Tourism Management 53 (2016) 207–214

Contents lists available at ScienceDirect

Tourism Management

journal homepage: www.elsevier.com/locate/tourman

A comparison of the moderating effect of tourism reliance on the economic development for islands and other countries

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HIGHLIGHTS

- There is a significant negative impact on economic development for countries that rely heavily on tourism.
- Islands (primarily SIDS) rely more on tourism than non-island countries.
- SIDS that rely more heavily on tourism have a significant negative impact of at lower levels of economic development.

ARTICLE INFO

Article history:
Received 17 June 2014
Received in revised form
6 October 2015
Accepted 6 October 2015
Available online xxx

Keywords:
Tourism reliance
Tourism development
Economic development
Quantile regression
Islands/SIDS

ABSTRACT

Tourism is usually one of the top industries in most countries, especially islands. However, there is some question as to whether there is a negative potential impact if a country relies too much on tourism as a means of economic development to the detriment of other industries such as manufacturing and agriculture. The purpose of this paper is to examine the moderating effect of tourism reliance on the relationship between tourism development and economic development for regular countries and island economies, including "small island developing states" (SIDS). This study uses quantile regression on panel data from the WDI database from 1995 through 2014 for all of the countries that report tourism and economic data. The findings demonstrate that tourism reliance does have a moderating effect on the relationship between tourism development and economic development for all countries, but mainly at higher levels of economic development.

1. Introduction

Tourism is a multi-billion dollar industry and it is normally one of the top three industries in most countries throughout the world, regardless of the country's level of development. McIntyre (2011) discussed the global importance of tourism in regards to GDP and exports, and provided data from the UNWTO that showed international tourism arrivals grew at a faster pace from 2010 to 2011 for emerging economies than developed countries. Countries in the Middle East and Asia and the Pacific regions demonstrated the highest growth rates, and the least developed countries (LDCs) benefited from the increase in ecotourism, adventure tourism, and cultural tourism. Developing countries tend to rely more on tourism because they do not have other products that they can export due to a lack of production and technological expertise (Sinclair, 2002). Tourism can contribute in terms of increased income and employment.

The main question is whether or not tourism can be beneficial in terms of economic development, or if an overreliance on tourism can have an adverse effect. Economic development is typically measured in terms of per capita gross domestic product (GDP) or gross national product (GNP), usually on a per capita basis. Both are indicators of the general wealth of a country based on the value of goods and services produced by its citizens in the country and abroad (GNP), or by its citizens and foreigners within the country (GDP). In particular, attention is given to the possible overreliance by "small states" and islands on tourism to drive their economies. Government agencies and researchers identify "small states" based on population, land area, income, and various other factors. Small states share similar sustainable development challenges, including small populations, limited resources, remoteness, vulnerability to global developments and external shocks (such as natural

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http://dx.doi.org/10.1016/j.tourman.2015.10.006
0261-5177/

disasters), and excessive dependence on international trade. The growth and development of small states is often further inhibited by high transportation and communication costs, high government spending on public administration and infrastructure, and an inability to create economies of scale.

Approximately three out of four developing small states are islands, and most of the rest are landlocked countries. The group known as "small island developing states" (SIDS) was first recognized at a United Nations conference in June 1992, and the first Global Conference on Sustainable Development of SIDS was held in Barbados in April 1994. Currently, there are 40 UNESCO SIDS member states and 7 associate members, and 10 of the member states are also listed as Least Developed Countries (LDCs). Islands are particularly remote and isolated and susceptible to natural disasters and environmental change. The remoteness and small domestic markets make it difficult for islands to diversify their industries and leave them vulnerable to changes in the external environment. This also makes them a risky venture for foreign investment and limits their international trade opportunities.

The purpose of this paper is to examine the potential moderating effect of tourism reliance on the relationship between tourism development and economic development. In particular, the main focus of the analysis is to determine if islands, including SIDS, rely more on tourism for economic development than regular countries (i.e., non-islands), and if there is a negative impact related to the level of reliance. Initially, the relationship between tourism development and economic development will be evaluated for all countries, islands, and SIDS using both OLS (conditional means) and median regression (conditional medians). The analysis will also examine the moderating effect of tourism reliance by including an interaction term for tourism development and tourism reliance. Next, the analysis will focus on whether the relationship obtained from the initial analysis differs depending on the level of economic development using quantile regression. Finally, a quantile regression analysis will be performed on a sample of just islands to determine the differences between regular islands and SIDS.

2. Literature review

The relationship between tourism development and economic growth has been the focus of numerous articles in economics and tourism journals. Most of the articles test the tourism-led growth hypothesis that suggests that there is a one-way causal relationship between tourism development and economic growth. However, the results are mixed based on the type of study and the country involved (Brida & Pulina, 2010; Jackman, 2012). For example, Oh (2005) found a one-way causality with economic growth leading to tourism development in Korea and Schubert, Brida, and Risso (2011) found a significant long-term relationship between tourism demand and economic growth in Antigua and Barbuda. In addition, Odhiambo (2012) concluded that tourism development had a distinct, unidirectional causal effect on economic growth in Zambia, and Dritzakis (2012) found that tourism development and economic growth were cointegrated for a group of Mediterranean countries. Conversely, Kim, Chen, and Jang (2006) found a two-way causality between tourism expansion and economic development in Taiwan, and Seentanah (2011) found a two-way causal relationship between tourism development and economic growth for 19 island economies, and that the effect of tourism development on island economies can be significantly better than other types of destinations.

Finally, the results for other studies were either not significant or they were mixed. Ekanayake and Long (2012) tested the relationship between tourism development (i.e., tourism receipts) and economic growth and found that the results were not significant, even though there was a positive relationship. Lee and Chang (2008) examined the causal relationship between tourism development and economic growth for OECD and non-OECD countries and found that tourism development had a one-way causal relationship with economic growth in OECD countries, but a two-way causality for non-OECD countries. Chou (2013) also found mixed results for the growth hypothesis between tourism spending and economic growth in 10 European transition countries. Three countries demonstrated a one-way causality to support the hypothesis, while the results for 4 countries supported the reverse relationship or two-way causality, and 3 countries were neutral.

Recently, Cárdenas-García, Sánchez-Rivero, and Pulido-Fernández (2015) found that, for a sample of 144 countries, tourism growth has led to an increase in the level of economic development. However, they determined that the relationship was stronger for developed countries and questioned the value of tourism as a catalyst for economic growth in developing countries (e.g., LDCs). This is counter to the findings of Kareem (2013) in a study of African countries, and Grúllon (2013) in a study of the Dominican Republic. Both researchers suggested that the economies under examination would benefit from an increased emphasis on tourism development. These opposing views are common in the tourism and economics literature, especially as it relates to the level of tourism specialization, or reliance, among island economies.

2.1. Tourism development in island economies

Islands tend to rely more heavily on tourism in generating income relative to other countries. Early research focused on the potential negative impacts of island economies relying too much on tourism (Milne, 1992; Wilkinson, 1989). The studies focused on island nations in specific regions around the world (Shareef & McAleer, 2005), including Caribbean countries (Craigwell & Maurin, 2007; Griffith, 2002) and European countries (Chen, 2006; Sharpley, 2003). Some researchers examined the increasing dependency of islands like Cyprus and Aruba on tourism and the potential positive and negative impacts (e.g., social, cultural, and environmental) related to continued development (Ayres, 2000; Vanegas & Croes, 2003). Kokkranikal, McLellan, and Baum (2003) addressed the issue of tourism development in Lakshadweep and found that a sustainability approach proved to be effective in minimizing the negative impacts of tourism.

There are also studies regarding the effect of tourism on the overall economic development of islands and how they can successfully control the development process (Croes, 2006; Kokkranikal et al., 2003; Sahli & Nowak, 2007). Griffith (2002) looked at the tourism industry in Barbados, as well as three other Caribbean nations (Trinidad and Tobago, Guyana, and Jamaica), from 1970 to 1997 and found that Barbados did a better job of becoming a mass-appeal destination. However, Mycoo (2006) examined tourism development policies in Barbados and found that they didn't ensure long-term success, or sustainability, even though there were some short-term benefits. There is also some question as to how government policies and institutions affect the economic impact of tourism (Aiyar, 2008; Winson, 2006). Researchers like Meng et al. (2013) provided an example of how effective governance can lead to successful tourism performance for a small island like Singapore, and Sharpley and Ussi (2014) looked at the impact of poor governance on tourism development in Zanzibar.

Brown and Hall (2008) commented on the problems associated with using tourism as a key element in a development strategy because of the economic, social, political and environmental context in which tourism occurs. Small island developing states (SIDS) are often used to examine sustainable tourism because they