Does tourism development promote economic growth in transition countries? A panel data analysis ☆

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ARTICLE INFO	ABSTRACT
	This study examines causal relationships between tourism spending and economic growth in 10 transition countries for the period 1988–2011. Panel causality analysis, which accounts for dependency and heterogeneity across countries, is used herein. Our empirical results support the evidence on the direction of causality, and are consistent with the neutrality hypothesis for 3 of these 10 transition countries (i.e. Bulgaria, Romania and Slovenia). The growth hypothesis holds for Cyprus, Latvia and Slovakia while reverse relationships were found for the Czech Republic and Poland. The feedback hypothesis also holds for Estonia and Hungary. Our empirical findings provide important policy implications for the 10 transition countries being studied. © 2013 The Author. Published by Elsevier B.V. All rights reserved.

1. Introduction

Over the past several decades, the relationship between tourism spending and economic growth for both developing and developed countries has been extensively researched.[1] Knowledge of the causal relationship between tourism spending and economic growth is of particular importance to policy makers, as tourism policies are becoming major concerns for these countries. The World Travel and Tourism Council (WTTC) (2011) argues that Travel & Tourism continues to be one of the world's largest industries. The total impact of the industry is impressive. In 2011, it contributed to 9% of global GDP, a value of over US$6 trillion, and accounted for 255 million jobs. Over the next ten years, this industry is expected to grow by an average of 4% annually. This will bring it to 10% of global GDP, or about US$10 trillion. By 2022, it is anticipated that it will account for 328 million jobs, 1 in every 10 jobs on the planet.

It has long been recognized that tourism can have an impact on economic activity (Dwyer et al., 2004). Tourism is seen as increasing overall economic activity, and this increase in activity is normally seen as desirable. Often, the positive impacts on economic activity are inaccurately described as the "benefits" of tourism, as explained below (Dwyer and Forsyth, 1993). Increasing attention has been focused on international tourism as an important potential growth sector for many countries (Brohman, 1996). The speedy growth of tourism causes an increase in household income and government revenues through multiplier effects, improvements in the balance of payments and growth in the number of tourism-promoted government policies. As such, the development of tourism has usually been considered a positive contribution to economic growth (e.g. Khan et al., 1995; Lee and Kwon, 1995; Lim, 1987; Oh, 2005).[2]

Chao et al. (2006) indicate that an expansion of tourism increases the relative price of nontraded goods, improves the tertiary terms of trade and yields a gain in revenue. However, if this increase in the relative price of nontraded goods results in a lowering of demand for the capital used in the traded sector, subsequent de-industrialization in the traded goods sector may lower resident welfare. Chao et al. (2009) further point out that if the output effect is dominant, expansion of tourism raises employment and welfare; however, under realistic conditions tourism may lower both labor employment and welfare due to rising costs. Holzner (2011) empirically analyzes the danger of a Dutch Disease Effect in tourism-dependent countries over the long run. Data on 134

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[1] We refer to the recent survey on the tourism spending and economic growth nexus by Lee and Chang (2008), Arslanturk et al. (2011) and Schubert et al. (2011).

[2] International tourism is recognized as having a positive effect on the increase of long-run economic growth through different channels. First, tourism is a significant foreign exchange earner which allows for payment of imported capital goods or the basic inputs used in the production process. Second, tourism plays an important role in spurring investment in new infrastructure and competition between local firms and firms in other tourist countries. Third, tourism stimulates other economic industries by direct, indirect and induced effects. Fourth, tourism contributes to generating employment and increasing income. Fifth, tourism can cause positive exploitation of economies of scale in national firms (see Andriotis, 2002; Fagance, 1999; Lin and Liu, 2000; Schubert et al., 2011). Finally, tourism is an important factor in the diffusion of technical knowledge, stimulation of research and development and the accumulation of human capital. Tourism has become a common development focus for many countries.

countries of the world over the period 1970–2007 were used. He first works on the long-run relationship between tourism and economic growth in a cross-country setting. Empirical results are then checked in a panel data framework on GDP per capita levels that allows control for reverse causality, non-linearity and interactive effects. He finds that there is no danger of a Beach Disease Effect. On the contrary, not only do tourism-dependent countries not face real exchange rate distortion and de-industrialization, they also experience higher than average economic growth rates. Investment in physical capital, such as transport infrastructure, is complementary to investment in tourism.

While the vast majority of empirical research already performed has focused on both developing and developed countries, there have been a few studies that address the causal relationship between tourism spending and economic growth in transition countries. This paper re-investigates the relationship between tourism spending and economic growth using a sample of 10 transition countries (i.e. Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Poland, Romania, Slovakia and Slovenia) over the period 1988–2011, and focusing on country-specific analysis.[3] These 10 transition countries started their liberalization programs in the late 1980s and early 1990s. Outward-oriented growth strategy is quite common in these 10 transition countries. This paper targets the transition countries. At the same time, both developed and developing countries are included to gain more insight into relevant tourism policies in different nations.

One major motivation of our study article is to complement prior studies via advanced econometric methodologies which can account for situations in the real world. Lee and Chang (2008) and Holzner (2011) find that different countries show different causality directions between tourism spending and economic growth. This suggests that tourism spending–growth relationships may be country-specific; therefore, it is necessary to recognize the heterogeneous nature of the countries under investigation. In cross-country investigations, heterogeneity across countries is present because of differences in economic conditions or social-cultural backgrounds. Dependence among countries is unavoidable due to cooperation or competition, particularly with the current prevalence towards globalization. Failing to account for these concerns jointly has constrained deeper analysis in extant studies.

In recognition of this situation, this study employs country-specific causality tests developed by Kónya (2006) to discover the dynamic and causal relationships between tourism sector growth and overall economic growth. These tests will allow for country-specific effects to be more readily uncovered. We test whether any causal relationship between tourism sector growth and economic growth exists, by using a bootstrap panel Granger causality test on a sample of 10 transition countries over the period 1988–2011. To the best of our knowledge, this is the first study to use a bootstrap panel Granger causality test to study the relationship between tourism spending and economic growth in the 10 transition countries. We hope that this study can bridge the gap in the current literature between tourism sector growth and economic growth.

In detecting causal linkage between tourism spending and economic growth, we utilize the panel causality approach instead of the time series method, since panel data sets include information not only from the time series dimension but also the cross-section dimension. Based on this advantage of panel data analysis, non-stationary panel tests (unit root, cointegration and causality) have become a more powerful econometric methodology in recent years. Our recent experience with economic dynamics shows that turbulence in a country may easily be transmitted to other countries through international trade and economic and financial integration, which are basic features among these transition countries. This demonstrates the importance of taking into account cross-section dependency in empirical analysis. Even though

there is strong dependence across countries, it is well known that each country sustains its own dynamics in the development process. This fact calls attention to the need to control for cross-country heterogeneity when initiating an empirical modeling strategy.[4] In light of these thoughts, the panel causality method we utilize is capable of controlling for dependency and country-specific characteristics across countries. This paper aims to follow a systematic modeling strategy. In examining causal linkages between the variables under concern, we separately test for both cross-section dependence and cross-country heterogeneity by using recently developed and statistically powerful tests instead of assuming the existence of these dynamics in our panel data set. We contribute to the existing literature by jointly addressing the two concerns.

One advantage of the econometric methodology proposed by Kónya (2006) is that it allows for contemporaneous correlation across countries. We utilize a more meaningful and effective analysis methodology than cross-sectional analysis or time series analysis on a country-by-country basis because interaction between tourism sectors across countries usually exists. For instance, many tourism companies around the world have branches outside their home countries, and we can reasonably expect that market structures or government policies in foreign countries will exert an indirect impact on business firms. If many tourism firms expand their business in the markets of foreign countries, the tourism companies will have a significant business impact in connection with policies outside their home countries. Competition with foreign tourism firms will also affect domestic tourism markets, possibly through the introduction of innovative products. Therefore, a country's tourism sector development may likely be correlated with other countries over time.

Empirical results show that the growth hypothesis holds for Cyprus, Latvia and Slovakia, shows a reverse relationship for the Czech Republic and Poland, and a feedback hypothesis for Estonia and Hungary. Although the tourism–growth relationship is significant in most of the sampled countries, there is still no significant relationship between the two variables in some countries, including Bulgaria, Romania and Slovenia.

This paper is organized as follows. Section 2 briefly reviews some of the previous literature, and Section 3 describes the data used in this study. Section 4 outlines the econometric methodology employed. Section 5 discusses the empirical findings and their policy implications. Section 6 is devoted to concluding remarks.

2. Review of the literature

Because of the potential economic benefits of tourism, such as increases in foreign exchange earnings, income, employment and taxes (Archer, 1995; Balaguer and Cantavella-Jorda, 2002; Dritsakis, 2004; Durbarry, 2002), many governments have engaged in tourism development for the purpose of promoting economic growth (Sahli and Nowak, 2007). Analyzing the relationship between tourism development and economic growth has been a popular topic in recent tourism literature (Arslanturk et al., 2011; Kim et al., 2006). However, researchers have reached mixed and sometimes conflicting results despite the common choice of time series techniques as a research methodology.

Empirical studies have shown inconsistent or even contradictory results in terms of a tourism-led economic growth hypothesis.[5] Examples of country specific studies include; Dritsakis (2004), who

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[3] To date, studies that have analyzed the causal relationship between tourism development and economic growth have been limited, especially in the case of transition countries, and results have been mixed. Oh (2005) argues that it is necessary to investigate the hypothesis in numerous destination countries for the purpose of generalization.

[4] Tang and Jang (2009) point out that in previous empirical studies based upon different countries, inconsistent results may be a reflection of the country effect. Countries could differ in terms of the weight of tourism on their overall economies (Oh, 2005), the size and openness of the economy (Kim et al., 2006) and production capacity constraints (Dwyer et al., 2000). The tourism–economy relationship could also differ from one country to another.

[5] Earlier studies on the relationships between tourism development and economic growth are currently "unfortunately blurry" due to different results for different countries in the same subject or region, different time periods within the same country and different methodologies in different regions.