Tourism as an economic development tool. Key factors

Tourism may serve as tool of economic development (ED). The aim of this article is to determine, through the analysis of determining factors identified in previous studies, which are the most important variables in channeling tourism growth into ED. Using a multivariate linear regression model, the main push and brake factors have been identified, for both developed and developing countries. It has been concluded that countries should maintain low initial provisions for CO_2 emissions, hospital beds, unemployment, energy without CO_2 emissions, and working population. It is also necessary to reduce conflict-related deaths. These results may be crucial in the decision-making processes implemented by policymakers and destination managers, given that they provide extremely useful information for the planning of their actions.

Keywords: tourism growth; economic development; key factors; multivariate linear regression model

1. Introduction

The processes of economic growth generate a number of benefits for the economy, even if this growth can be achieved through different economic activities. In this sense, it has been proven that tourism is a major activity, becoming in some countries a cornerstone of its business activity (Castro, Molina, & Pablo, 2013). Indeed, in 2015, tourism has generated a total of 9.8% of world GDP – US$7.2 trillion – and it has supported 284 million people in employment – that's 1 in 11 jobs on the planet (WTTC, 2016). Also, United Nations World Tourism Organization predictions involve a global growth in tourist flows, reaching 1.8 billion trips in 2030 (UNWTO, 2011).

Recognizing the importance of tourism activity for economic growth, distinct inter- national organizations have gone further, defending the role of said activity as an instrument of economic development (ED) in many regions of the globe (OECD, 2010; UNCTAD, 2011; UNWTO, 2015; WTTC, 2010). However, some studies have been critical of the relationship between tourism and ED, suggesting that not only has tourism activity not led to an improvement in socio-economic conditions, but that it may even lead to a decrease in the society's welfare level (Intermón Oxfam, 2007; Lee & Brahmasrene, 2013; Sahli & Nowak, 2007; UNDP, 2011).

There are, therefore, two tendencies regarding the conception of tourism as an ED tool, both of which are compatible with one another. In fact, the growth of tourism activity may become a tool of ED, as defended by the first of these currents; however, this transformation does not take place automatically. Rather, a series of conditions are necessary to permit the channelling of tourism growth (TG) into ED, as established by the second of the currents.

Thus, the purpose of this article is, on the one hand, to compile those factors that have been identified in prior studies as being determinant in the transformation of TG into ED and, on the other hand, to use a country-level empirical study with a sample of 144 countries and data from the past two

decades, in order to analyze the relative importance of each of these factors in the transformation process of tourism activity into ED.

The results that have been obtained are fundamental for achieving greater efficiency in the policies applied by organizations that support tourism as a tool for ED (for example, the Organization for Economic Cooperation and Development, the United Nations Development Programme or the United Nations World Tourism Organization).

Thus, the hypothesis of this study affirms that the economic growth of tourism activity contributes to an improvement in the ED of a country, in those cases in which there are a certain series of determinant factors to produce this relationship, which may be classified in order of relative importance.

2. Tourism and ED

Tourism is a sector that is considered to be capable of spurring economic growth, given that it complements other economic activities while supporting the GDP, the creation of job positions, the generation of foreign exchange, etc. (Aguiló & Juaneda, 2000; Balaguer & Cantavella-Jordá, 2002; Bento, 2016; Brida, Lanzilotta, Lionetti, & Risso, 2010; Pulido- Fernández, Flores-Ruiz, & Vargas-Machuca, 2008 or Sánchez-Rivero, Pulido-Fernández, & Cárdenas-García, 2013). Therefore, there is no doubt that this activity currently contributes to economic growth in beneficiary regions.

However, as revealed over recent years, mainly thanks to international organizations – as highlighted in the works of Hummel and Van der Duim (2012) – the real significance of tourism should not only reside in the fact that it contributes to the overall growth of the economy, but also, in the fact that this growth can influence the economic and sociocultural progress of society, leading to an improvement of the welfare of the resident population (Ashley, De Brine, Lehr, & Wilde, 2007).

According to this research line, over recent years, works have analyzed the capacity of tourism activity, not only for growth in economic activity, but also to improve ED.

On the one hand, there is a group of studies relating tourism and ED, limited to deter- mining whether or not a relationship exists between the growth produced in the national economy due to tourism activity and the level of progress achieved by this society, including, among others, the works of Akama and Kieti (2007), Akinboade and Braimoh (2010), Bojanic and Lo (2016), Brida, Lanzilotta, and Pizzolon (2016), Chiu and Yeh (2017), Cooper, Fletcher, Fyall, Gilbert, and Wanhill (2008), Cortés-Jiménez and Artís (2005), Kim, Chen, and Jang (2006) or Sharpley (2003).

The main objective of these works has been to determine, based on statistical tests, whether or not there is a causal relationship between the increase in tourism activity and the level of ED in the beneficiary regions, either in a unidirectional manner between tourism and development or in a bi-directional manner between both magnitudes. However, the results that were

obtained do not provide us with any clear conclusions regarding whether or not the expansion of tourism activity may lead to an improvement in ED, given that, on some occasions, a relationship has been found to exist between tourism and ED in the analyzed regions; while on other occasions, the increase in income from tourism has not necessarily led to improvements in the principal areas of human development (Croes, 2012).

Therefore, it is clear that tourism can function as an effective tool for ED, contributing to raise the incomes of the local population, leading to an improvement in their welfare and providing certain public services to the society, for example, in the study conducted by Kim et al. (2006) in Taiwan, it was found that tourism contributes to ED. However, it has also been proven that, in other occasions, this activity does not improve the socioeconomic conditions of the population, for example, in the study conducted by Akama and Kieti (2007) in Kenya, it was shown that increased levels of tourism did not lead to an improvement in human development.

This is due, mainly, to the fact that tourism requires certain conditions in order to achieve an improvement in ED, that is, in the countries where this connection between tourism and economic progress has not come to fruition, significant economic, social and environmental difficulties exist, which impede the maximization of the benefits from the tourism industry (Cárdenas-García, Sánchez-Rivero, & Pulido-Fernández, 2015; Pulido et al., 2008).

This has entailed, in a subsequent step, that other studies describe in generic terms those determinants acting as a link between these two dimensions, although without analyzing specific variables in depth, for example, Ashley et al. (2007), Balaguer and Cantavella-Jordá (2002), Croes (2012), Fayissa, Nsiah, and Tadasse (2008), Lee and Brahmasrene (2013), Po and Huang (2008), Sahli and Nowak (2007) or Vita and Kyaw (2016).

This second group of studies highlights that, even when the increase in tourism activity may contribute to a country's prosperity, the economic, social and environmental benefits that are generated in the population do not occur automatically. In fact, it has been found that in order for the increase in tourism to lead to an improved quality of life for the resident population, the distinct agents involved in the tourism activity must adequately manage this growth, via policies and actions that permit the channelling of TG into an improvement in socio-economic conditions.

Therefore, these studies have determined the distinct policies that are necessary for the creation of an environment in which tourism may solidly and effectively contribute to the country's progress; however, in almost all of the studies, said policies have been designed in a generic manner, with little specificity, based on qualitative information.

Some works, however, based on statistical analysis, have found that specific variables determine that the increase in tourism activity leads to an improvement in some of the main variables influencing human development.

Despite this, the characteristics of these studies do not allow us to generalize from their results. Furthermore, limited sample sizes were often

used in these studies, as is the case in Balaguer and Cantavella-Jordá (2002) who analyzed only one country and Croes (2012) analyzing two countries; or biased samples were used, as with Fayissa et al. (2008) who only analyzed the African continent or Sahli and Nowak (2007) who only considered developing countries. On the other hand, in these studies, only some of the identified variables have been analyzed, as with Lee and Brahmasrene (2013) who only considered environ- mental variables, Fayissa et al. (2008) who only analyzed variables related to the economic dimension or Vita and Kyaw (2016) who only considered the level of financial development.

In summary, the approach advocated by most international organizations dealing with ED and much of the scientific literature on this topic recognizes that tourism has some features that make it an activity to be considered in the processes of improvement of the socioeconomic conditions of a territory – so that its appropriate management can generate a number of beneficial effects in any territory.

However, an increasing number of papers are emerging that question this fact as a categorical truth and try to verify, empirically, the relationship between TG and ED, as well as to identify the factors that help or hinder the transformation of economic growth through tourism into an improvement of the living conditions of the population.

However, until now, there have been major limitations in the identification process for the factors determining an appropriate environment for the increase in tourism activity to result in an improved level of ED.

3. Identification of determinant factors

Many of the studies that analyze the relationship between tourism and development – these works have been discussed in the previous section – confirm that tourism faces major limitations in its function as a development tool demonstrated when recipient countries show a lower level of socioeconomic development (Bojanic & Lo, 2016).

Along these lines, using a sample of 144 countries and data from the past two decades (1991–2010), Cárdenas-García et al. (2015) demonstrated that the increase in tourism activity leads to an improvement in living conditions in a resident population, but only in those countries that previously had a higher level of ED.

This is due to the existence of huge disparities between developing countries and more developed nations in terms of the creation of an environment in which tourism will solidly and efficiently lead to the country's progress (Intermon Oxfam, 2007; UNECA, 2010; UNWTO, 2006; Vita & Kyaw, 2017).

In fact, diverse international organizations, such as the World Bank, the United Nations Development Programme or the International Monetary Fund, have theoretically identified distinct factors that may determine the existence of an appropriate environment that permits a country to transform its TG into a sustained process of ED. The review of the contributions made by these

organizations has allowed for the identification of those factors acting as a link between the economic growth resulting from tourism and ED (IGME, 2008; IMF, 2010; UNDP, 2005, 2009; UNFPA, 2008; World Bank, 2006, 2007, 2010), which have been arranged into five major groups: (i) Geographical features and infrastructure provision, (ii) Population characteristics, (iii) Foreign exchange generation and tax collection capacity, (iv) Investment climate and, (v) Environmental dimension of sustainability.

Having demonstrated that the relationship between TG and ED only occurs in a certain type of country, and based on these latest reports, this article uses the same sample of countries and the same time frame as the study conducted by Cárdenas-García et al. (2015), to identify, through distinct studies that have already been published, those specific individual factors (existing in some countries and absent in others) that condition this relationship between TG and ED.

Thus, as seen in Table 1, these studies have identified those factors favouring – push factors – and those hindering – brake factors – the relationship between TG and ED. Also, apart from examining the initial situation of a country in relation to a certain factor
– static factor – the variation in that factor during the period analyzed – dynamic-factor
– was also analyzed, which allowed the determination whether the influence of that particular factor was due to having adequate starting levels and/or to its evolution over the two decades analyzed.

Developed countries have twelve push factors – five static and seven dynamic – that favour the channelling of TG into an improvement of ED, and they have only three brake factors – one static and two dynamic – that limit this relationship. Meanwhile, in developing countries there are only five push factors – two static and three dynamics – that favour the channelling of TG into an improvement of ED and, in contrast, seventeen brake factors – thirteen static and four dynamics.

Table 1. Factors determining the relationship between tourism growth and economic development.

Developed Countries

Reference	Group	Push Factors		Brake factors	
		Static	Dynamic	Static	Dynamic
Cárdenas-García and Sánchez-Rivero (2015)	Geographic features and infrastructure provision	Access to the coast Number of homicides Telephone lines	Paved roads Armed forces personnel Internet subscribers	–	–
Sánchez-Rivero and Cárdenas-García (2014)	Population characteristics	Emigration rate of people with a tertiary education	–	–	Population under 14 years of age Population over 65 years of age
Cárdenas-García (2012)	Foreign exchange generation and collection capacity	External leaks due to foreign direct investment	Net trade in goods and services External leaks due to workers remittance	–	–
Cárdenas-García and Pulido-Fernández (2014)	Investment climate	–	PIB per person employed	–	–
Pulido-Fernández, Cárdenas-García, and Villanueva-Álvaro (2013)	Environmental dimension of sustainability	–	–	Production of electricity from oil, gas and coal	–
Cárdenas-García and Sánchez-Rivero (2015)	Geographic features and infrastructure provision	–	–	Electricity production Number of homicides Hospital beds	Conflict-related deaths in the country
Sánchez-Rivero and Cárdenas-García (2014)	Population characteristics	–	–	Unemployment Working population	–

(*Continued*)

Table 1. Continued.

Developed Countries

Reference	Group	Push Factors		Brake factors	
		Static	Dynamic	Static	Dynamic
Cárdenas-García (2012)	Foreign exchange generation and collection capacity	–	–	Exports of goods and services Net trade in goods and services Internal leaks derived from imports of goods and services External leaks due to foreign direct investment Tax revenue	Net trade in goods and services
Cárdenas-García and Pulido-Fernández (2014)	Investment climate	–	Dismissal costs	Strength of legal rights	Strength of legal rights
Pulido-Fernández et al. (2013)	Environmental dimension of sustainability	Electric power consumption CO_2 emissions	Cultivated land Energy without CO_2 emissions	Cultivated land Energy without CO_2 emissions	Renewable fresh water resources

Therefore, based on previous research (detailed in Table 1), twenty-nine factors having a positive or negative impact on the relationship between tourism and ED, have been identified. In order to carry out this research, all these factors have been taken into account, because, as it has already been demonstrated in previous studies, all of them have an impact on whether tourism is transformed, or not, into an improvement of ED. This explains why the twenty-nine factors identified have not been previously selected or discarded in previous research.

Therefore, the differences observed between both groups of countries with regards to the presence and/or absence of some specific factors (Table 1) have made it possible for some developed countries to have an environment that permits the transformation of TG into ED, while in some less developed countries, the environment hinders this relationship. Furthermore, although TG currently contributes to ED in more developed countries, these countries should pay special attention to certain risk factors in terms of the relationship between tourism and ED. Also, according to Table 1, we may assume that the environ- mental dimension of sustainability offers less developed countries the opportunity to improve the relationship between tourism and development.

4. Methodology

4.1. *Previous considerations*

As indicated in the previous section, a prior study concluded that tourism activity may lead to an improved quality of life of the population residing in the most developed countries (Cárdenas-García et al., 2015). This study serves as the starting point for our research, along with other studies (see Table 1) that have identified which specific factors determine that this relationship only occurs in this group of countries.

Therefore, in this study, in order to ensure homogeneity of the results, both the sampling of countries as well as the time frame of the study and the databases, are the same as those used in the previous studies.

4.2. *Data*

The results of this study have been obtained based on a sample of 144 countries, according to the same classification made by Cárdenas-García et al. (2015), divided into two groups of countries of the same size: Group A, developed countries in which there is a transformation of tourism into ED; Group B, developing countries in which there is no such relationship between tourism and ED (Appendix 1 and 2).

For all countries, tourism activity growth has been measured, as well as variation in the level of ED and the value of the variables considered by the international organizations to be factors determining the existence of an environment that promotes a relationship between TG and ED:

- The growth of tourism activity has been measured using the database published by the World Travel and Tourism Council, specifically, that known as the "Tourism Impact Data & Forecast", which quantifies the majority of the economic impacts of this activity.
- The variation in the level of ED has been quantified using information provided by the United Nations Development Programme, in a report referred to as the "Human Development Report", which conducted a measurement of the principal variables influencing the population's quality of life.
- The measurement of the factors that may determine the relationship between tourism and ED were made using data provided by the World Bank, in its "World Development Indicators & Global Development Finance" database, which provides information on over two thousand variables affecting ED.

As a time, frame for the analysis, and taking into account the time limit derived from the date of publication of the cited information sources, the last two decades were used. More specifically, the horizontal time frame analyzed in this study ranges from 1991 to 2010 (20 years).

4.3. *Variables and model*

First, regarding the variables that measure TG and the variation in level of ED, the same measurements have been used, based on a structural model, as those used in the Cárdenas-García et al. (2015) study.

As for the factors that may determine the relationship between tourism and ED, we have used the variables that, analyzed previously in other research studies (see Table 1), may condition the relationship between TG and ED – twenty-nine factors – given that they are present in certain countries and absent in others.

The reports prepared by the main international organizations and the empirical works published in the scientific literature, have shown that these factors are capable of generating an appropriate environment that allows a country to transform its TG into an improvement of ED. In both cases, sufficient theoretical and logical arguments support the impact of these factors, pushing or braking, on the relationship between TG and ED. The objective of this work is not to explore further the debate of these theoretical and logical arguments, which have already been discussed in the literature reviewed during this research; however, they can be read in order to get a further explanation of the analysis provided below. A detailed explanation of these factors appears in Table 2.

For each of the analyzed variables, in accordance with the same methodology used in prior studies, it has been indicated whether or not its effect on the relationship between tourism and ED is direct, that is, positively influences both variables, for example, energy consumption without CO_2 emissions – or the opposite, that is, negatively influences both variables – for

example, external leakage caused by direct foreign payment.

For further details, as well as for a theoretical justification, of the direct or inverse impact that each of the twenty-nine factors analysed have on the relationship between TG and ED, you can check the previous research studies analysing the different types of factors, which are detailed in Table 2.

Furthermore, these variables are measured and analyzed in two distinct manners; first, according to the absolute value that is presented at the beginning of the analyzed period (1991), with this measurement being referred to as the *static factor* and, second, according to the variation experienced over the entire time period analyzed (relative variation from 1991 to 2010), with this measurement being referred to as the *dynamic factor*.

Table 2. Factors analyzed.

Ref.	Group	Variable	Link		Meaning (measuring)
Cárdenas-García and Sánchez-Rivero (2015)	Geographic features and infrastructure provision	Access to the coast	ALI	Direct	A state without access to the coastline is one country whose territory is landlocked or ocean.
		Paved roads	PAV	Direct	Paved roads are those surfaced with crushed stone and hydrocarbon binder or bituminized agents. (% of total roads)
		Number of homicides	HOC	Inverse	Intentional homicides are estimates of unlawful homicides purposely inflicted. (per 100,000 people)
		Armed forces personnel	PFA	Direct	Total Armed forces personnel are active duty military personnel. (per 100,000 people)
		Telephone lines	TEL	Direct	Telephone lines are fixed telephone lines that connect a subscriber's terminal equipment. (per 100 people)
		Internet subscribers	SIN	Direct	Fixed broadband Internet subscribers are the number of broadband subscribers. (per 100 people)
		Electricity production	ELE	Direct	Electricity production is measured at the terminals of all alternator sets in a station. (kWh)
		Hospital beds	CHO	Direct	Hospital beds include inpatient beds available in public, private, general, and specialized hospitals. (per 1,000 people)
		Conflict-related deaths	MCP	Inverse	Battle-related deaths are deaths in battle-related conflicts between warring parties in the conflict dyad. (number of people)
Sánchez-Rivero and Cárdenas-García (2014)	Population characteristics	Emigration with a tertiary educ.	TET	Inverse	Emigration rate of educated shows the stock of emigrants > ages 25, with at least one year of 3th education. (% of total tertiary educated)
		Unemployment	DES	Inverse	Unemployment refers to the share of the labour force that is without work but available for and seeking employment. (% of total unempl.)
		Pop. < 14 years	PCC	Direct	Population between the ages 0 and 14. (% of total)
		Pop. > 65 years	PMS	Inverse	Population ages 65 and above. (% of total)
		Working population	TDA	Direct	Labour force participation rate is the proportion of the population that is economically active. (% of total population ages 15+)

(*Continued*)

Table 2. Continued.

Ref.	Group	Variable		Link	Meaning (measuring)
Cárdenas-García (2012)	Foreign exchange generation and collection capacity	External leaks direct investment	FEI	Inverse	Refers to the compensation of the entrance of foreign direct investment. (Currents US$)
		Net-trade in goods & services	CBS	Direct	Net trade in goods and services is derived from imports of goods and services offset exports of goods and services. (Currents US$)
		External leaks workers remit.	FIR	Inverse	Workers remittances and compensation of employees comprise current transfers by migrant workers. (Currents US$)
		Exports of goods & services	EBS	Direct	Exports of goods and services comprise all transactions between residents of a country and the world. (Currents US$)
		Internal leaks	FIB	Inverse	All the outflows of foreign exchange for imports. (Currents US$)
		Tax revenue	IFI	Direct	Tax revenue refers to compulsory transfers to central government for public purposes. (% of GDP)
Cárdenas-García and Pulido-Fernández (2014)	Invest-ment climate	GDP per person employed	PPE	Direct	It is gross domestic product (GDP) divided by total employment in the economy. (Constant 1990 PPP $).
		Dismissal costs	CDD	Inverse	It is the cost of advanced severance payments, and penalties due when terminating a redundant worker. (Weeks of wages)
		Strength of legal rights	FDL	Direct	Strength of legal rights measures the degree to which collateral and bankruptcy laws protect the rights. (0 = weak to 10 = strong)
Pulido-Fernández et al. (2013)	Environmental dimension of sustainability	Energy without CO_2 emissions	ESD	Direct	Clean energy is no carbohydrate energy that does not produce carbon dioxide when generated. (% of total energy use)
		CO_2 emissions	ECO	Inverse	They include carbon dioxide produced during consumption of solid, liquid and gas fuels. (metric tons per capita)
		Renewable fresh water resources	RAD	Direct	Renewable internal freshwater resources flows refer to internal renewable resources. (resources per capita, cubic metres)
		Cultivated land	TRE	Direct	Cultivated land includes land defined by the FAO as land under temporary crops. (% of land area)
		Production of electricity	PDE	Inverse	Oil refers to petroleum products. Gas refers to natural gas. Coal refers to all coal and brown coal. (% of total)
		Electric power consumption	CEE	Inverse	Electric power consumption measures the production of power plants and combined heat and power plants. (kWh per capita)

The objective of this dual measurement is to determine if the factors influencing the relationship between tourism and ED are the result of appropriate initial provisions, the increase experienced during the analyzed period or both of these causes.

Thus, considering the pre-identified factors associated with the relation of the ED and the tourism activity, it has designed a multivariate analysis including all factors with the aim of determining the influence and the relative importance of each of these factors within the economic growth.

Indeed, as detailed in the section on "Identification of determinant factors", all the factors (a total of twenty-nine) that have been identified in other previous research studies have been included in this analysis; given that multivariate regression analysis aims to evaluate the effect of multiple covariates and factors over the dependent variable. Thus, although initially some variables may not modify the effect, some interaction between the effects of those and other covariates may occur, and so, it is important to test for those effects in the model and make sure that no interaction or confounder effect is produced. In that sense, the above variables might have been interacting with others and therefore might have modified the relation between TG and ED.

First a descriptive analysis of the identified factors by group of country, as well as a description of the TG and ED scores are summarized using the mean, standard deviation, maximum and minimum. Also the 95% confidence interval for the mean are presented.

Second, a bivariate analysis for testing the differences in the factors and scores by group of country are performed using *t*-test on-parametric test (U-Mann Whiteny).

Also, in order to find the associated factors (in the static or dynamic form) and the relative importance of the identified factors with the economic growth, a multivariate linear regression model for the ED scores adjusted by the TG scores and group of country has been performed. Multivariate statistical analysis including all possible factors (in their static or dynamic form) adjusted by the group of country and the tourism activity was fitted (Dugard, Todman, & Staines, 2010). The effects of moderation of tourism activity with those factors were analyzed using interactions terms within the model. Also interactions between factors and group of country were included in the model in order to test for changes in the degree of influence of those factors in the economy depending on the group of country.

In the desired to develop a concise model and to avoid collinearity between variables two parallel models were carried out, one for the static form of the factors and another for the dynamic form of the factors. When developing the multivariate model the list of all factors was included, however, when presenting the results "insignificant" regression coefficients are removed to gain more statistical power and precision. To assist the selection of the significant variables a backward elimination procedure was performed manually, in each step the variable that causes the less contribution to the model measured by the lowest eta-squared and the greater *p*-value associated

to the statistical test of between-subjects effects and when the residual sum of squares increase the least. The goodness of fit and robustness of the model was passed through the examination of the residuals and R- squared values (Harrell, 2001).

All the statistical analysis have been carried out with SPSS Software Version 19.

5. Results

5.1. *Descriptive analysis*

A descriptive analysis of the identified factors related to geographic features and infrastructure provision are provided in Table 3. Differences between groups were tested using the non-parametric test U-Mann Whitney. For all static indicators a significant difference between groups was found (p-value < 0.001 for each factor). Significant differences of the relative variation (dynamic indicator) between groups of countries were found for all factors (p-value < 0.01) except for PFA (p-value = 0.217). No difference in the distribution of country with access to the coast (ALI) between groups of countries was found, 83.3% of countries in group A has access to the coast and 73.6% of countries in group B has access to the coast, being this difference no significant (Chi-square p-value = 0.156).

Table 3. Summary of including factors for geographic features and infrastructure provision.

	Group	*N*	Mean	S.D.	Median	Minimum	Maximum	C.I. Lower Limit	C.I. Upper Limit
Static factors									
PAV	A	72	62.872	31.568	66.950	0.000	100.000	55.454	70.290
	B	72	28.370	24.586	19.090	0.800	99.140	22.593	34.147
HOC	A	70	8.584	9.932	4.051	1.498	54.047	6.216	10.953
	B	72	18.296	13.512	17.310	2.118	70.397	15.121	21.471
PFA	A	70	1070.544	1462.931	732.377	18.834	11274.117	721.720	1419.367
	B	70	526.432	629.545	332.052	58.437	3734.470	376.323	676.542
TEL	A	72	25.526	18.012	19.892	1.261	69.128	21.293	29.758
	B	72	1.645	2.262	0.777	0.039	14.281	1.113	2.177
SIN	A	72	0.059	0.097	0.015	0.000	0.481	0.036	0.082
	B	61	0.000	0.002	0.000	0.000	0.010	0.000	0.001
ELE	A	66	5403.027	4680.043	4104.852	663.357	25943.403	4252.529	6553.525
	B	49	658.778	1159.999	364.247	4.632	6731.350	325.588	991.969
CHO	A	72	6.942	4.166	5.700	1.100	19.900	5.963	7.921
	B	72	1.898	1.407	1.491	0.237	6.620	1.568	2.229
MCP	A	72	0.100	0.547	0.000	0.000	3.310	0.000	0.229
	B	71	4.326	10.801	0.000	0.000	47.600	1.769	6.882
Dynamic factors									
PAV	A	70	7.952	16.680	4.655	−45.095	76.154	3.975	11.929
	B	72	21.991	35.831	8.730	−26.495	220.000	13.571	30.411
HOC	A	70	−32.416	38.316	−36.805	−80.849	207.087	−41.552	−23.280
	B	72	−14.920	15.984	−9.273	−64.669	24.004	−18.676	−11.164
PFA	A	70	44.078	364.189	−19.168	−98.847	2672.918	−42.760	130.916
	B	70	6.744	88.978	−12.642	−89.564	576.392	−14.472	27.961
TEL	A	72	72.986	115.090	35.851	−50.578	812.155	45.941	100.030
	B	72	593.486	2051.538	253.548	−34.585	17236.466	111.399	1075.574

(*Continued*)

Table 3. Continued.

	Group	*N*	Mean	S.D.	Median	Minimum	Maximum	C.I. Lower Limit	C.I. Upper Limit
SIN*	A	72	15.811	11.504	13.257	0.018	40.717	13.107	18.514
	B	61	1.066	1.768	0.209	0.004	8.526	0.613	1.519
ELE	A	66	45.693	62.524	26.200	−70.742	247.921	30.323	61.063
	B	49	135.524	275.886	88.067	−73.573	1845.118	56.281	214.768
CHO	A	72	−18.279	42.245	−25.373	−73.340	272.160	−28.206	−8.352
	B	72	39.022	244.543	0.000	−82.901	2007.926	−18.443	96.487
MCP*	A	72	0.369	2.784	0.000	−0.170	23.400	0.000	1.023
	B	71	−3.100	10.539	0.000	−47.600	20.260	−5.595	−0.606

Note: mean, standard deviation, median, maximum and minimum and 95% confidence intervals for the mean.Dynamic factors: relative Variation $((V_{2010} - V_{1991})/ V_{1991})*100$. *Simple Variation $(V_{2010} - V_{1991})$ since minimum values in 1991 are 0.

Table 4 shows the statistical summary of the factors related to population characteristic and labour market access. Significant differences between groups were found for the static indicators for PCC, PMS and TDA (p-values <0.001), and no differences between groups in the static factors TET and DES (p = 0.274 and 0.876, respectively). Differences between groups for the dynamic indicator for PCC and PMS ($p < 0.01$) were found. The dynamic indicators TET, DES and TDA were found to be no significant (p-values = 0.839, 0.19 and 0.722, respectively).

Regarding the factors for foreign exchange generation and taxed collection, the summaries of the results are presented in Table 5. Statistical significant differences between groups were found for the static indicators for factors FEI, CBS and IFI (p-values < 0.021). No differences between groups were found for FIR, EBS and FIB (p-values = 0.46, 0.10 and 0.37, respectively). For the dynamic indicators, significant differences were found for FEI and FIR (p-values < 0.023), but not differences for the factors CBS, EBS, FIB and IFI (p-values > 0.6).

Table 6 shows a summary of the results of factors for the investment climate. Significant differences between groups were found for all static indicators (p-values < 0.003), however; only for the dynamic indicator for factor CDD a significant difference between groups was found (p-value = 0.007). No differences for the dynamic indicators for PPE and FDL were found (p-values = 0.555 and 0.196, respectively).

The results from the factors in regards to environmental dimension of sustainability are presented in Table 7. Differences between groups were found for the static indicators of ESD, EC, PDE and CEE (p-values < 0.03). No differences for the static indicators of RAD and TRE were detected (p-values = 0.269 and 0.406, respectively). Regarding dynamic indicators, ECO, RAD, TRE, PDE and CEE found to be significant different between groups (p-values <0.001), and ESD was found no to be significant with a p-value of 0.055.

A summary of the results for the ED and TG factors are shown in Table 8. Significant differences between groups for both factors are found (p-values < 0.001).

5.2. *Multivariate results statistical analysis*

5.2.1. *Analysis of static factors*

Using multivariate linear regression models, the degree of the association and the relative importance of the static indicator for the factors with the ED were studied. The association was checked in relation to the TG and classified group of country by including an interaction term between those and the static indicator of the factor. As described in the methodology section, only those associations that were significant are presented for the final model results. Nevertheless, a table with the associated p-value and partial η^2 measurement for the non-relevant factors (in their static form) was elaborated. Table 9 shows those static indicators that in a full multivariate model were not significant, indicating their order of relevance within the model at time of removal. Note that none of the factors presented in this table were significantly associated with the ED of their country in relation to the TG and independently of the classified group. Thus, indicating that when those factors are analyzed in a global relation with all other considered factors, then no relevant association with the ED was found.

Table 4. Summary of including factors for population characteristics.

	Group	*N*	Mean	S.D.	Median	Minimum	Maximum	C.I. Lower Limit	C.I. Upper Limit
Static factors									
TET	A	72	17.361	21.439	8.831	0.404	85.533	12.323	22.399
	B	72	17.726	19.009	11.113	0.306	90.942	13.259	22.193
DES	A	72	7.959	5.461	6.910	1.480	30.260	6.676	9.242
	B	72	8.543	7.013	6.335	0.300	28.560	6.895	10.191
PCC	A	71	26.657	7.833	24.792	16.000	45.815	24.803	28.511
	B	72	43.244	4.424	44.404	28.181	51.462	42.205	44.284
PMS	A	71	9.307	4.425	10.506	1.119	17.715	8.260	10.354
	B	72	3.400	0.825	3.221	1.908	5.665	3.206	3.593
TDA	A	72	60.954	7.122	61.400	45.900	80.100	59.281	62.628
	B	72	68.088	11.992	68.700	45.000	90.500	65.270	70.905
Dynamic factors									
TET	A	72	21.413	82.939	−1.563	−115.519	418.717	1.923	40.902
	B	72	9.412	50.234	9.922	−97.181	177.400	−2.393	21.216
DES	A	72	53.967	125.099	17.975	−73.737	816.667	24.570	83.364
	B	72	105.161	228.771	30.551	−72.906	1464.885	51.402	158.920
PCC	A	71	−22.345	11.248	−22.707	−43.042	7.343	−25.007	−19.682
	B	72	−14.945	10.671	−14.216	−45.851	2.506	−17.452	−12.437
PMS	A	71	28.181	23.407	25.370	−11.351	107.989	22.641	33.722
	B	72	17.237	21.712	15.405	−33.309	64.283	12.135	22.339
TDA	A	72	0.951	8.631	1.129	−25.526	20.227	−1.078	2.979
	B	72	1.099	6.132	0.311	−18.609	28.298	−0.342	2.540

Note: mean, standard deviation, median, maximum and minimum and 95% confidence intervals for the mean.Dynamic factors: relative Variation $((V_{2010} - V_{1991})/ V_{1991})*100$.

Table 5. Summary of including factors for foreign exchange generation and tax collection.

	Group	*N*	Mean	S.D.	Median	Minimum	Maximum	C.I. Lower Limit	C.I. Upper Limit
Static factors									
FEI	A	56	7.733	10.563	5.182	0.246	72.057	4.904	10.562
	B	68	5.083	5.238	3.405	0.103	26.040	3.815	6.350
CBS	A	55	−3.569	12.198	−0.599	−73.487	10.632	−6.867	−0.272
	B	68	−8.629	17.627	−6.801	−130.124	14.978	−12.896	−4.362
FIR	A	67	1.046	1.878	0.331	0.005	10.453	0.588	1.504
	B	69	1.514	2.548	0.597	0.001	15.323	0.902	2.126
EBS	A	62	36.179	32.075	28.791	0.000	174.115	28.034	44.325
	B	63	26.115	15.596	23.328	3.262	75.376	22.187	30.043
FIB	A	69	46.515	42.551	32.387	6.096	265.203	36.293	56.737
	B	64	37.226	27.794	30.687	5.652	180.218	30.283	44.168
IFI	A	68	18.773	6.552	18.051	0.256	34.203	17.187	20.359
	B	61	15.444	8.040	14.614	1.079	47.654	13.385	17.503
Dynamic factors									
FEI	A	56	125.004	337.372	25.597	−84.268	2024.151	34.655	215.353
	B	60	8.399	84.652	−8.624	−84.698	292.916	−13.469	30.267
CBS	A	53	223.560	1698.982	−12.177	−1736.497	11668.005	−244.738	691.857
	B	50	−296.521	2219.837	−13.076	−15558.606	736.930	−927.392	334.350
FIR	A	67	241.892	591.839	63.803	−93.177	4373.320	97.531	386.252
	B	69	248.603	1020.541	−23.708	−94.254	7295.649	3.443	493.764
EBS*	A	62	10.339	23.338	8.492	−94.241	70.944	4.413	16.266
	B	61	5.515	12.083	5.353	−25.668	32.346	2.420	8.610
FIB	A	69	25.462	47.517	23.455	−71.231	161.417	14.047	36.877
	B	64	26.318	73.201	19.933	−62.573	461.073	8.033	44.603
IFI	A	68	11.884	40.393	3.997	−71.223	248.088	2.107	21.661
	B	61	8.983	34.268	0.326	−74.142	184.491	0.207	17.760

Note: mean, standard deviation, median, maximum and minimum and 95% confidence intervals for the mean.Dynamic factors: relative Variation $((V_{2010} - V_{1991})/ V_{1991})*100$.*Simple Variation $(V_{2010} - V_{1991})$ since minimum values in 1991 are 0.

Table 6. Summary of including factors for investment climate

	Group	N	Mean	S.D.	Median	Minimum	Maximum	C.I. Lower Limit	C.I. Upper Limit
Static factors									
PPE	A	64	24131.891	12151.040	21016.500	4736.000	48884.000	21096.651	27167.130
	B	43	5914.930	5055.394	3343.000	1101.000	20600.000	4359.110	7470.751
CDD	A	66	41.288	33.846	30.500	3.000	193.000	32.967	49.608
	B	71	72.423	47.856	57.000	5.000	205.000	61.095	83.750
FDL	A	70	5.308	2.794	5.513	0.059	9.673	4.642	5.974
	B	72	4.027	2.337	3.687	0.101	9.919	3.478	4.576
Dynamic factors									
PPE	A	64	50.597	48.806	34.640	−11.806	237.183	38.405	62.788
	B	43	44.583	53.979	37.480	−46.964	285.656	27.971	61.196
CDD	A	66	−5.861	84.804	−15.901	−75.000	633.333	−26.709	14.986
	B	71	−8.008	20.889	−8.163	−67.925	117.561	−12.952	−3.063
FDL	A	70	324.940	1206.065	10.921	−28.105	8654.844	37.364	612.516
	B	72	128.833	456.946	0.283	−34.419	2990.589	21.456	236.210

Note: mean, standard deviation, median, maximum and minimum and 95% confidence intervals for the mean.Dynamic factors: relative Variation $((V_{2010} - V_{1991})/ V_{1991})*100$.

Table 7. Summary of including factors for environmental dimension of sustainability.

	Group	*N*	Mean	S.D.	Median	Minimum	Maximum	C.I. Lower Limit	C.I. Upper Limit
Static factors									
ESD	A	65	10.659	13.583	6.034	0.005	70.112	7.294	14.025
	B	50	5.769	11.807	2.217	0.076	79.483	2.414	9.125
ECO	A	72	7.907	6.320	6.611	0.924	36.657	6.422	9.392
	B	71	0.895	1.499	0.429	0.010	9.631	0.540	1.250
RAD	A	66	28739.174	84993.230	4043.237	7.585	651091.56	7845.230	49633.118
	B	70	19438.524	48797.765	3048.797	29.848	320878.97	7803.108	31073.940
TRE	A	71	17.654	15.927	12.460	0.070	60.109	13.884	21.424
	B	72	14.058	13.391	10.573	0.113	67.619	10.911	17.204
PDE	A	66	63.157	34.116	73.152	0.085	100.000	54.771	71.544
	B	48	48.496	36.769	40.934	0.000	100.000	37.820	59.173
CEE	A	65	5195.761	4452.096	4164.868	395.395	23808.809	4092.585	6298.936
	B	49	482.449	690.926	297.264	21.779	4383.645	283.992	680.906
Dynamic factors									
ESD	A	65	69.692	266.523	16.421	−94.360	1924.299	3.651	135.733
	B	50	68.005	436.995	−4.985	−95.663	3059.788	−56.187	192.198
ECO	A	72	21.921	60.796	6.269	−55.220	335.329	7.635	36.207
	B	71	279.192	1703.156	58.231	−57.755	14401.777	−123.939	682.322
RAD	A	66	−10.541	14.072	−9.669	−56.572	19.411	−14.001	−7.082
	B	70	−26.689	7.794	−27.398	−40.436	−1.706	−28.548	−24.831
TRE	A	71	−5.121	32.262	−4.318	−80.772	200.000	−12.758	2.515
	B	72	31.288	60.014	14.060	−29.625	350.000	17.186	45.391
PDE*	A	66	−0.828	11.752	−0.001	−57.593	26.911	−3.717	2.061
	B	48	12.148	17.410	8.608	−31.337	60.490	7.092	17.203
CEE	A	65	52.896	67.013	30.475	−46.173	252.900	36.291	69.501
	B	49	123.393	151.246	92.206	−17.561	780.550	79.950	166.836

Note: mean, standard deviation, median, maximum and minimum and 95% confidence intervals for the mean.Dynamic factors: relative Variation $((V_{2010} - V_{1991})/ V_{1991})*100$.*Simple Variation $(V_{2010} - V_{1991})$ since minimum values in 1991 are 0.

Table 8. Summary of economic development and tourism growth.

Economic Development and Tourism growth									
	Group	N	Mean	S.D.	Median	Minimum	Maximum	C.I. Lower Limit	C.I. Upper Limit
ED	A	72	34.927	13.316	31.735	11.827	70.168	31.798	38.056
	B	72	60.663	30.722	68.556	1.917	99.557	53.444	67.883
TG	A	72	36.726	16.490	30.440	17.918	86.403	32.851	40.601
	B	72	55.579	21.996	51.650	21.674	99.997	50.410	60.748

Note: mean, standard deviation, median, maximum and minimum and 95% confidence intervals for the mean.

Table 9. Non-relevant static factors for the economic development.

Group	Static factors	*p*-value	Partial η^2
Geographic features and infrastructure provision	ALI	0.472	0.006
	TEL	0.692	0.002
	PAV	0.291	0.014
	PFA	0.962	0.000
	SIN	0.987	0.000
	ELE	0.967	0.000
	CHO	0.117	0.030
	MCP	0.298	0.015
Population characteristics	PCC	0.572	0.005
	TET	0.868	0.001
	PMS	0.572	0.005
Foreign exchange generation and collection capacity	EBS	0.989	0.000
	FEI	0.792	0.000
	CBS	0.989	0.000
	FIR	0.881	0.001
	FIB	0.765	0.002
Investment climate	CCD	0.933	0.000
	FDL	0.528	0.006
Environmental dimension of sustainability	CCE	0.885	0.000
	TRE	0.812	0.001
	ESD	0.876	0.000
	RAD	0.698	0.003

Note: *P*-value and η^2 obtained from the multivariate linear regression model.

The results from the multivariate analysis are presented in Table 10. The factors that influence the ED (adjusted by TG) are ranked in increasing order of value for the partial η^2 measurement, which is a measure of the variability in the dependent variable that is accounted for by variation in the independent variable.

From the results obtained, the associated factors with the ED adjusted by the TG and type of country can be explained as follows. The lowest degree of relevant association is observed for the static indicator of IFI (tax revenue) with a η^2 of 0.084 and β of −0.6 which indicates to be a break factor, that is higher values of the indicator is associated

Table 10. Relevant static factors for the economic development.

	β	Standard Error	*P*-value	Partial η^2	Observed Power
Group A vs. B	6.564	8.650	0.451	0.010	0.116
TG	0.977	0.183	0.000	0.322	0.999
IFI_91	−0.602	0.256	0.022	0.084	0.637
HOC_91	−0.389	0.155	0.015	0.095	0.696
CHO_91	−1.661	0.616	0.009	0.108	0.756
ESD_91	−0.825	0.621	0.189	0.029	0.258
Group A * ESD_91	1.416	0.604	0.022	0.084	0.635
DES_91	−1.053	0.369	0.006	0.119	0.802
CBS_91	0.503	0.163	0.003	0.136	0.857
ECO_91	−4.494	1.859	0.019	0.089	0.662
Group A * ECO_91	3.568	1.892	0.064	0.056	0.458
PDE_91	0.259	0.077	0.001	0.157	0.908
TDA_91	−0.824	0.227	0.001	0.180	0.946
PPE_91	0.004	0.001	0.000	0.185	0.953
Group A * PPE_91	−0.003	0.001	0.003	0.142	0.874
TG * PPE_91	−0.00006	0.00001	0.00016	0.21251	0.97718

Note: β, S.E. *p*-value and η^2 obtained from the multivariate linear regression model. *R* Squared 0.777. Adjusted *R* Squared 0.717. Test for homogeneity *p*-value = 0.118. VIF for collinearity vary between 1.353 and 4.082 for the different independent variables. Normality test for the residuals $p = 0.871$.

with a lower ED, independently of the type of country and TG. Therefore, this factor is associated with the ED in both group of countries and the level of association with the ED is the same for all countries (independent of their TG). In contrast, the highest degree of association is observed for the static factor PPE (GDP per working person) with a total η^2 of 0.54. An interaction between the factor and group of country was found, indicating that the effect of this factor in the ED differ depending on the type of country, and since an interaction between the factor and TG was also observed, then the effect of the association also depend on the level of tourism activity within the country. For example, in countries from group B the association with ED is 0.004 increase per unit increase of PPE, while in countries from group A the association with ED is 0.001 increase per unit increase of PPE, so stronger pushed effect in the ED is observed in countries belonging to group B in compare to the pushed effect in countries classified as A. In relation with the TG, the pushed effect of PPE in countries with higher tourism activity is smaller than in countries with lower tourism activity. The number of homicides (HOC) is a significant break static factor associated with ED, thus increasing number of homicides implies a decrease in the ED, and this effect is similar in both type of countries and independently of the degree of tourism activity. Also hospital beds (CHO), unemployment (DES) and working population (TDA) are found to be break static factors for the ED, in both type of countries and with similar effect for different TG.

In contrast, net trade in goods and services (CBS) and production of electricity from oil, gas and coal (PDE) are push static factors, indicating than higher values is associated with a higher ED, in both type of countries and independently of the level of tourism. The energy without CO_2 emissions (ESD) has a positive impact in the ED in countries from group A, indicating that an increase unit of ESD has an increase effect of 0.591 in the ED, however, this push effect is not observed in countries from group B, where almost no impact is detected (this factor is within the five least relevant factors associated with the ED). Thus ESD is a push static factor in countries from group A. A determinant static factor

in countries from group B is the CO_2 emissions (ECO), where a negative impact is observed in the ED. ECO is a break factor with a decreasing effect in the ED of 4.4 per unit increase of ECO, while in countries from group A the decreasing effect in the ED is 0.926 per unit increase of ECO. This static factor is within the five most relevant factors associated with the ED.

5.2.2. *Analysis of dynamic factors*

Using a similar procedure as in previous section for static factors, in this section the results presented were obtained by applying a multivariate regression model including the dynamic factors. Table 11 shows the non-relevant dynamic factors for the ED.

Table 12 shows the results from the model with a raking from the least to the most relevant dynamic factor associated with the ED.

The significant dynamic factor with the least impact is the hospital bed (CHO) as a push factor, increasing ED of 0.075 per unit increase of the relative variation of hospital beds (η^2 of 0.046). The next dynamic factor in the ranking of relevance is paved roads factor (PAV) was found to be a break factor for the ED, where higher values of relative variation were associated with worse ED, for both type of countries. Another relevant dynamic factor associated with ED is GDP per working person (PPE), being a push factor for ED, higher relative variation of PPE is associated with higher ED (η^2 of 0.062). The electric power consumption (CEE) is anther push dynamic factor for the ED in both type of countries, higher relative variation of CEE increases the ED in 0.073 per unit increase (η^2 of 0.081). The relative variation of conflict-related deaths in the country (MCP) is a break factor in the ED; higher relative variation implies a higher ED. For countries in group B the relative variation of electricity production (ELE) is a push dynamic factor of the ED, indicating that countries with higher relative variation within group B increase

Table 11. Non-relevant dynamic factors for the economic development.

Group	Static Indicators	*p*-value	Partial η^2
Geographic features and infrastructure provision	ALI	0.991	0.000
	TEL	0.824	0.000
	PFA	0.530	0.004
	SIN	0.966	0.000
Population characteristics	TET	0.575	0.003
	DES	0.588	0.003
	PCC	0.519	0.004
	PMS	0.958	0.000
	TDA	0.928	0.000
Foreign exchange generation and collection capacity	EBS	0.957	0.000
	FEI	0.670	0.002
	CBS	0.884	0.001
	FIR	0.898	0.000
	FIB	0.827	0.001
	IFI	0.700	0.005
Investment climate	CCD	0.691	0.002
	FDL	0.763	0.001
Environmental dimension of sustainability	ECO	0.681	0.006
	ESD	0.997	0.000
	RAD	0.383	0.008

Note: *P*-value and η^2 obtained from the multivariate linear regression model.

Table 12. Relevant dynamic factors for the economic development.

	β	Standard Error	*P*-value	Partial η^2	Observed Power
Group A vs. B	10.159	7.089	0.156	0.025	0.294
TG	0.264	0.125	0.038	0.053	0.548
CHO (RV)	0.075	0.039	0.054	0.046	0.489
PAV (RV)	−0.115	0.058	0.053	0.046	0.493
PPE (RV)	0.083	0.036	0.024	0.062	0.624
CEE (RV)	0.073	0.028	0.010	0.081	0.746
MCP (RV)	−0.767	0.251	0.003	0.104	0.854
ELE (RV)	0.134	0.081	0.102	0.033	0.373
Group A * ELE (RV)	−0.092	0.062	0.140	0.027	0.314
TG * ELE (RV)	−0.002	0.001	0.038	0.053	0.550
TRE (RV)	0.327	0.115	0.006	0.091	0.798
Group A * TRE (RV)	−0.357	0.128	0.007	0.088	0.785
HOC (RV)	−0.753	0.167	0.000	0.202	0.993
Group A * HOC (RV)	0.766	0.185	0.000	0.176	0.983

Note: β, S.E. *p*-value and η^2 obtained from the multivariate linear regression model. *R* Square 0.698. Adjusted *R* Squared 0.645. Test for homogeneity *p*-value = 0.100. VIF for collinearity vary between 1.126 and 4.731 for the different independent variables. Normality test for the residuals $p = 0.268$.

the ED significantly, however, in countries from group A the impact of the association as a push dynamic factor of the ELE for the ED was lower. The effect of the relative variation of ELE in the ED depends also of the TG; in particular the impact of the relative variation of ELE in the ED is lower in countries with higher tourism activity. The relative variation of cultivated land (TRE) in countries from group B was a push factor for ED of the country with a increase for the ED of 0.327 per unit increase, however, for countries in group A the relative variation of TRE was not associated with ED of the country, no change per unit increase was observed (0.327−0.357 = −0.03). One of the most relevant dynamic factor associated with ED is the number of homicides (HOC), the relative variation of HOC within countries in group B is a break factor, indicating that higher relative variation has a negative effect for the ED, however in countries from group A higher relative variation does not have an impact in the ED.

6. Conclusions

The results presented in this article allow us to verify the hypothesis that has guided this study. It has, in fact, been possible to demonstrate that, in order for the economic growth of tourism to result in an improvement in a country's ED, it is necessary to manipulate a series of factors that are determinant in order for this relationship to occur. Similarly, it was possible to identify these factors, within the set of variables that were analyzed in this study, and to classify them in order of relative importance.

Works such as that presented in this article are essential in the decision-making process undertaken by policymakers and destination managers, given that they facilitate extremely useful information for the planning of their actions, both over the short and the long term. In fact, the distinction in our analysis between the static and dynamic factors shall help us to know in what moment each of the analyzed factors may affect the TG-ED relationship and what decisions and actions may be put into place at each moment.

Overall, it has been possible to verify that many of the static factors that condition (favouring or limiting) the transformation of a country's TG into ED act in this way, regardless of country type (belonging to group A or B) or level of touristic development.

Regarding these variables, the results allow us to deduce that the initial provision of certain factors is essential in assuring that TG contributes to an improvement in ED. In this sense, policymakers and destination managers should intervene, implementing policies and actions that ensure the lowest possible level of IFI, HOC, CHO, DES and TDA. On the other hand, it is also necessary to plan actions that ensure maximum initial levels of CBS and PDE.

There are, however, certain factors that act in a distinct way depending upon the country group under consideration. For example, it has been verified that high levels of ECO in the group B countries are a handicap for the production of this TG-ED relationship, requiring that these countries develop a taxation policy to reduce their CO_2 emissions if they wish to ensure an appropriate initial level of this factor. On the other hand, group A countries have a key success factor in ESD that favours this relationship, therefore, the use of clean energy should be supported, promoting green economic policies.

Country groups also differ in terms of the treatment to be given to the PPE factor. Although generally speaking, a high initial level of PPE favours the transformation of TG into ED in all countries, in the group B countries, this transformation occurs in a larger measure than in the group A countries. And furthermore, the leverage effect of PPE on TG is lower in the more touristic countries. Thus, policymakers and destination managers from countries having greater tourism activity from group A should evaluate the opportunity cost that may result from intervening in order to have a higher initial pro- vision of PPE as compared to how this may affect other factors.

As for the dynamic factors, regardless of country type (belonging to group A or B) and the level of touristic development of the country, it has been found that those countries that increase their levels of CHO, PPE and CEE, favour the easy transformation of TG into ED. Also, the transformation of TG into ED is favoured in those countries that manage to gradually decrease their levels of PAV and MCP.

On the other hand, there are factors that are shared in a different manner depending on country type. For example, in the group B countries, an increase in TRE and a decrease in HOC favour the transformation of TG into ED, although this relationship does not exist in group A countries. Also, an increase in ELE favours a positive TG-ED relationship, but more so in the group B countries as compared to those from group A. And it has also been shown that this relationship is less intense in countries with greater tourism activity.

The results appearing in Tables 10 and 12 allow us to determine the factors that favour or limit the transformation of TG into ED, while also prioritizing these factors according to their importance in this transformation. Thus, in the case of static factors, countries from group B should prioritize in this order, with the lowest initial provision of ECO, CHO, DES, ESD and TDA. Countries from group A should consider these same factors as the most important, although the prioritization changes. These countries should prioritize by taking the lowest initial provision of CHO, DES, ECO, ESD and

TDA. As for the dynamic factors, countries from group B should prioritize in this order, ensuring the greatest possible reduction in the MCP and HOC factors, the greatest possible increase in TRE and ELE and fifth, the greatest possible decrease in PAV. However, for countries from group A, the prioritization, quite different from the other dynamic factors, lies in reducing, as much as possible, the MCP followed by (and with much less importance) a reduction in PAV. Third, for these countries, their provision of PPE should be increased, followed by an increase in CHO and CEE.

Ultimately, if policymakers and destination managers from all of the analyzed countries manage to prioritize their policies and actions, the intervention regarding to factors detected in this study may ensure that TG leads to ED, a significant step in improving the local population's quality of life through tourism.

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Appendix 1.

Group A. Developed countries in which there is a transformation of tourism into economic development.

1. Norway	19. Australia	37. Latvia	55. Tr. and Tobago
2. Sweden	20. UK	38. Belarus	56. Saint Lucia
3. France	21. Spain	39. Czech Republic	57. Venezuela
4. Iceland	22. Seychelles	40. Argentina	58. Azerbaijan
5. Germany	23. Hungary	41. Ukraine	59. Mexico
6. Switzerland	24. Greece	42. Slovakia	60. Korea. Rep.
7. Denmark	25. Ireland	43. Cyprus	61. Romania
8. Canada	26. Uruguay	44. Bahamas	62. Arabia
9. Netherlands	27. Qatar	45. Poland	63. Jordan
10. Austria	28. Portugal	46. Moldova. R.	64. Jamaica
11. Belgium	29. Cuba	47. Singapore	65. Colombia
12. Luxembourg	30. Malta	48. Costa Rica	66. Malaysia
13. Japan	31. Estonia	49. Panama	67. Mongolia
14. US	32. Lithuania	50. Bahrain	68. Suriname
15. Finland	33. Kuwait	51. Kazakhstan	69. Fiji
16. Israel	34. Russian. Fed.	52. Armenia	70. Ecuador
17. Italy	35. Bulgaria	53. Albania	71. Brazil
18. N. Zealand	36. Hong Kong	54. Chile	72. Belize

Source: Cárdenas-García et al. (2015).

Appendix 2

Group B. Developing countries in which there is no relationship between tourism and economic development.

1. Paraguay	19. Maldives	37. Ghana	55. Uganda
2. Thailand	20. Vietnam	38. India	56. Benin
3. Sri Lanka	21. Vanuatu	39. Yemen	57. Sudan
4. South Africa	22. Iran, Rep.	40. Comoros	58. Burundi
5. Oman	23. Cape Verde	41. Côte d'Ivoire	59. Malawi
6. Syria, Rep.	24. Honduras	42. Pap. N. Guinea	60. Gambia
7. China	25. Lesotho	43. Madagascar	61. Rwanda
8. Tunisia	26. Swazi	44. Zambia	62. R.Central Africa
9. Peru	27. Gabon	45. Pakistan	63. Ethiopia
10. Turkey	28. Egypt	46. Laos, Rep.	64. Nigeria
11. Guyana	29. Indonesia	47. Tanzania	65. Chad
12. Nicaragua	30. Sao Tome	48. Cameroon	66. Mozambique
13. Namibia	31. Zimbabwe	49. Cambodia	67. Angola
14. Philippines	32. Bolivia	50. Haiti	68. Burkina Faso
15. Botswana	33. Kenya	51. Togo	69. Mali
16. Algeria	34. Congo	52. Bangladesh	70. Guinea
17. R. Dominic	35. Morocco	53. Nepal	71. Niger
18. El Salvador	36. Guatemala	54. Senegal	72. Sierra Leone

Source: Cárdenas-García et al. (2015).