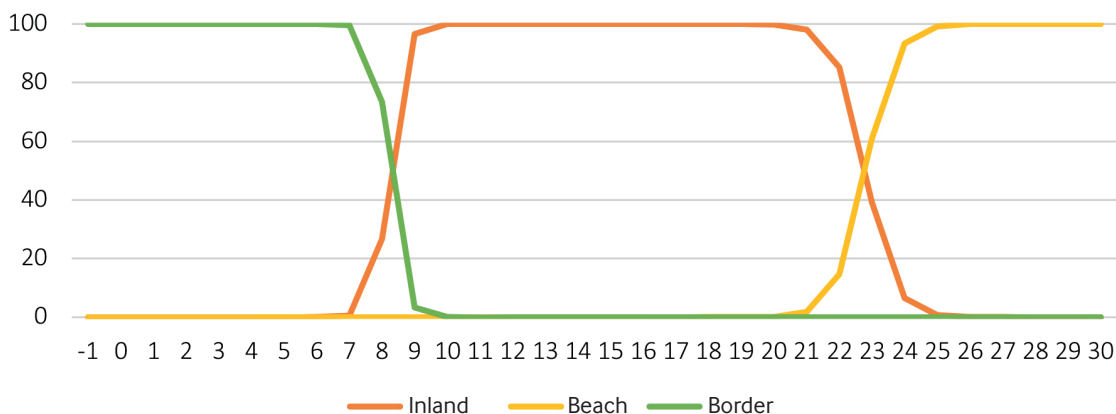


Source: own

In issues of availability of cultural spaces, the results show the importance they have in beach destinations. On the other hand, the effect is reversed in inland destinations. The reasons that could explain the negative relationship in inland destinations may be associated with the fact that in these types of destinations, the incorporation of more cultural spaces is not necessarily accom-

panied by an added value of the place. Moreover. This could lead to an over-saturation of spaces that could be a disincentive to offering unattractive products without great cultural content (museums with few works of art to name an example). For its part, the existence of cultural spaces shows no significant impact on border destinations.

Figura N° 5. Probabilities of visiting inland, beach and border destinations due to changes in the destination temperature (percentage).



Source: own

Finally, with respect to the temperature variable, it can be observed that changes in the temperature significantly affect the different types of destination. As seen in Figure 5, low temperatures stimulate the visit of tourists to border destinations, inhibiting as counterparts the inland and beach places. Temperatures considered moderate increase the likelihood of going to inland destinations and reduce the interest of going to beach and border destinations. Finally, high temperatures stimulate the arrival of tourists to beach destinations and reduce the intention to visit inland and border destinations. The results obtained in this variable, corroborate the findings in other studies that observe the weight of climatic conditions in tourist demand (Olcina-Cantos & Vera-Rebollo, 2016; Bujosa-Bestard & Rosselló-Nadal, 2011).

DISCUSSION

The objective of the present document was to know the effect that GTP programs have on the choice of inland tourist sites, beach and border of thirty Mexican destinations. In this regard, it was found that the variables used for model estimation show significant values in all variables incorporated into the model, with coefficients of considerable magnitude and both positive and negative signs. This indicates that some variables have a direct relationship to the variable of interest, whereas others have a reverse (negative) impact on their behavior.

The results obtained in the model show that tourism demand is determined by the type of infrastructure available in each type of destination. though in a differentiated way, so that, while promoting infrastructure in establishments lodging, culture and leisure and recreation spaces increase the likelihood of going to beach destinations, investing in these same areas inhibit stake in inland destinations. Border destinations, on the other hand, are likely to increase their tourism demand when lodging and food establishments are available.

A special case is related to the climatic aspects in all types of destination where it was found that temperature and, to a lesser extent, rainfall affects the arrival of tourists to each of the destinations of interest.

From the above, it can be concluded that the construction of infrastructure works seeks to be an "anchor" for the attraction of tourism, current programs are required to support projects according to the characteristics and

needs of each tourist site. Therefore, a review of the operating rules of each current program is required, in order to specify the types of support and financeable projects that allow, not only to make spending more efficient but to detonate the tourism development of the country.

Regarding climate aspects, it is important to note that the strengthening of sustainable tourism programs that ensure the protection of the environment and natural resources is required to avoid effects as harmful as climate change. It should be noted that this phenomenon can have different impacts on the tourism sector of Mexico, as set out in the different national communications before the United Nations Convention on Climate Change (six so far). Here, a description of the threats, vulnerability, adaptation actions and costs involved is provided. In addition, it is important to mention that this sector is one of the most contributing to greenhouse gases, between 5% and 12% (Sector, 2014).

In this regard, there are successful cases such as Taiwan and Argentina, where programs like "Responsible, Ecological and Social Tours (TRES) in the first, and Federal Strategic Plan of Sustainable Tourism (PFETS) have led to sustainable tourist activities in environmental and social aspects. This was achieved through a territorial delimitation of the strategies and an improvement in the use of resources. Although our country is one of the first in the world to have a General Act of Climate Change in which the strategies to face the effects of climate change were outlined, as well as moving towards to a sustainable, competitive and low carbon economy, the truth is that in terms of programs, there are still significant gaps in legal and operational terms about the way in which these strategies have been carried out. In addition to the above, there are no studies at the moment to allow measuring results that in environmental matters with a sustainable approach have achieved to protect flora, wildlife and environment.

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