Tourism towards the well-being of Small Island Developing States: Tourism Agenda 2030

Miguel Puig-Cabrera, Ginesa Martínez-del Vas, Miguel Ángel Beltrán-Bueno and Abraham Nuevo-López

Abstract

Purpose – *The purpose of this study is to contrast the capacity of tourism-specialized and non-tourism-specialized systems in small developing insular societies to achieve a well-being model aligned with the Agenda 2030.*

Design/methodology/approach – *The empirical method of this work consists of a panel-corrected standard errors analysis for a total of seven Caribbean Small Island Developing States (SIDS) to measure the contribution of both economic diversification and tourism specialization to well-being in the Agenda 2030 framework. Time period considered in the analysis include 2005–2019.*

Findings – *Linear and nonlinear relationships reveal the need to conjugate both tourism specialization and economic diversification in the 2030-development agendas of small developing insular societies as both represent a means to achieve a well-being model aligned with the Agenda 2030.*

Originality/value – *One of the main novelties of this work is that development is analyzed from a multidimensional point of view (standard of living, access to education and health services), as an integrated thinking that considers any tourism development model that defines a route with Sustainable Development Goals (SDGs) and Agenda 2030 as main destination in SIDS. Specifically, practical implications are given combining recommendations to foster development and face poverty (SDG-1), while inequalities situations are reduced (SDG-10) and decent jobs are generated (SDG-8). These implications also focus on strengthening local suppliers of goods and services from other sectors to be integrated into the destination value chain (SDG-2), ensuring access to education (SDG-4) and contributing to gender equality (SDG-5).*

Keywords *Tourism specialization, Economic diversification, Small Island Developing States Agenda 2030, Development, Well-being, Sustainable Development Goals, Economic diversification*

Paper type *Research paper*

旅游业促进小岛屿发展中国家的福祉：*2030*年旅游议程

摘要

方法论： 这项工作的实证方法包括对*7*个加勒比海小岛屿发展中国家进行面板校正标准误差（*PCSE*）分析，以衡量经济多样化和旅游专业化对*2030*年议程框架中的福祉的贡献。分析中考虑的时间段包括*2005–2019*年。

目的： 这项工作的目的是对比小型发展中岛国社会的旅游专业系统和非旅游专业系统的能力，以实现与*2030*年议程相一致的福祉模式。

研究结果： 线性和非线性关系表明，在发展中小岛国社会的*2030*年发展议程中，需要将旅游专业化和经济多样化结合起来，因为两者都是实现与*2030*年议程一致的福祉模式的手段。

原创性/价值： 这项工作的主要创新点之一是，从多维的角度（生活水平、受教育机会和健康服务）来分析发展，作为一种综合思维，考虑任何旅游发展模式，确定了一条以可持续发展目标和*2030*年议程为主要目的地的小岛屿发展中国家路线。具体来说，在减少不平等状况（*SDG-10*）和创造体面工作（*SDG-8*）的同时，结合促进发展和面对贫困（*SDG-1*）的建议，给出了实际意义。此外，要加强其他部门的货物和服务的当地供应商，以融入目的地价值链（*SDG-2*），保证受教育的机会（*SDG-4*）和促进性别平等（*SDG-5*）。

关键词 旅游业专业化，经济多样化，小岛屿发展中国家，*2030*议程，发展

文章类型 研究型论文

Miguel Puig-Cabrera, Ginesa Martínez-del Vas and Miguel Ángel Beltrán-Bueno are all based at the Faculty of Economics and Business, Catholic University of Murcia - UCAM, Murcia, Spain. Abraham Nuevo-López is based at the Faculty of Tourism, University of Malaga, Malaga, Spain.

Received 28 February 2022
Revised 17 June 2022
15 September 2022
30 October 2022
Accepted 2 November 2022

The authors wish to thank six anonymous reviewers and the Editor-in-Chief, Prof Dimitrios Buhalis, for providing helpful remarks and suggestions on prior versions of this work.

El turismo al servicio del bienestar de los pequeños estados insulares en desarrollo: Agenda 2030 del turismo

Resumen

Metodología: *El método empírico de este trabajo consiste en un análisis de errores estándar corregidos por panel (PCSE) para 7 Pequeños Estados Insulares en Desarrollo para medir la contribución al bienestar a través de la especialización turística y la diversificación económica en el marco de la Agenda 2030. El horizonte contemplado en el análisis incluye 2005–2019.*

Objetivo: *El objetivo de este trabajo es contrastar la capacidad de los sistemas especializados y no especializados en turismo dentro de las pequeñas sociedades insulares en desarrollo para lograr un modelo de bienestar alineado con la Agenda 2030.*

Resultados: *Las relaciones lineales y no lineales revelan la necesidad de conjugar tanto la especialización turística como la diversificación económica en las agendas de desarrollo 2030 de las pequeñas sociedades insulares en desarrollo, ya que ambas representan un medio para alcanzar un modelo de bienestar alineado con la Agenda 2030.*

Originalidad: *Una de las principales novedades de este trabajo es que se analiza el desarrollo desde un punto de vista multidimensional (nivel de vida, acceso a la educación y servicios de salud), como un pensamiento integrado que considera cualquier modelo de desarrollo turístico que defina una ruta con los ODS y la Agenda 2030 como destino principal en los PEID. En concreto, se ofrecen implicaciones prácticas que combinan recomendaciones para fomentar el desarrollo y hacer frente a la pobreza (ODS-1), al tiempo que se reducen las situaciones de desigualdad (ODS-10) y se generan empleos decentes (ODS-8). Asimismo, fortalecer a los proveedores locales de bienes y servicios de otros sectores para que se integren en la cadena de valor del destino (ODS-2), garantizar el acceso a la educación (ODS-4) y contribuir a la igualdad de género (ODS-5).*

Palabras clave *Especialización turística, Diversificación económica Pequeños estados insulares en desarrollo, Agenda 2030, Desarrollo*

Tipo de papel *Trabajo de investigación*

Introduction

The Agenda 2030 and the 17 Sustainable Development Goals (SDGs) identifies tourism as one of the main drivers of sustainable development in destinations (UNWTO, 2018) concerning several issues, such as socioeconomic development (SDG-1, SDG-2 and SDG-10); access to education and health (SDG-3 and SDG-4); gender equality (SDG-5); protection of natural and maritime resources (SDG-6, SDG-14 and SDG-15); climate change fight and energy efficiency (SDG-7 and SDG-13); and global peace (SDG-16 and SDG-17), among others. This is also being reflected in an increasingly number of works that focus on tourism effects on each one of these goals (Alonso-Muñoz *et al.*, 2022).

Tourism growth in developing destinations and its impact on the living conditions of the population are giving rise to a growing dilemma in the literature (Smith and Diekmann, 2017) regarding its benefits, supported by some authors (Pulido-Fernández and Cárdenas-García, 2021; Sokhanvar *et al.*, 2018), but rejected by others (Scheyvens and Hughes, 2019). Despite this controversy, the dilemma is greater about relying on a tourism specialized (TS) economy or a diversified one (DE) to achieve an optimal development model for well-being (Çiftçioğlu and Sokhanvar, 2021; Croes *et al.*, 2018; Lin *et al.*, 2019; Scarlett, 2021).

Small Island Developing States (SIDS) are classified by United Nations (2022) according to their unique and common social, economic and environmental vulnerabilities. Although there is no universally agreed definition for SIDS (Macfeely *et al.*, 2021), there is a broad consensus that "these territories are typically characterized as remote, with high vulnerability to economic and environmental shocks, and with an inability to capitalize on economies of scales" (p1.). This implies several difficulties to compete in the global supply chain, their high-cost structure to import (especially energy) and, consequently, several disadvantages for tourism development.

The dependence on tourism as well as the concerns to well-being are specially critic for SIDS (Chattopadhyay *et al.*, 2022), because of their small size and shared commonalities.

This attempts to also affect the existing *model of well-being* of the host communities, that can be understood as a set of factors that conditions the individuals' health, knowledge and standard of living so that they can achieve a desired state of being, in line with Anand and Sen's (2000) approach of multidimensional development. Some existing empirical evidence suggest a poorer performance on the achievement of global development goals regarding the patterns of tourism dynamics in the more tourism dependent territories in relation to the nonspecialized ones (Romao and Neuts, 2017). Thus, the SIDS' vulnerabilities as well as the TS make a crucial combination to contrast the *myopic* paradigm of tourism and well-being in line with the Agenda 2030 and the SDGs. Although some works emphasize on the opportunity of TS for well-being in SIDS (Marsiglio, 2018), there is still a gap of knowledge regarding TS as a linear and nonlinear predictor for well-being in SIDS for the Agenda 2030 fulfillment, especially after the COVID-19 pandemic (Hoarau, 2022).

Thus, the purpose of this work is to contrast the capacity of TS and non-tourism specialized systems in small developing insular societies to achieve a well-being model aligned with the Agenda 2030 and the SDGs. The empirical method of this work consists of a panel-corrected standard errors (PCSE) analysis for a total of seven SIDS to measure the contribution of both economic diversification and tourism specialization to well-being in the Agenda 2030 framework including linear and nonlinear relations. The time period considered in the analysis is 2005–2019. This work offers an up-to-date answer to the existing dilemma of SIDS about TS or diversified-oriented strategies to achieve well-being regarding the vulnerabilities of these territories. One of the main novelties of this work is that development is analyzed from a multidimensional point of view (standard of living, access to education and health services), as an integrated thinking that considers any tourism development model that defines a route with SDGs and Agenda 2030 as main destination and build competitive and resilient advantages in SIDS. Specifically, practical implications are given to these territories combining recommendations to foster development and face poverty (SDG-1), while inequalities situations are reduced (SDG-10) and decent jobs are generated (SDG-8). These implications also focus on strengthening local suppliers of goods and services from other sectors to be integrated into the destination value chain (SDG-2), ensuring access to education (SDG-4) and contributing to gender equality (SDG-5).

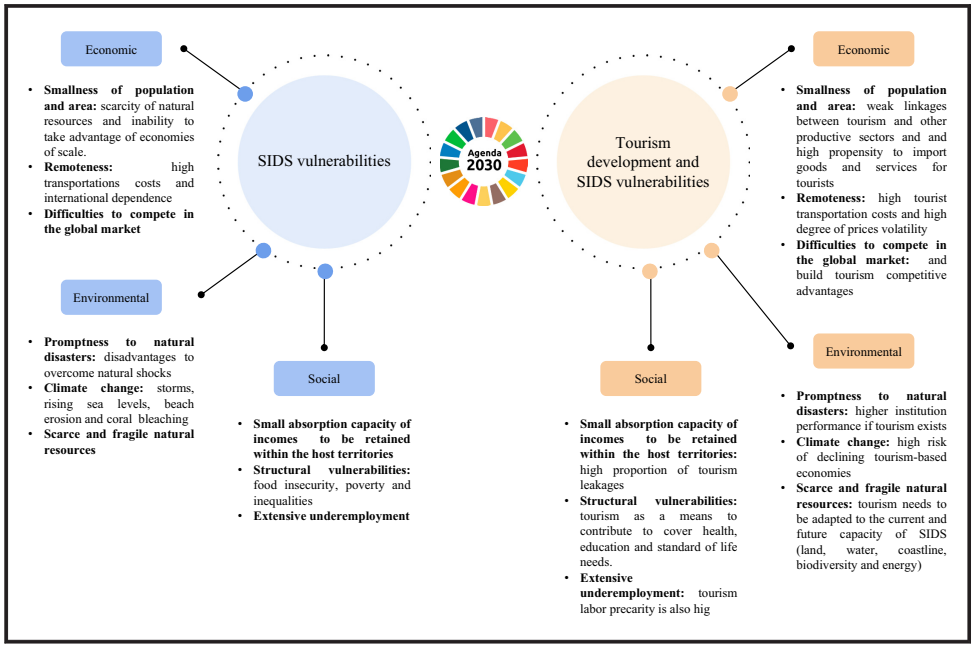
Literature review

According to Sen (1988), a distinction must me made regarding the concepts of growth and development. Meanwhile *growth* represents the quantitative approach of wealth, *development* represents the qualitative approach in which that wealth distributes among community to increase well-being. In this work, the term *wealth* must not be understood from its strict economic sense, but from a socioeconomic approach. Thus, including monetary and non-monetary, material and non-material assets that contribute to individuals' development in terms of Anand and Sen's (2000) approach (health, knowledge and standard of living dimensions). Consequently, it is a categorical fact that growth is necessary for development, as well as development is for well-being. For the case of tourism, this work refers to both terms considering tourism growth as a *means* to achieve an *end* like development is for community well-being in SIDS. Tourism being one of the primary sources of wealth in these territories, it also becomes an opportunity for achieving the Agenda 2030 and 17 SDGs (UNWTO, 2020).

As Figure 1 shows, these territories share several vulnerabilities related to social, economic and environmental issues and face common development challenges including small populations and surface, spatial dispersion and remoteness from major markets, scarcity of resources, as well as a high exposure to external shocks and severe climate-related events and natural disasters, among others (Macfeely *et al.*, 2021).

These vulnerabilities also reflect on tourism development, and, thus, condition the model of development of SIDS to build competitive advantages aligned with the Agenda 2030. Consequently, the adverse effects of tourism development could be more severe, as well as

Figure 1 Vulnerabilities of SIDS as a conditioning factor for tourism Agenda 2030



the generated benefits could also be more significant and become a path to achieve a model of development suitable with the Agenda 2030 (UNWTO, 2018). The increasing empirical evidence on the relationship between tourism and development in SIDS has generated some discussion regarding the convenience of TS in these territories (Croes *et al.*, 2018; UNWTO, 2018). Thus, tourism development could become the main driver for economic growth in SIDS (Biagi *et al.*, 2017), although socioeconomic benefits could be limited (Hampton and Jeyacheya, 2020). Instead, Croes *et al.* (2018) emphasize the need to develop other sectors to ensure further growth.

Causality of the tourism–socioeconomic development binomial

There is a widespread consensus attributing the existence of a strong relationship between tourism growth and the overall socioeconomic development of a country (Wang *et al.*, 2020). However, the dilemma in the literature opens up when it comes to attributing the causality of this growth to the tourism sector or the development of other economic activities. UNWTO (2018) points out that tourism is directly associated with economic progress in emerging destinations in two ways:

1. as a cause of economic growth (tourism-led growth hypotheses); or
2. because of prior development of sectors other than tourism (growth-led tourism hypotheses).

Following the tourism-led growth approach, some authors point out that the causality of economic growth can be attributed to the tourism sector (Zhang and Cheng, 2019), showing empirical evidence in cases such as Lebanon (Bassil *et al.*, 2015), Laos (Kyophilavong *et al.*, 2018) or Mauritius (Solarin, 2018). In line with the growth-led tourism approach, some authors argue that the development of sectors other than tourism contribute to the socioeconomic development of a country (Lin *et al.*, 2019). Empirical evidence is given for the cases of China (Songling *et al.*, 2019), Nigeria (Osinubi *et al.*, 2021), Malaysia (Massidda and Mattana, 2013) or Tunisia (Cortés-Jimenez *et al.*, 2011).

However, other work suggests the existence of a bidirectionality, in which both tourism and the other sectors could be drivers of economic development. Regarding the findings of Lin *et al.* (2019), tourism-led growth and growth-led tourism approaches tend to occur at the same time in less developed economies. Pulido-Fernández and Cárdenas-García (2021) confirm this bidirectionality for a total of 143 countries.

In the case of SIDS, the symptoms of tourism on well-being are reinforced: Fauzel and Seetanah (2021) confirm a bidirectional causality between tourism and development based on the Mauritius Islands. Ridderstaat *et al.* (2014) prove bidirectionality for the case of Aruba. Narayan *et al.* (2010) confirm the interaction between economic growth and tourism development for Papua New Guinea, the Solomon Islands, Tonga and Fiji. In addition, Liu *et al.* (2018) found that tourism could lead to economic growth in Mauritius.

Tourism specialization versus productive diversification

Regardless of its directionality, another major debate beyond the causality of this relationship is about becoming TS versus developing other sectors to achieve well-being. Biagi *et al.* (2017) suggest that an economy specialized in tourism grows faster versus a non-tourism economy, based on a sample of 63 developing countries. Romao and Neuts (2017) point out that in more advanced regions tourism is a complementary driver of well-being in comparison to other sectors. De Vita and Kyaw (2017) state that TS is a path to socioeconomic prosperity, although it is conditioned by the level of economic development and the absorption capacity of the financial system of the host economies. Their findings reveal that tourism specialization and socioeconomic development are interrelated, although countries with middle and high income seem to gain more from TS than countries with lower incomes. Croes *et al.* (2018) revealed that TS has a negative relationship with quality of life of the population.

Marsiglio (2018) argues that TS is an effective way for inclusive and green socioeconomic development leads a destination to ensure benefits to population, even if it is in a regardless its life cycle phase. Regarding the SIDS, there is limited empirical evidence contrasting TS and DE in these territories. However, Resende-Santos (2019) focuses on the case of Cape Verde to reveal that TS increases dependency and macroeconomic risks and vulnerability of this island. Hoarau (2022) proposes and tests the "tourism-led vulnerability hypothesis" in the insular context to suggest that TS implies a vulnerability in the medium and long-term, so DE is also necessary in SIDS. Bojanic and Lo (2016) suggest that TS could be a driver for well-being for the case of SIDS, conditioned by the existing level of economic development on that territory. Finally, although some works emphasize on the opportunity of TS for well-being in SIDS (Marsiglio, 2018), there is a clear gap of knowledge regarding TS as a linear and nonlinear predictor for well-being in SIDS within the framework of the Agenda 2030 and the SDGs, especially after the COVID-19 pandemic (Hoarau, 2022).

Tourism and well-being in Caribbean SIDS: brief contextual framework

Caribbean SIDS recorded 44 million of international tourists in 2019, that represents 43% of the total tourism market share in SIDS (UNWTO, 2020). Despite some climate drivers such as warming oceans and rising seas exacerbate tropical cyclone hazards are even making tourism being a volatile catalyst of well-being (Nurse *et al.*, 2018), tourism still generates over 30% of total exports in a significative number of SIDS, reaching as much as 80% in some of these territories (UNWTO, 2020). Several works address tourism and well-being in SIDS regarding the common vulnerabilities of these territories between the Caribbean and other regions. Since post-1960, tourism could become a factor of unsustainability in these territories.

According to McElroy and De Alburquerque (1988), the growth of tourism in the Caribbean SIDS implies sacrificing socio-environmental sustainability and limited benefits to population

while reducing space of these territories and not contribute to other economic activities. This is in line with Laguardia's (2019) findings on the case of Cuba, a high tourism dependent island that still needs to face several social and economic needs of the population. Jackman (2014) gives an overview about TS and volatility in SIDS, revealing that natural disasters or trade erosion could make the competitive advantage being debuilt gradually in these territories. Additionally, Peterson *et al.* (2020) focus on the Aruban community case study to reveal significant negative socioecological impacts and diminishing well-being.

Finally, the Caribbean SIDS share several similarities and vulnerabilities with SIDS located in other regions and have a high degree of tourism development (Murphy *et al.*, 2020; Spencer, 2019). Thus, this work will focus on these commonalities to test the potentiality of both tourism and non-tourism sector from a multidimensional point of view (standard of living, access to education and health services), to offer practical implications aligned with the Agenda 2030 so that competitive and resilient advantages can be built in these territories.

Methodology

Following the assumption that tourism contributes to development (UNWTO, 2018; Puig-Cabrera and Foronda-Robles, 2020), the empirical method of this work consists of a panel data analysis including a total of seven SIDS to measure the contribution of both economic diversification and tourism specialization to well-being based on the Agenda 2030 approach between 2005 and 2019. Given the trend of SIDS to have a high degree of tourism development (WTTC, 2021), the Caribbean was chosen as the pilot area for being one the most tourism-dependent regions worldwide (UNWTO, 2020).

Thus, the sample of this work contains seven Caribbean SIDS (Figure 2) for the period time 2005–2019. It includes both small developing insular societies with a high tourism GDP, as

Figure 2 Sample of study

well as others with an alternative main income source. Consequently, 57% of the analyzed SIDS (Barbados, Belize, Dominican Republic, Grenada, St. Kitts and Nevis) are in the first scenario. In 2019, this group ranged a tourism GDP from a minimum of 15.9% (Dominican Republic), to 43.6% (like Grenada and St Kitts and Nevis), also including SIDS with 29.5% (Barbados) and 37.6% (Belize) (WTTC, 2021). 42% of the studied SIDS (Guyana and Trinidad and Tobago) is characterized by having oil producing as the main income source, and thus, tourism represents a smaller part of the economies of these developing island states, with a tourism GDP value that ranges from 4.1% (Guyana) to 7.9% (Trinidad and Tobago) (WTTC, 2021). The inclusion of both typologies of SIDS, as well as the different levels of tourism development and/or dependence between them, make possible to better contrast the extrapolation of findings regarding the potentiality of tourism in comparison to the development of other sectors to build competitive advantages that are aligned with the Agenda 2030 (UNWTO, 2020).

Empirical model to be tested

The empirical method of this work consists of a PCSE analysis for a total of seven Caribbean SIDS to measure the contribution of both economic diversification (DE) and tourism specialization (TS) to well-being in the Agenda 2030 framework. Time period considered in the analysis include 2005–2019, combining linear and quadratic effects:

$$WB_{it} = f(TS_{it}, DE_{it}) \tag{1}$$

where *WB* reflects the well-being of Caribbean SIDS; *TS* represents tourism specialization; *DE* covers the development of all sectors other than tourism; *i* is a subscript that denotes the destinations included in the study; and *t* refers to the years covered by the study (2005–2019). To measure this theoretical model, a panel data analysis was carried out based on the following equation:

$$HDI = \Delta A_{it} + \beta_1 TS_{it} + \beta_2 TS_{it}^2 + \beta_3 DE_{it} + \beta_4 DE_{it}^2 + e_{it} \tag{2}$$

HDI stands for the Human Development Index as a proxy variable to measure the level of well-being achieved by the population. This variable is obtained from the Human Development Reports prepared annually by the United Nations Development Program (UNDP, 2021).

This index measures the socioeconomic development of a country based on the population's access to a better standard of living (or well-being), such as the coverage of its educational (years of schooling) and health (life expectancy at birth) needs (Anand and Sen, 2000). Its values range from 0 to −1, with 0 being the situation closest to underdevelopment (low standard of living and unsatisfied educational and health needs), and 1 for the situation of maximum development (high standard of living and satisfied educational and health needs). This variable has been accepted as a proxy to analyze the nexus of tourism and well-being (Chattopadhyay *et al.*, 2022; Croes *et al.*, 2018).

TS stands for tourism specialization as a proxy variable that represents the total tourism gross domestic product (GDP) per capita extracted from World Travel and Tourism Council (WTTC, 2021) and the World Bank (2021). This variable measures the tourism income obtained by the population in the destination and is expressed in dollars at constant prices (base year 2010) per capita. Thus, it enables to quantifying the individual contribution of tourism to the living conditions of the population in relation to the contribution of the non-tourism sectors. The GDP per capita is usually used to measure economic growth and well-being (Chi, 2021).

DE stands for economic diversification as a proxy variable calculated by the difference between gross domestic product (GDP) and tourism GDP in dollars at constant prices

(base year, 2010) extracted from WTTC (2021) and World Bank (2021) per capita. It represents the total set of goods and services produced in a given country and year and which are not linked to the tourism sector (Karabulut *et al.*, 2020).

A is the sum of individual and temporal effects, and *e* stands for the error term,

Napierian logarithmic transformation (Ln) was used to induce stationarity in the time series, thus assuring that the statistical properties are all constant over time.

Quadratic terms were included in the analysis to test nonlinearity (Tsay, 1986) between well-being, TS and DE. The inclusion of quadratic terms is used in tourism studies to analyze curvilinear relationships in destinations. For example, Bi and Zeng (2019) explored the nonlinearity of tourism spatial effects on carbon emissions in China provinces from 2003 to 2016 and Wang and Chen (2021) tested and validated an inverted U-shaped link between air quality and tourists arrivals.

The Durbin–Wu–Hausman test was applied to confirm endogeneity within the model (Table 1). Unit root (Pesaran, 2007) and cointegration (Westerlund, 2008) (Table 2) were also tested. The stationarity test was undertaken level and first difference forms.

Pesaran's (2004) cross-sectional dependence was tested (Table 3).

The results of these tests confirmed the first difference form (Δ) was the optimal way to obtain parameter estimates of equation (2):

$$HDI = \Delta A_{it} + \beta_1\ \Delta \mathrm{Ln} TS_{it} + \beta_2\ \Delta LnTS_{it}^2 + \beta_3\ \Delta \mathrm{Ln} DE_{it} + \beta_4\ \Delta \mathrm{Ln} DE_{it}^2 + e_{it} \quad (3)$$

The PCSE was chosen for estimation in equation (3) to solve issues of contemporaneous correlation, heteroscedasticity and autocorrelation among variables (Nsanyan *et al.*, 2021). This is based on the methodological assumptions of other similar works. According to Beck and Katz (1995), PCSE is more efficient than feasible generalized least squares (FGLS) estimator in a statistical scenario with presence of heteroscedasticity, first-order serial

Table 1 Endogeneity test

Dep. variable	*Checking variable*	*Durbin–Wu–Hausman test*
HDI	TS	Chi^2 test: 0.5942 p-value: 0.4436
HDI	DE	Chi^2 test: 0.8531 p-value: 0.4351

Note: The large Chi2 and F values reject the null hypothesis that all variables in the model are exogenous

Table 2 Panel unit root test and Westerlund's cointegration tests

		Pesaran (CIPS)		*Westerlund's cointegration test*	
Variable		*Z (t-bar)*	p-*value*	*Variance ratio*	p-*value*
HDI	*I (0)*	−4.106	0.073	3.346	0.000***
	I (1)	−4.840	0.000***		
LnTS	*I (0)*	−1.432	0.832		
	I (1)	−5.654	0.000***		
LnDE	*I (0)*	−1.552	0.697		
	I (1)	−5.804	0.000***		

Notes: A constant is included in the Pesaran (2007) tests. Critical values for the Pesaran (2007) test are −2.40 at 1%, −2.21 at 5% and −2.10 at 10%, respectively. The null hypothesis is that of a unit root. ***: $p \leq 0.01$ also indicates the rejection of no co-integration null hypothesis according to Westerlund's cointegration test

Table 3 Cross dependence tests

Variable	Lags 1	2	3	4
HDI	(0.00)***	(0.00)***	(0.00)***	(0.00)***
LnTS	(0.00)***	(0.00)***	(0.01)***	(0.02)***
LnDE	(0.00)***	(0.00)***	(0.00)***	(0.00)***

Notes: Under the null hypothesis of cross-sectional independence the CD statistic is distributed as a two-tailed standard normal. Results are based on the test of Pesaran (2004). Figures in parentheses denote *p*-values. ***: $p \leq 0.01$; **: $p \leq 0.05$; *: $p \leq 0.10$

correlation and contemporaneous cross-sectional correlation. For example, Dossou *et al.* (2021) use the PCSE to explore the linkage between tourism, governance quality and poverty reduction in 15 different Latin American countries between 2003 and 2015. Also, Xu *et al.* (2022) based on a panel data model estimated with PCSE parameters to stablish the linkages between tourism development and corruption in 30 African countries over the period 1996–2020. However, the findings of this kind of studies should be considered to identify only generalized relationship patterns among variables that a posteriori should be analyzed individually in each country. Multicollinearity among the explanatory variables was also analyzed, by using the values of the variance inflation factors (VIFs). None of the VIF values of all the variables in the model are 5> (Salmerón *et al.*, 2018).

Findings and discussion

The test Hausman (1978) was applied to check the convenience of fixed-effect (FE) or random-effect (RE) estimators (Table 4). Being *p*-value > 0.05, the null hypothesis is rejected and the alternative one accepted. Thus, the FE model is chosen. Table 5 shows the linear and quadratic coefficients for equation (3). Considering the coefficient of determination of the model (R^2 = 0.988), it is confirmed that 98.8% of the HDI variation can be explained by the covariate X.

The Wald chi-square test (Prob > chi2 = 0.0000) confirms that the null hypothesis must be rejected, as none of the regression coefficients in the model is equal to zero. Therefore, it is concluded that all the variables included are not simultaneously equal to zero. The variables in the model are significant at $p < 0.01$ (LnTS and $LnDE^2$) and $p < 0.05$ ($LnTS^2$ and LnDE). In general terms, it is observed that both LnTS and LnDE could contribute in a direct way to HDI and, therefore, to the living conditions of the population in the SIDS.

Regarding the results of the panel data analysis, $1,000 produced by the tourism sector could contribute by +1.93% on HDI. One thousand dollars produced by a sector that is not tourism could contribute by +2.36% on well-being. Thus, the contribution of both variables

Table 4 Hausman's test

Variable	Coef_Fe (b)	Coef_Re (B)	b-B difference	Sqrt (diag(V_b-V_B))
ΔLnTS	0.0193	0.0200	−0.0007	0.0017
$\Delta LnTS^2$	0.0049	0.0046	0.0002	0.0007
ΔLnDE	0.0236	0.0264	0.0028	0.0028
$\Delta LnDE^2$	0.0027	0.0043	0.0016	0.0016
Chi^2=	1.56			
Prob>Chi^2=	0.076			

Notes: (1) b = consistent under *H0* and *Ha*; B = inconsistent under *Ha*, efficient under *H0*. (2) Test: *H0* difference in coefficients not systematic

Table 5 PCSE estimators for equation (3)

Variable	*Coef.*	*St. err.*	P > |z|
ΔLnTS	0.0193**	0.0012	0.050
$\Delta LnTS^2$	0.0049***	0.0005	0.000
ΔLnDE	0.0236***	0.0016	0.000
$\Delta LnDE^2$	0.0027**	0.0012	0.022
R^2 =		0.988	
Wald chi^2 =		44.61	
Prob>chi^2 =		0.0000	

Notes: Figures in parentheses denote *p*-values. ***: $p \leq 0.01$, **: $p \leq 0.05$ and *: $p \leq 0.10$

has a direct effect on well-being. This is consistent with findings of Bojanic and Lo (2016), Hoarau (2022), Resende-Santos (2019) and UNWTO (2018), that suggest the existence of direct effects of TS on development of SIDS and recommend DE as a necessary strategy to build resilience in these territories. Some curvilinear relationships between both TS and DE with well-being were revealed. Being both curves $c > 0$, an U-shape pattern is found. TS and DE, at a given time, could deviate from the trend and reinforce their positive contribution to HDI in SIDS, in line with Chattopadhyay *et al.* (2022) findings. Whereas DE could increase its contribution to well-being (+0.27%), TS (+0.49%) seems to be a more resilient activity for assuring well-being in a bigger pace, despite of tourism volatility being high in these territories (Jackman, 2014). However, Zhang and Cheng (2019) state the need to analyze the existence of threshold effects of tourism on development.

Although nonlinear evidence was found, the question that cannot be answered with the analyzed data is the reason *why* of these U-shape patterns in SIDS regarding TS and DE to achieve some of the goals contained in the Agenda 2030. An attributed reason could be the socioeconomic volatility that characterize small developing insular societies, as well as their high dependence of international openness, as Pratt (2015) suggests. The fact that tourism is one of the main wealth sources of SIDS implies that a high proportion of transactions deriving from other sectors could benefit from the tourism activity once these sectors are integrated along the destination value chain.

Conclusions and implications

Regarding the goal of this work, it was contrasted the capacity of TS and non-tourism specialized systems in SIDS to achieve a well-being model aligned with the Agenda 2030 and the SDGs. To this purpose, Caribbean SIDS were chosen as pilot area with a high degree of tourism that shares the similarities and vulnerabilities of SIDS in other regions. Findings reveal the need to conjugate both TS and DE in the development agendas of SIDS as both represent a means to achieve a model of well-being in line with SDG's and the Agenda 2030S, especially in a scenario like the COVID-19 pandemic, in which dependence becomes a serious risk that could endanger the residents' well-being in SIDS destinations, additionally to their intrinsic vulnerabilities.

According to the analyzed linear relations, both variables TS and DE could contribute in a direct and significant way to well-being in SIDS from a multidimensional point of view: access to a standard living, education and health. According to nonlinear relations, the identified U-shape patterns also reveal that both variables, at a given time, could deviate from the trend and reinforce their positive contribution to HDI in SIDS. Thus, TS could become a source of wealth in SIDS as well as a dynamizing mechanism for reinvesting in other activities that promote investment in capital and the generation of knowledge in relation to DE. These findings offer different formulas for socioeconomic development aligned with the Agenda 2030, with a focus on SDG-1; SDG2; SDG-4; SDG-5; SDG8; and SDG-10.

Theoretical implications for existing body of knowledge about tourism specialization and well-being

Contrasting the potentiality of TS for well-being in relation to non-tourism sectors contributes to the existing literature in several ways. First, empirical evidence is given to answer about the dilemma of TS or DE-oriented strategies. Although several works deal with the interrelationship between TS and development, it is limited the existing empirical evidence that focus on SIDS and their particularities.

Second, this empirical answer addresses development from a multidimensional point of view (standard of living, access to education and health services), as an integrated thinking that considers almost any tourism development model that defines a route with SDGs and Agenda 2030 as main destination and build competitive and resilient advantages in SIDS. This is another novelty of the work, as no prior analyses were made between tourism and HDI from an Agenda 2030 approach in SIDS.

Third, this work proposes to surpass tourism-led growth and growth-led tourism hypotheses to approach *tourism-led development* and *development-led tourism hypotheses* from a multidimensional point of view to assure that growth contribute to sustainable development in line with the Agenda 2030 and the SDGs, and thus, socioeconomic wealth is distributed among community to increase well-being in SIDS.

Practical implications for tourism on well-being within the Agenda 2030 and the Sustainable Development Goal's achievement

From a managerial perspective, this work offers policymakers of SIDS a series of implications for well-being achievement by building competitive and resilient advantages in line with Agenda 2030. Regarding the SDG-1 and SDG-10, destination management organisations (DMOs) in SIDS should guarantee the existence of available social inclusion mechanisms that offer tourism-related opportunities to population in this sector. To do this, a tourism tax for well-being could be implemented in SIDS to improve and/or assure socioeconomic equality by creating a tourism fund for this purpose. The tax could be levied by public authorities from tourists according to the length of the stay and the type of establishment they lodge in. The distribution of this tax should prioritize on benefiting the subgroups of population with income share held by lowest 10% or collectives under risk of social exclusion interested on involving the tourism sector and become socioeconomically independent. Also, a series of tax incentives could be given to microbusiness and local suppliers related to tourism, so that they are able to compete with transnational operators and have a competitive offer. To do so, several Agenda 2030 criteria should be defined so that these incentives can be applied according to a sustainable development approach.

One of the main challenges in SIDS to contribute to well-being is building real competitive advantages and overcoming the existing "price race" (Hampton and Jeyacheya, 2020). At the destination level, DMOs of SIDS should design strategies based on tourism differentiation and quality instead of cost leadership, to foster endogeneity instead of depending on exogenous factors, and preventing from a less mass tourism that could increase the cost to achieve well-being. According to Pratt (2015), the larger the income outflows from the SIDS is, the smaller is the investment in the tourism industry, and thus, both manufacturing and agriculture sectors would decline. To assure that tourism development reaches well-being in SIDS, the tourism-related financial absorptive capacity (De Vita and Kyaw, 2017) should be considered by competent authorities as other crucial factor. This could reduce the possible existence of economic leakage of tourism incomes that are not retained within the host territories (profits flowing off islands) (Croes *et al.*, 2018; Romao and Neuts, 2017). Thus, SIDS should focus on measuring the performance gap between foreign and domestic companies in terms of technology knowledge, human capital education and financial development so that absorptive capacity can be increased.

Regarding the SDG-2, linkages between transnational and local suppliers should be built and consolidated along the whole tourism value chain of these territories to foster TS and DE. Hampton and Jeyacheya (2020) state that as international tourism gains importance in these territories, transnational operators do as well. This could condition the links in the tourism value chain and the contribution of this sector to community well-being. This phenomenon could be understood as a "*glocal*" productive disadjustment among both transnational and local service providers from tourism and other suppliers indirectly related to tourism sector (e.g. transport, accommodation, food and beverages, among others). To assure a balanced productive enchainment, policymakers could design tools that harmonize the percentage of local/national goods versus imported ones by tourism businesses. For example, tax incentive could be given to tourism businesses with a minimum threshold of products and/or services provided by local producers and suppliers. Also, the creation of an insular food distinctive could contribute to revalorize local food and products so that can become quality components for the competitiveness of the insular tourism system.

Regarding the SDG-4, both education institutions and tourism companies in these territories must emphasize on the identification of required knowledge, capabilities and skills to connect existing tourism curricula to the needs of the job market. To facilitate the access to education of tourism employees, policymakers could make a partnership program based on co-funding of studies and courses by both the employers' tourism business and the public authorities. This program could include modalities such as specific courses on tourism professionalization to access to several tourism jobs including internship; access to university studies, including graduate and postgraduate degree; and digital literacy and development of digital skills to assure a gradual and optimal digital transition of the tourism sector in SIDS.

According to SDG-5 and SDG-8, with the "revalorization" of tourism from a competitive differentiation, labor policies should face the existing labor precarity in SIDS (Lee *et al.*, 2015) and assure that human talent reaches individual well-being based on decent work conditions and reducing the lowering vulnerable employment as well as the gender gap. To do so, a best workplaces standard could be made by public and private entities so that any company could implement it including opportunities for promotion and professional challenges, recognition of achievements as well as personal and familiar benefits.

Study limitations and future research

Regarding the limitations of the work, any potential externality related to the COVID-19 pandemic situation could make these findings differ. Also, the existing data for SIDS is limited as well as proxy variables to measure TS and DE could also differ in terms of the components that build these variables. Finally, it is important to note that development could be severely affected for several variables different from the ones that are included in the analysis and could be relevant for further study these relationships. The analysis of curvilinear relationships could contain the existence of threshold effects that should be analyzed so that these findings can be properly managed in destinations according to their properties.

This work opens new lines of research regarding the binomial tourism and well-being, being necessary to advance on the impacts of TS on the economy of SIDS, given the limited research existing on this issue regarding the Agenda 2030 and the SDGs. To do so, this work proposes to transit from tourism-led growth to tourism-led development in terms of a multidimensional point of view and withing the 2030 framework. Also, the factors associated to curvilinear relationships between TS, DE and well-being should be analyzed to know the nature and properties of threshold effects in SIDS. Regarding the tourism and well-being paradigms, the Agenda 2030 and the SDGs also become an opportunity to rethink theoretical underpinnings such as quality of life and its dimensions, subjective and/or objective well-being, hedonist and eudaimonic paradigms or happiness and prosperity models, among others.

References

Alonso-Muñoz, S., Torrejón-Ramos, M., Medina-Salgado, M.S. and González-Sánchez, R. (2022), "Sustainability as a building block for tourism–future research: tourism agenda 2030", *Tourism Review*, ahead of print.

Anand, S. and Sen, A. (2000), "The income component of the human development index", *Journal of Human Development*, Vol. 1 No. 1, pp. 83-106.

Bassil, C., Hamadeh, M. and Samara, N. (2015), "The tourism led growth hypothesis: the Lebanese case", *Tourism Review*, Vol. 70 No. 1, pp. 43-55.

Beck, N. and Katz, J.N. (1995), "What to do (and not to do) with time-series cross-section data", *American Political Science Review*, Vol. 89 No. 3, pp. 634-647.

Bi, C. and Zeng, J. (2019), "Nonlinear and spatial effects of tourism on carbon emissions in China: a spatial econometric approach", *International Journal of Environmental Research and Public Health*, Vol. 16 No. 18, p. 3353.

Biagi, B., Ladu, M.G. and Royuela, V. (2017), "Human development and tourism specialization, evidence from a panel of developed and developing countries", *International Journal of Tourism Research*, Vol. 19 No. 2, pp. 160-178.

Bojanic, D.C. and Lo, M. (2016), "A comparison of the moderating effect of tourism reliance on the economic development for islands and other countries", *Tourism Management*, Vol. 53, pp. 207-214.

Chattopadhyay, M., Kumar, A., Ali, S. and Mitra, S.K. (2022), "Human development and tourism growth's relationship across countries: a panel threshold analysis", *Journal of Sustainable Tourism*, Vol. 30 No. 6, pp. 1384-1402.

Chi, J. (2021), "Revisiting the tourism-inequality nexus: evidence from a panel of developed and developing economies", *Current Issues in Tourism*, Vol. 24 No. 6, pp. 755-767.

Çiftçioğlu, S. and Sokhanvar, A. (2021), "Can specialization in tourism enhance the process of sustainable economic development and investment in east Asia and the pacific?", *International Journal of Hospitality and Tourism Administration*, Vol. 23, pp. 1-24.

Cortés-Jimenez, I., Nowak, J.J. and Sahli, M. (2011), "Mass beach tourism and economic growth: lessons from Tunisia", *Tourism Economics*, Vol. 17 No. 3, pp. 531-547.

Croes, R., Ridderstaat, J. and van Niekerk, M. (2018), "Connecting quality of life, tourism specialization, and economic growth in small island destinations: the case of Malta", *Tourism Management*, Vol. 65, pp. 212-223.

De Vita, G. and Kyaw, K.S. (2017), "Tourism specialization, absorptive capacity, and economic growth", *Journal of Travel Research*, Vol. 56 No. 4, pp. 423-435.

Dossou, T.A.M., Ndomandji Kambaye, E., Bekun, F.V. and Eoulam, A.O. (2021), "Exploring the linkage between tourism, governance quality, and poverty reduction in Latin America", *Tourism Economics*, p. 13548166211043974.

Fauzel, S. and Seetanah, B. (2021), "Does financial development spur tourism growth? A dynamic time series analysis for the case of an SIDS", *Journal of Policy Research in Tourism, Leisure and Events*, Special Issue on Social Tourism at the Crossroads, pp. 1-17.

Hampton, M.P. and Jeyacheya, J. (2020), "Tourism-dependent small islands, inclusive growth, and the blue economy", *One Earth*, Vol. 2 No. 1, pp. 8-10.

Hausman, J.A. (1978), "Specification tests in econometrics", *Econometrica*, Vol. 46 No. 6, pp. 1251-1271.

Hoarau, J.F. (2022), "Is international tourism responsible for the outbreak of the COVID-19 pandemic? A cross-country analysis with a special focus on small islands", *Review of World Economics*, Vol. 158 No. 2, pp. 493-528.

Jackman, M. (2014), "Output volatility and tourism specialization in small island developing states", *Tourism Economics*, Vol. 20 No. 3, pp. 527-544.

Karabulut, G., Bilgin, M.H., Demir, E. and Doker, A.C. (2020), "How pandemics affect tourism: international evidence", *Annals of Tourism Research*, Vol. 84, p. 102991.

Kyophilavong, P., Gallup, J.L., Charoenrat, T. and Nozaki, K. (2018), "Testing tourism-led growth hypothesis in Laos?", *Tourism Review*, Vol. 73 No. 2, pp. 242-251.

Laguardia, J. (2019), "Cuba: a Caribbean SIDS reinventing itself", *Development, Political, and Economic Difficulties in the Caribbean*, Palgrave Macmillan, Cham, pp. 215-233.

Lee, D., Hampton, M. and Jeyacheya, J. (2015), "The political economy of precarious work in the tourism industry in small island developing states", *Review of International Political Economy*, Vol. 22 No. 1, pp. 194-223.

Lin, V.S., Yang, Y. and Li, G. (2019), "Where can tourism-led growth and economy-driven tourism growth occur?", *Journal of Travel Research*, Vol. 58 No. 5, pp. 760-773.

Liu, A., Song, H. and Blake, A. (2018), "Modelling productivity shocks and economic growth using the Bayesian dynamic stochastic general equilibrium approach", *International Journal of Contemporary Hospitality Management*, Vol. 30 No. 11, pp. 3229-3249.

McElroy, J.L. and De Albuquerque, K. (1988), "Migration transition in small northern and eastern Caribbean states", *International Migration Review*, Vol. 22 No. 3, pp. 30-58.

MacFeely, S., Petolta, A., Barnat, N., Hoffmeister, O. and Hopp, D. (2021), "Constructing a criteria-based classification for small island developing states: an investigation", *Journal of Marine and Island Cultures*, Vol. 10 No. 1, pp. 155-195.

Marsiglio, S. (2018), "On the implications of tourism specialization and structural change in tourism destinations", *Tourism Economics*, Vol. 24 No. 8, pp. 945-962.

Massidda, C. and Mattana, P. (2013), "A SVECM analysis of the relationship between international tourism arrivals, GDP and trade in Italy", *Journal of Travel Research*, Vol. 52 No. 1, pp. 93-105.

Murphy, M.M., Jeyaseelan, S.M., Howitt, C., Greaves, N., Harewood, H., Quimby, K.R., … Hambleton, I.R. (2020), "COVID-19 containment in the Caribbean: the experience of small island developing states", *Research in Globalization*, Vol. 2, p. 100019.

Narayan, P.K., Narayan, S., Prasad, A. and Prasad, B.C. (2010), "Tourism and economic growth: a panel data analysis for pacific Island countries", *Tourism Economics*, Vol. 16 No. 1, pp. 169-183.

Nsanyan, J., Duodu, E. and Oteng-Abayie, E.F. (2021), "Regulatory capital requirements and bank performance in Ghana: evidence from panel corrected standard error", *Cogent Economics and Finance*, Vol. 9 No. 1, p. 2003503.

Nurse, K., Edwards, D. and Dookie, D. (2018), "Climate change governance and trade policy: challenges for travel and tourism in small island developing states", in Jones, A. and Phillips, M. (Eds), *Global Climate Change and Coastal Tourism: Recognizing Problems, Managing Solutions and Future Expectations*, CABI, pp. 74-91.

Osinubi, T.T., Osinubi, O.B., Tabash, M.I., Ajayi, A.O. and Tran, D.K. (2021), "The impact of corruption on tourism sector in Nigeria: empirical insights by using an autoregressive distributed lag bounds (ARDL) testing approach", *International Journal of Hospitality and Tourism Administration*, Vol. 23, pp. 1-20.

Pesaran, M.H. (2004), "General diagnostic tests for cross section dependence in panels (IZA discussion paper no. 1240)", Institute for the Study of Labor (IZA).

Pesaran, M.H. (2007), "A simple panel unit root test in the presence of cross-section dependence", *Journal of Applied Econometrics*, Vol. 22 No. 2, pp. 265-312.

Peterson, R.R., DiPietro, R.B. and Harrill, R. (2020), "Search of inclusive tourism in the Caribbean: insights from Aruba", *Worldwide Hospitality and Tourism Themes*, Vol. 12 No. 3, pp. 225-243.

Pratt, S. (2015), "The economic impact of tourism in SIDS", *Annals of Tourism Research*, Vol. 52, pp. 148-160.

Puig-Cabrera, M. and Foronda-Robles, C. (2020), "The phenomenon of tourism poverty trap: is It possible that tourism breaks the vicious circle of poverty in emerging destinations?", *Journal of Poverty*, Vol. 24 No. 4, pp. 334-353.

Pulido-Fernández, J.I. and Cárdenas-García, P.J. (2021), "Analyzing the bidirectional relationship between tourism growth and economic development", *Journal of Travel Research*, Vol. 60 No. 3, pp. 583-602.

Resende-Santos, J. (2019), "Cape Verde and the risks of tourism specialisation: the tourism option for Africa's small states", *Journal of Contemporary African Studies*, Vol. 37 No. 1, pp. 148-168.

Ridderstaat, J., Croes, R. and Nijkamp, P. (2014), "Tourism and long-run economic growth in Aruba", *International Journal of Tourism Research*, Vol. 16 No. 5, pp. 472-487.

Romao, J. and Neuts, B. (2017), "Territorial capital, smart tourism specialization and sustainable regional development: experiences from Europe", *Habitat International*, Vol. 68, pp. 64-74.

Salmerón, R., García, C.B. and García, J. (2018), "Variance inflation factor and condition number in multiple linear regression", *Journal of Statistical Computation and Simulation*, Vol. 88 No. 12, pp. 2365-2384.

Scarlett, H.G. (2021), "Tourism recovery and the economic impact: a panel assessment", *Research in Globalization*, Vol. 3, p. 100044.

Scheyvens, R. and Hughes, E. (2019), "Can tourism help to 'end poverty in all its forms everywhere'? The challenge of tourism addressing SDG1", *Journal of Sustainable Tourism*, Vol. 27 No. 7, pp. 1061-1079.

Sen, A. (1988), "The concept of development", *Handbook of Development Economics*, Vol. 1, pp. 9-26.

Smith, M.K. and Diekmann, A. (2017), "Tourism and well-being", *Annals of Tourism Research*, Vol. 66, pp. 1-13.

Sokhanvar, A., Aghaei, I. and Aker, Ş. (2018), "The effect of prosperity on international tourism expenditure", *Tourism Review*, Vol. 73 No. 1, pp. 44-54.

Solarin, S.A. (2018), "Does tourism-led growth hypothesis exist in Mauritius? Evidence from disaggregated tourism markets", *Current Issues in Tourism*, Vol. 21 No. 9, pp. 964-969.

Songling, Y., Ishtiaq, M. and Thanh, B.T. (2019), "Tourism industry and economic growth nexus in Beijing", *China. Economies*, Vol. 7 No. 1, p. 25.

Spencer, A. (2019), "Climate change and the sustainable development of tourism within the Caribbean", *Travel and Tourism in the Caribbean*, Palgrave Macmillan, Cham, pp. 27-46.

Tsay, R.S. (1986), "Nonlinearity tests for time series", *Biometrika*, Vol. 73 No. 2, pp. 461-466.

UNDP (2021), *Human Development Data*, United Nations Development Programme, New York, NY.

UNWTO (2017), *Tourism and the Sustainable Development Goals–Journey to 2030. Highlights*, World Tourism Organisation, Madrid.

UNWTO (2020), *Tourism in SIDS: The Challenge of Sustaining Livelihoods in Times of COVID-19*, World Tourism Organisation, Madrid.

Wang, J., Huang, X., Gong, Z. and Cao, K. (2020), "Dynamic assessment of tourism carrying capacity and its impacts on tourism economic growth in urban tourism destinations in China", *Journal of Destination Marketing and Management*, Vol. 15, p. 100383.

Wang, L.J. and Chen, M.H. (2021), "Nonlinear impact of air quality on tourist arrivals: new proposal and evidence", *Journal of Travel Research*, Vol. 60 No. 2, pp. 434-445.

Westerlund, J. (2008), "Panel cointegration tests of the fisher effect", *Journal of Applied Econometrics*, Vol. 23 No. 2, pp. 193-233.

World Bank (2021), Data. 2018. Washington DC, USA, available at: https://tool.wttc.org/.datos.bancomundial.org (accessed 3 November 2021).

WTTC (2021), "Data gateway", World Travel and Tourism Council, London, UK, available at: https://tool.wttc.org/ (accessed 3 November 2021).

Xu, C., Yang, Y., Dossou, T.A.M., Berhe, M.W. and Ndomandji Kambaye, E. (2022), "Does corruption undermine tourism development in Africa?", *Current Issues in Tourism*, ahead of print, pp. 1-18.

Zhang, J. and Cheng, L. (2019), "Threshold effect of tourism development on economic growth following a disaster shock: evidence from the Wenchuan earthquake", *PR China. Sustainability*, Vol. 11 No. 2, p. 371.

Further reading

Bishop, M.L. (2010), "Tourism as a small-state development strategy: pier pressure", *In the Eastern Caribbean? Progress in Development Studies*, Vol. 10 No. 2, pp. 99-114.

Croes, R., Ridderstaat, J., Bąk, M. and Zientara, P. (2021), "Tourism specialization, economic growth, human development and transition economies: the case of Poland", *Tourism Management*, Vol. 82, p. 104181.

Godovykh, M., Pizam, A. and Bahja, F. (2021), "Antecedents and outcomes of health risk perceptions in tourism, following the COVID-19 pandemic", *Tourism Review*, Vol. 76 No. 4, pp. 737-748.

Hakan, K.U.M., Aslan, A. and Gungor, M. (2015), "Tourism and economic growth: the case of next 11 countries", *International Journal of Economics and Financial Issues*, Vol. 5 No. 4, pp. 1075-1081.

Lanza, A., Temple, P. and Urga, G. (2003), "The implications of tourism specialisation in the long run: an econometric analysis for 13 OECD economies", *Tourism Management*, Vol. 24 No. 3, pp. 315-321.

Llorca-Rodríguez, C.M., García-Fernández, R.M. and Casas-Jurado, A.C. (2020), "Domestic versus inbound tourism in poverty reduction: evidence from panel data", *Current Issues in Tourism*, Vol. 23 No. 2, pp. 197-216.

Pérez-Dacal, D., Pena-Boquete, Y. and Fernández, M. (2014), "A measuring tourism specialization: a composite indicator for the Spanish regions. Almatourism-Journal of tourism", *Culture and Territorial Development*, Vol. 5 No. 9, pp. 35-73.

Pulido-Fernández, J.I. and Cárdenas-García, P.J. (2021), "Analyzing the bidirectional relationship between tourism growth and economic development", *Journal of Travel Research*, Vol. 60 No. 3, pp. 583-602.

UN (2022), "List of small island developing states", United Nations, USA: New York, available at: https://sustainabledevelopment.un.org/topics/sids/list (accessed 20 January 2022).

UNWTO (2018), *Tourism for Development*, World Tourism Organisation, Madrid, Vol. I.

About the authors

Dr Miguel Puig-Cabrera holds a degree in Tourism and a PhD in Geography from the University of Seville (Spain). He is currently a Lecturer and Researcher in the Department of Tourism at Catholic University of Murcia (UCAM, Spain). His line of research focuses on tourism for poverty reduction, economic growth and quality of life. Miguel Puig-Cabrera is the corresponding author and can be contacted at: mpuig@ucam.edu

Dr Ginesa Martínez-del Vas holds a degree in Geography and History from the University of Murcia and a PhD in Tourism from the University of Alicante. She is Tourism Vice Dean at UCAM. Her research line focuses on tourism public governance and smart tourism.

Dr Miguel Ángel Beltrán-Bueno holds a degree in Economics and Business Administration from the University of Murcia (Spain) and a PhD in Business Administration and Management from UCAM, where he is a Lecturer and Researcher. His research activity focuses mainly on marketing and consumer behavior in the tourism sector.

Dr Abraham Nuevo-López is a Lecturer at the University of Málaga (Spain). He holds a PhD in Geography from the University of Málaga, and his research lines deal with the geography of tourism.