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Yingsha Zhang
University of South Carolina - Columbia

Tong (Stoltzer) Wu
University of South Carolina - Columbia

Xiang (Robert) Li
University of South Carolina - Columbia

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THE IMPACTS OF CULTURAL VALUES ON BILATERAL INTERNATIONAL TOURISM FLOWS

Yingsha Zhang
School of Hotel, Restaurant, and Tourism Management
University of South Carolina

Tong (Stoltzer) Wu
Department of Statistics
University of South Carolina

and

Xiang (Robert) Li
School of Hotel, Restaurant, and Tourism Management
University of South Carolina

ABSTRACT

This study explores the impacts of cultural values on international tourism flows. A gravity model for bilateral tourism flows was tested with data involving 81 original countries and 32 destination countries. The external validity of the model was examined by testing several sub-models for each destination. The results show that international tourists tend to flow from lower power distance countries to higher power distance countries; countries with a higher level of individualism, a higher degree of masculinity, relaxed attitudes to new things, and pragmatic approaches tend to have more outbound and inbound travel. Among the control variables, distance has a strong negative impact, population and GDP per capita in original countries have strong positive impacts, population and GDP per capita in destination countries have moderate positive impacts, and the calendar year has a minor negative impact on tourism flows.

Keywords: *International, Bilateral, Tourism Flows, Cultural Distance, Gravity Model*

INTRODUCTION

Unilateral tourism flows have been studied extensively, especially tourism flows from multiple source markets to one destination (Gholipour, Tajaddini, and Al-mulali 2014), but less attention is drawn to tourism flows from one source market to multiple destinations (Garin-Munoz and Amaral 2000; Yang and Wong 2012). Few studies examined bilateral tourism flows (Marrocu and Paci 2012; Prideaux 2005), i.e. tourism flows from multiple source markets to multiple destinations, making it hard to compare the importance of indicators of origin and destination areas to tourism flows. Presumably, the lack of studies on bilateral tourism flows is due to the difficulty in collecting data on outbound tourism flows and the difficulty in the comparison between data from different sources using various tourist definitions and data collection methods. Studies on tourism flows from multiple source markets to one destination generally focus more on tourist generating markets, while research on tourism flows from one source market to multiple destinations naturally focuses on destinations. These two lines of

research rarely examine factors of source and destination markets simultaneously and hence may ignore the interactions among factors relating to source and destination markets. This study attempts to analyze global bilateral tourism flows, which may help address the above issue.

Extensive research has been conducted on what factors determine tourism demand. These determinants may be roughly classified into eight categories: socioeconomic factors (Khadaroo and Seetanah 2008), geographical factors (Khadaroo and Seetanah 2008), tourism factors (Hu 2002; Yang and Wong 2012), cultural factors (Khadaroo and Seetanah 2008; Yang and Wong 2012), political factors (Balli, Balli, and Cebeci 2013), climate factors (e.g. Amelung, Nicholls, and Viner 2007), time factors (Hu 2002; Yang and Wong 2012), and marketing factors (Hu 2002; Song and Li 2008). They can be further classified into source market factors, destination factors, and origin-destination area factors (i.e., factors related to both source markets and destinations).

Among the above factors, cultural distance has seldom been discussed. Cultural distance is generally considered to have a negative impact on tourism demand, though it may also positively affect tourism demand for some people, such as allocentric persons (Goeldner and Ritchie 2011). Yang and Wong (2012) found that cultural distance had a significant negative effect on inbound tourism flows. Hofstede and colleagues (Hofstede, Hofstede, and Minkov 2010) suggest that the cultural distance has six dimensions: Power Distance (PDI), Individualism versus collectivism (IDV), Masculinity versus femininity (MAS), Uncertainty avoidance (UAI), Long-term versus short-term orientation (LTO), and Indulgence versus Restraint (IND). Because data of the 6th dimension (IND) is not available in many countries, most current research still only uses the first five dimensions. Detailed explanation of each dimension will not be reported here due to space limitation, but can be easily found on the website of the Hofstede Centre (2015). Understanding the impacts of cultural values on international tourism flows is crucial to destination country marketing, but how cultural values of host and guest countries affect bilateral tourism flows is still unclear. This study aims to shed some insights on it. Specifically, this study explored the effect of cultural values—a key cultural factor—on bilateral tourism flows, controlling the effects of some critical tourism demand factors, such as geographical distance (geographical factor), GDP per capita and population in source markets and destinations (socioeconomic factor), and the year (time factor).

METHODOLOGY

The most popular techniques in modeling tourism demand are multiple linear regression models and gravity models (Getz 2008). After curve estimation (including linear, logarithmic, inverse, quadratic, cubic, power, compound, S, logistic, growth, and exponential models) in SPSS 21 for tourism flows with each variable, the authors found that power models generate the highest R square than any other types of models. The power model is equivalent to using $\ln(\text{independent variable})$ to predict $\ln(\text{dependent variable})$ in a linear regression model. It is essentially a gravity model, indicating that the gravity model work better than traditional linear regression model in this study. Therefore, the authors propose the following gravity model:

$$\ln T = \beta_0 + \beta_1 \ln Dist + \beta_2 \ln GDPpc_o + \beta_3 \ln GDPpc_d + \beta_4 \ln Pop_o + \beta_5 \ln Pop_d + \beta_6 \ln Year \\ + \beta_7 \ln PDI_o + \beta_8 \ln PDI_d + \beta_9 \ln IDV_o + \beta_{10} \ln IDV_d + \beta_{11} \ln MAS_o + \beta_{12} \ln MAS_d \\ + \beta_{13} \ln UAL_o + \beta_{14} \ln UAL_d + \beta_{13} \ln LTO_o + \beta_{14} \ln LTO_d$$

where T represents the tourism flows from a source country to a destination in a specific year; Dist represents the distance between the original country and the destination; $GDPpc_o$ and $GDPpc_d$ represent the GDP per capita (current US\$) in the source market and that of the

destination country in a certain year, respectively; Pop_o and Pop_d refer to the population in the source market and that of the destination country in a certain year; PDI_o and PDI_d refer to the power distance index of the source market and that of the destination country; Year refers to the calendar year in which a tourism flow is generated; IDV_o and IDV_d refer to the individualism versus collectivism index of the source market and that of the destination country; MAS_o and MAS_d refer to the masculinity versus femininity index of the source market and that of the destination country; UAL_o and UAL_d refer to the uncertainty avoidance index of the source market and that of the destination country; LTO_o and LTO_d refer to the long-term versus short-term orientation index of the source market and that of the destination country.

Tourism flows among countries in each year from 1995 to 2008 were retrieved from the UNWTO database. There are 32 destinations and 81 source countries or areas. In total, 18,228 tourism flow records were analyzed, with tourist arrivals from one country to another country in each year as one record. All data are documented from an inbound tourism perspective and were collected by each destination. The distances between countries were calculated in ArcGIS using the centroid of each country. GDP per capita (current US\$) and Population (Total) were downloaded from the website of World Bank (2015). Cultural distance index for each country was obtained from the Hofstede Center, including Power Distance Index (PDI), Individualism versus collectivism (IDV), Masculinity versus femininity (MAS), Uncertainty avoidance (UAI), and Long-term versus short-term orientation (LTO).

The authors first tested the above model with data from 32 destinations (81 source countries, 14 years, 18,228 records). To test external validity, they further examined the model for each of eight destination countries, such as the United States, China, Israel, Korea Rep., New Zealand, and Hungary, respectively. Each of these destination countries had more than 1,000 records. Because each of these tests only used one destination country's data, each model excluded destination related variables ($GDPpc_d$, Pop_d , PDI_d , IDV_d , MAS_d , UAL_d , and LTO_d).

RESULTS

Due to high collinearity levels, MAS_d and LTO_s were deleted. The results of the analysis for 32 destinations show a strong negative impact of geographical distance ($\beta = -0.487$), strong positive impacts of population (0.523) and GDP per capita (0.487) in the source market, moderate positive impacts of population (0.367) and GDP per capita in the destination country (0.395), and a minor negative impact of year. In total, cultural distance, or the combined effects of PDI_o , PDI_d , IDV_o , IDV_d , MAS_o , UAL_o , UAL_d , and LTO_d , can only explain 5.1% of the variance in tourism flows. However, the effects of the cultural distance index in the model are all significant. PDI_d , IDV_o , IDV_d , MAS_o , and LTO_d have positive impacts on international tourism flows, whereas PDI_o , UAL_o , and UAL_d have negative impacts. The results indicate 1) international tourists tend to flow from low power distance countries to high power distance countries; 2) people in countries with a high level of individualism make more outbound trips, and these countries also receive more inbound travel; 3) people in countries with a high degree of masculinity tend to do more outbound travel; 4) people in countries with relaxed attitudes to new things are more likely to travel internationally, and these countries also tend to receive more inbound tourists; 5) international tourists generally prefer to visit countries where people are more pragmatic instead of countries suspecting societal changes.

The tests on individual countries show some slight differences: In the model in which the destination is the United States, IDV_o is not significant. In the model for the destination China, PDI_o is not significant. In the model for the destination Israel and the one for Korea Rep., all

cultural distance indices in the model are significant. In the model for the destination New Zealand, MAS_o is not significant. In the model for the destination Hungary, IDV_o and UAL_o are not significant. Models for a specific destination countries all exhibit a high prediction accuracy ($R^2 > 0.75$), except the model for Israel ($R^2 = 0.6$). It shows that the model can be applied to different destination countries although different destination countries' inbound tourism flows are sensitive to slightly different dimensions of source market cultural distance. These differences sensitize destination marketers to different cultural aspects of their target markets.

CONCLUSION

This study mainly explores the effects of different dimensions of cultural values on international tourism flows. Global bilateral tourism flows were analyzed in a gravity model using data involving 81 source countries and 32 destination countries. The external validity of the model was tested from the single destination perspective (multiple source countries to one destination country), and relatively robust results were obtained. Due to data incompatibility, the external validity could not be tested from the single source country perspective (one source country to multiple destination countries). Based on the above results, a destination country on the one hand should invest resources in marketing towards countries which are closer, with a larger population, a higher GDP per capita, a lower power distance, a higher level of individualism and masculinity, and people with more relaxed attitudes to new things. On the other hand, destination marketing organizations should make efforts in shortening target tourists' perceived geographical distance, improving their perceived socioeconomic status, and changing their perceived culture in a favorable way through marketing activities. Host countries where residents have a more relaxed attitude to new things, who take care of only themselves and their immediate families, who are more pragmatic and more easily accepting of societal changes and hierarchical order, appear to be more attractive to international tourists. Simply negative or positive effects found in existing literature are clearly not enough to describe the impacts of cultural distance on bilateral international tourism flows.

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