Transforming competitiveness into economic benefits:

Does tourism stimulate economic growth in more competitive destinations?

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Abstract:

This research note investigates the impact of a destination’s competitiveness upon tourism’s contribution to economic growth using a cross-section with 131 countries. Destination competitiveness is measured with the World Economic Forum’s Travel and Tourism Competitiveness Index, while tourism’s contribution to economic growth is measured with the growth decomposition methodology. Results reveal that destination competitiveness has no statistically significant impact on tourism’s contribution to economic growth. Tourism policy implications and directions for future research are also discussed.

Key words: tourism and economic growth; growth decomposition methodology; destination competitiveness; World Economic Forum; Travel and Tourism Competitiveness Index
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1. Introduction

Tourism is frequently viewed as an important engine for the economic growth and development of countries (Brida & Risso, 2009; Tang & Tan, 2013), helping to increase the economic welfare of local populations. This perspective justifies the allocation of public resources into attracting more visitors to destinations by increasing their competitive position in relation to other destinations. The importance of destination competitiveness to attracting visitors and its determinants have been widely recognised (Botti et al., 2009; Crouch & Ritchie, 1999; Dwyer et al., 2004; Dwyer & Kim, 2003; Gomezelj & Mihalič, 2008; Ritchie & Crouch, 2005) and some discussion has also addressed its measurement (Hall, 2007; Mazanec & Ring, 2011). Ritchie & Crouch (2005: 2) pinpoint that “what makes a tourism destination truly competitive is its ability to increase tourism expenditure, to increasingly attract visitors, while providing them with satisfying, memorable experiences, and to do so in a profitable way, while enhancing the well-being of destination residents and preserving the natural capital of the destination for future generations.” Furthermore, Dwyer & Kim (2003: 372) emphasise that the ultimate goal of a destination’s competitiveness is “to maintain and increase the real income of its citizens, usually reflected in the standard of living of the country.” Therefore, the explicit assumption in the destination competitiveness literature is that more competitive destinations will attract more visitors; the visitors will spend more money in the destination, which leads to increased GDP and economic growth in the destination, which means higher the economic welfare of the local population. However, this is not necessarily the case in reality – more visitors in the destination
do not always mean more money spent by them, nor that more money spent by visitors in the destination will generate economic growth leading to economic development. The tourism economic impact literature has long recognised that tourism-related leakages from the local economy (Ivanov, 2005b; Lejárraga & Walkenhorst, 2010; Stabler et al., 2010: 206-207) in the form of imports to serve visitors, repatriation of incomes by foreign workers in the local tourism industry to their home countries, repatriation of profits by foreign investors, or selling tourist products at dumping prices (to name just few examples) could even lead to a decrease of the economic benefits of tourism development for the local population (Ivanov, 2005a, b). Therefore, in competitive destinations with high tourism-related leakages, the increase in the number of visitors and their spending might not lead to higher GDP and economic growth, because a significant portion of visitors’ expenses may pay for imports.

In light of the above discussion, this research note empirically investigates whether in reality destination competitiveness contributes positively to the economic welfare of local populations. In particular, it answers the question whether tourism stimulates economic growth in more competitive destinations.

2. Methodology

In order to measure the impact of competitiveness on tourism’s contribution to economic growth we apply a cross-section analysis with 131 countries. The concepts, variables and sources of data used in the analysis are summarised in Table 1. Tourism’s contribution to economic growth is calculated with the growth decomposition methodology (Ivanov, 2005a; Ivanov & Webster, 2007, 2010, 2013a, b; Brida & Aguirre, 2010; Xie et al., 2011):
\[
g'_t = \frac{Y'_{q_1(p_2)} - Y'_{q_0(p_2)}}{N_1 - N_0} \cdot 100
\] (1)

where \(Y'_{q_1(p_2)}\) is the tourism GDP in the current period in constant base year prices, \(Y'_{q_0(p_2)}\) and \(Y'_{q_0(p_1)}\) are the total and the tourism GDP in base year at market prices, respectively, \(N\) is the average size of the population, and indexes 0 and 1 denote base and current period. The variable \(g'_t\) reflects the direct impact of tourism on economic growth, i.e. how many percentage points of the real per capita economic growth in the country is attributable to tourism (Ivanov & Webster, 2007, 2010).

A country’s tourism competitiveness is measured using the World Economic Forum’s (hereafter “WEF”) Travel and Tourism Competitiveness Index (TTCI) (WEF, 2011), an index used in previous studies (see Kayar & Kozak, 2010; Mazanec & Ring, 2011). The WEF measures the travel and tourism competitiveness of destinations with one overall index based upon three different sub-indices – a travel and tourism regulatory framework sub-index, a travel and tourism business environment and infrastructure sub-index, and a travel and tourism human, cultural, and natural resource sub-index (see Appendix 1). The sub-indices reflect 14 pillars of travel and tourism competitiveness (to use WEF terminology), such as “safety and security” and “tourism infrastructure,” that are in turn composed of various indicators. The WEF measures the tourism
competitiveness of 139 countries. For 2011, the country with the highest value of the overall index is Switzerland (5.68) while the lowest value is Chad (2.56).

(2)

\[ g'_r = b_0 + b_1 \cdot TTCI + b_2 \cdot \ln PPL + b_3 \cdot \ln GDP + b_4 \cdot \ln TourGDP + b_5 \cdot \ln GDPcapita + b_6 \cdot TourShare + b_7 \cdot EU + b_8 \cdot AF + b_9 \cdot AS + b_{10} \cdot LA + b_{11} \cdot NA + b_{12} \cdot OC + b_{13} \cdot LDC + b_{14} \cdot OECD \]

The analysis uses a number of control variables (see Equation 2). Population size, economy size, tourism GDP and per capita GDP are in natural logarithm form to avoid favouring countries with large populations (China, India), economies (USA, Japan, China), tourism industries (USA, France, Spain, Italy) or per capita GDP (Luxembourg, Norway, Iceland, Qatar). The same variables are calculated as average annual values from 2000-2010 (or 1999-2009 depending on data availability) in order to eliminate short-term fluctuations caused by force majeur events like 9/11, SARS, swine and bird flu outbreaks, the 2004 tsunami in South-East Asia. Dummy variables are used to signify regions of the world and identify any regional variations in tourism’s contribution to economic growth. Dummy variables are also employed to denote less developed countries (19 countries in the data set) and OECD members (34 countries). The final data set includes 131 countries for which data are available for all the variables used in the analysis. The descriptive statistics of the regression variables are reported in Appendix 2.

3. Findings
Table 2 illustrates the bivariate correlations between the variables used in the analysis. Most importantly, $g'_r$ has a statistically significant and negative relationship with TTCI, meaning that more competitive destinations are associated with lower levels of tourism’s contribution to economic growth. The correlations suggest that $g'_r$ is negatively related with the size of the economy, the economic wealth of local population, the volume of a country’s tourism GDP and the OECD dummy variable. There is a positive relationship between $g'_r$ and tourism’s share in country’s GDP and the dummy variable for Africa. The correlation coefficients with the other variables are not statistically significant.

INSERT TABLE 2 AROUND HERE

INSERT TABLE 3 AROUND HERE

Table 3 illustrates the regression model results with $g'_r$ as a dependent variable. Results reveal that a country’s tourism competitiveness, as measured by the WEF’s TTCI, has no statistically significant impact on tourism’s contribution to economic growth. It means that tourism contributes to economic growth in both competitive and uncompetitive destinations as identified by the WEF. Moreover, the negative sign of the standardised coefficient indicates that tourism contributes to economic growth more in less competitive destinations, i.e. competitive destinations fail to fully transform their competitiveness potential into economic benefits for their local populations. The regression analysis identifies only 2 variables that have statistically significant impact – tourism’s share in country’s GDP (with a positive impact on $g'_r$) and the regional variable for Latin America and the Caribbean (with negative impact on $g'_r$). The other
variables do not have any statistically significant effect on tourism’s contribution to economic growth.

4. Conclusion
The findings illustrate that there seems to be no direct positive and statistically meaningful relationship between a destination’s competitiveness and tourism’s contribution to economic growth. Although some destinations have been effective in attracting tourists and have been assessed as very competitive destinations by the WEF’s TTCI, they fail to utilise their competitiveness and effectively transform it into economic benefits for their local populations. Therefore, high destination competitiveness might contribute to attracting more visitors to a destination, but this does not automatically mean that local people would actually benefit from tourism development. The leakages from the economy, as discussed above, might easily offset most tourism earnings of the country and, therefore, decrease the net economic benefits of tourism for the local population. Destinations need not only to be competitive and attract tourists, but also to capture high share of visitors’ expenditures by offering locally produced products. Destination competitiveness, while entailing a number of major investments by national tourism organisations and expensive political choices, might not be worth the investment, in terms of developing tourism relative to the size of the economy.

Future research should focus upon modelling the relationship between various characteristics of a country that influence tourism’s contribution to economic growth. Although there seems to be no evidence that destination competitiveness, as measured by the WEF, plays a role in influencing tourism’s contribution to economic growth, there might be other factors that play a role in
conditioning this. One key thing to look into is the quality of political and economic policies that states have dealing with the regulation of tourism. It may be that more statist policies, such as mercantilist or social democratic ones (see Webster et al., 2011; Webster & Ivanov, 2012), which put much attention on import substitution and capital controls, might actually lead to fewer leakages and thus are more likely to enhance the population’s welfare, than the liberal economic doctrine that has become increasingly popular in recent decades.

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| Concept                                      | Variable                                                                 | Abbreviation | Primary data source                      |
|----------------------------------------------|--------------------------------------------------------------------------|--------------|------------------------------------------|
| **Dependent variable**                       |                                                                          |              |                                          |
| Tourism’s contribution to economic growth    | Average tourism contribution to real per capita economic growth (2000-2010) | $g^t_r$       | Authors’ calculation                     |
| **Independent variables**                   |                                                                          |              |                                          |
| Travel and Tourism Competitiveness           | Travel and Tourism Competitiveness Index 2011                            | TTCI         | World Economic Forum                     |
| Population size                              | Log average population (2000-2010) - both sexes combined, as of 1st July of the respective year | lnPPL        | United Nations                           |
| Economy size                                 | Log average GDP (1999-2009) in USD in 2011 prices                        | lnGDP        | United Nations                           |
| Tourism GDP                                  | Log average Travel and tourism GDP (2000-2010) in USD in 2011 prices    | lnTourGDP    | World Travel and Tourism Council         |
| Economic wealth of local population         | Log average per capita GDP (1999-2009) in USD in 2011 prices            | lnGDPcapita  | Authors’ calculations                    |
| Tourism share in country GDP                 | Average share of tourism GDP (1999-2009)                                | TourShare    | Authors’ calculations                    |
| Geographic region                            | Dummy variables for geographic regions                                  | EU, AF, AS, LA, NA, OC | Breakdown of world regions and sub-regions adopted from United Nations’ classifications |
| Least developed country                     | Dummy variable                                                           | LDC          | United Nations                           |
| OECD member state                            | Dummy variable                                                           | OECD         | OECD                                     |
Table 2.
Bivariate Correlations

|                                    | Pearson correlation (Significance) |
|------------------------------------|-----------------------------------|
| Travel and Tourism Competitiveness Index | -0.224*** (0.010)                |
| Population size                    | -0.104 (0.236)                    |
| Economy size                       | -0.338*** (0.000)                 |
| Economic wealth of local population| -0.321*** (0.000)                 |
| Tourism GDP                        | -0.208** (0.017)                  |
| Tourism share in country GDP       | 0.532*** (0.000)                  |
| Africa dummy variable              | 0.218** (0.012)                   |
| Asia dummy variable                | 0.004 (0.960)                     |
| Europe dummy variable              | -0.143 (0.103)                    |
| Latin America and the Caribbean dummy variable | -0.035 (0.695)              |
| North America dummy variable       | -0.090 (0.305)                    |
| Oceania dummy variable             | -0.073 (0.404)                    |
| Least developed countries          | 0.130 (0.139)                     |
| OECD                               | -0.332*** (0.000)                 |

N=131

*** Significant at the 1% level (2-tailed)
** Significant at the 5% level (2-tailed)
### Table 3.
Regression Model Results

| Model variables                                      | Standardised coefficients (significance) |
|------------------------------------------------------|------------------------------------------|
| (Constant)                                           | (0.038)                                  |
| Travel and Tourism Competitiveness Index             | -0.212 (0.304)                           |
| Population size                                      | 0.554 (0.430)                            |
| Economic wealth of local population                  | 0.332 (0.618)                            |
| Tourism GDP                                          | -0.687 (0.410)                           |
| Tourism share in country GDP                         | 0.757***                                 |
| Africa                                               | -0.148 (0.270)                           |
| Asia                                                 | -0.167 (0.129)                           |
| Latin America and the Caribbean                      | -0.186* (0.068)                          |
| North America                                        | 0.008 (0.917)                            |
| Oceania                                              | -0.028 (0.709)                           |
| Least developed countries                            | -0.039 (0.700)                           |
| OECD                                                 | 0.017 (0.898)                            |
| Excluded variables                                   | Collinearity Statistics Tolerance        |
| Economy size                                         | 0.003                                    |
| Europe                                               | 0.000                                    |
| Model summary                                        | R 0.626                                 |
|                                                     | R Square 0.392                          |
|                                                     | Adjusted R Square 0.330                  |
|                                                     | Standard Error of the Estimate 0.002     |
| N=131                                                |                                          |
| *** Significant at the 1% level (2-tailed)           |
| * Significant at the 10% level (2-tailed)            |
### Appendix 1. TTCI Sub-indices and Pillars of Destination Competitiveness

| Sub-index                                                                 | Pillar                                                                 |
|--------------------------------------------------------------------------|------------------------------------------------------------------------|
| Travel and tourism regulatory framework sub-index                        | 1. Policy rules and regulations                                         |
|                                                                          | 2. Environmental sustainability                                         |
|                                                                          | 3. Safety and security                                                  |
|                                                                          | 4. Health and hygiene                                                   |
|                                                                          | 5. Prioritisation of travel and tourism                                 |
| Travel and tourism business environment and infrastructure sub-index      | 6. Air transport infrastructure                                          |
|                                                                          | 7. Ground transport infrastructure                                       |
|                                                                          | 8. Tourism infrastructure                                                |
|                                                                          | 9. ICT infrastructure                                                    |
|                                                                          | 10. Price competitiveness in the travel and tourism industry            |
| Travel and tourism human, cultural, and natural resource sub-index       | 11. Human resources                                                     |
|                                                                          | 12. Affinity for travel and tourism                                      |
|                                                                          | 13. Natural resources                                                    |
|                                                                          | 14. Cultural resources                                                   |
## Appendix 2. Regression Variables Descriptive Statistics

| Minimum | Maximum | Mean | Std. Deviation |
|---------|---------|------|---------------|
| -0.0031 | 0.0141  | 0.001591 | 0.0026383 |

### Dependent variable:
Tourism’s contribution to economic growth $g_t^t$

### Independent variables:
- Travel and Tourism Competitiveness Index: 2.560 - 5.680, Mean: 4.100, Std. Deviation: 0.706
- Population size: 5.600 - 14.083, Mean: 9.295, Std. Deviation: 1.631
- Economy size: 20.399 - 30.238, Mean: 24.546, Std. Deviation: 2.027
- Tourism GDP: 16.716 - 26.685, Mean: 21.388, Std. Deviation: 1.989
- Economic wealth of local population: 5.135 - 11.391, Mean: 8.354, Std. Deviation: 1.610
- Africa dummy variable: 0 - 1, Mean: 0.26, Std. Deviation: 0.440
- Asia dummy variable: 0 - 1, Mean: 0.26, Std. Deviation: 0.440
- Europe dummy variable: 0 - 1, Mean: 0.29, Std. Deviation: 0.456
- Latin America and the Caribbean dummy variable: 0 - 1, Mean: 0.16, Std. Deviation: 0.368
- Northern America dummy variable: 0 - 1, Mean: 0.02, Std. Deviation: 0.123
- Oceania dummy variable: 0 - 1, Mean: 0.02, Std. Deviation: 0.123
- Least developed countries dummy variable: 0 - 1, Mean: 0.15, Std. Deviation: 0.353
- OECD: 0 - 1, Mean: 0.26, Std. Deviation: 0.440

N=131

Note: Numbers reported in the table are rounded. In the actual data set used in the analysis numbers were not rounded.