

The Impact of the Culture Distance on Tourism Demand--An Econometric Method from a Global Perspective

Introduction

International visitor arrivals have sustained growth over the past decades except some obstacles such as wars and financial crisis. As the increase of income and the development of science and technology, people travel more frequently and easier than ever before. Understanding the impact factors of tourism demand is essential for the marketing and branding strategies of destinations, and it also plays a fundamental role for tourism demand forecasting. Although a vast body of literature has focused on the impact of economic factors, little light has been shed on the influence of culture distance on tourism demand.

The aim of this study is to quantify the impact of culture distance on tourism demand using an econometric method from a global perspective. Culture affects human beings' behavior and thinking in many ways, thus the investigation of the role that the culture distance plays in determining the tourism demand would be important and valuable for both the academia and industry.

Literature Review

Tourism demand

Tourism demand has become a popular research topic in tourism field for years. The findings of the review articles show that the visitors' income, the relative price between destination and source markets and the substitute prices of competitive destinations are the most important influencing factors of tourism demand (Song & Li, 2008; Wu, Song & Shen, 2017). In spite of the economic factors, other determinants such as climate (Li, Song & Li, 2016; Zhang & Kulendran, 2017) and political factors (Pratt & Liu, 2016; Liu & Pratt, 2017) have emerged in recent studies.

Cultural distance

The distance between different cultures has been reported to affect tourists in various aspects, generally via an unconscious manner. According to different study objects, the cultural distance may be small and supplementary or large and incompatible (Reisinger & Turner, 2002a). In the tourism field, cultural distance mostly refers to the extent to which the culture of the original region differs from the host region's (Goeldner & Ritchie, 2012). The cultural distance was also introduced to explain the psychological and behavioral differences among different tourist groups (Tsang & Ap, 2007; Reisinger & Turner, 2002a, 2002b).

Relationship between cultural distance and tourism demand

Regarding the cultural distance and travel demand, there has been a paradoxical debate in the academy. On one side, many scholars believe that cultural distance may negatively affect tourists' willingness to travel to a certain region. Cohen (1979) argued that people seek for difference and change when traveling, however, just to the extent that change remains nonthreatening. Ng, Lee and Soutar (2007) found a negative correlation between culture distance and travel intention of Australian tourists. As stated by Goeldner and Ritchie (2012), in general, the greater the cultural distance, the greater the resistance.

On the other hand, some scholars have found that cultural distance, rather than cultural similarity can stimulate tourists' travelling willingness to a destination. For example, McKercher and Cros (2003) found that a destination's cultural attributes were associated with the destination selection. McKercher and Chow (2001) stated that the greater the cultural difference is, the more likely that tourists would participate in cultural tourism activities and the more important cultural reasons become in their travel decision making. A positive relationship between the culture distance and tourism demand of Hong Kong tourists to short-haul destinations was observed by Ahn & McKercher (2015). In some extreme cases, an allocentric person in Plog's (1974) tourist psychographics may wish to travel to a destination with greater cultural difference.

From the above literature, it is found that no agreement has been achieved on the impact of culture distance on tourism demand. The limitations of the current studies are as follows. First, most literature only employs the culture distance as the independent variables. Without the control of other determinants of tourism demand, the measure of the impact of culture distance would not be accurate. Second, most studies only focus on one destination. To obtain a more generalized model, a global view to investigate the relationship between the culture distance and tourism demand is needed. Third, most studies used travel intention to estimate tourists' actual behavior (Ng et al., 2007), however, the travel intention cannot completely transform to actual tourism demand. Last but not least, most existing studies view cultural distance as a collective concept. However, according to Cohen's (1979) study, further exploration of the impacts in different layers of cultural distance is needed.

To fill in the research gaps, a tourism demand model is proposed in this study, collecting the tourism demand data from 70 countries/regions across the world. To show a comprehensive picture of the role that the culture distance plays, not only the culture distance but other determinants of tourism demand such as economic factors are also introduced into the model.

Method and Data

The econometric model is proposed as follows to investigate the impact of the culture distance on tourism demand.

$$\begin{aligned} \ln Q_{ij,t} = & \beta_0 + \beta_1 \ln GDP_{i,t} + \beta_2 \ln CPI_{j,t} + \beta_3 \ln EX_{i,t} + \beta_4 \ln CD_{ij} + \beta_5 \ln TD_{ij} + \beta_6 Dummy_B \\ & + \beta_7 (\ln GDP_{i,t} \times \ln CD_{ij}) + \beta_8 (\ln CPI_{j,t} \times \ln CD_{ij}) + \beta_9 (\ln EX_{i,t} \times \ln CD_{ij}) \\ & + \beta_{10} (\ln TD_{ij,t} \times \ln CD_{ij}) + \beta_{11} (Dummy_B \times \ln CD_{ij}) + \varepsilon_{ij,t} \end{aligned}$$

$$(t = 2000, 2005, 2010 \text{ and } 2015)$$

where $Q_{ij,t}$, $GDP_{i,t}$ are the visitor arrivals from source market i to destination j and the GDP of source market i . $CPI_{j,t}$ and $EX_{i,t}$ indicate the price level of destination j and the exchange rate of the country of origin towards US dollar, respectively. CD_{ij} and TD_{ij} are the culture distance and travel distance between the origin-destination pairs. $Dummy_B$ is a dummy variable to measure whether the source market borders the destination. The interaction terms of the culture difference with the other independent variables are also introduced to the model to capture the moderating effects.

The real GDP is employed to capture the income of the source market and the travel cost is represented by the price level of the destination and the exchange rate of the source market. Kogut and Singh (1988)'s and Jackson (2001)'s cultural diversity indices are introduced to represent the culture distance, respectively. Both the two indices are aggregated based on the National Culture Dimension (Hofstede, 2010), which is the most widely used measurement of culture distance in tourism studies. As argued by Ng et al. (2007), no agreement has been achieved regarding the strengths of the aggregated indices, thus the impact of the two indices will be examined, respectively. The straight distance between the capitals of the source market and the destination is used to measure the travel distance.

The data of the six dimensions of the National Culture Dimension (Hofstede, 2010) are available for 70 countries/regions, thus the arrivals from the top 30 source markets of the 70 countries/regions will be collected to cover both the short-haul and long-haul travels. The origin-destination pairs will be removed from the dataset if the source market is not included in the database of the National Culture Dimension (Hofstede, 2010). Any origin-source market pairs with missing data of GDP and RP will also be deleted.

The data of visitor arrivals will be collected from UNWTO, the National Culture Dimension (Hofstede, 2010) will be downloaded from their official website and the economic indicators will be obtained from the World Bank. Since the culture distance is not a time-varying variable, the year 2000, 2005, 2010 and 2015 have been selected to investigate the impact of culture distance in different time periods. The median regression with robust standard deviation is used to obtain more robust estimation results.

Expected Findings

The elasticities of income, price, exchange rate and culture distance and travel distance will be obtained based on the estimation results. According to neoclassical economics, it is expected the income and exchange rate elasticities are positive whereas the price elasticity is negative. Since no agreement has been achieved on the impact of culture distance in literature, cluster analysis will be conducted to split the samples into different groups based on the destination and source market's scales of Hofstede (2010), respectively to shed light on different market segments.

This is the first study to quantify the impact of culture distance on tourism demand from a global perspective. The model could draw a meaningful picture of the role that the culture distance plays in determining the tourism demand. Various elasticities reveal valuable information of the international visitors, which is essential for destinations to better understand their key source

markets. The findings of this study could also benefit tourism industry regarding tourism planning and market strategies formation.

Keywords: Culture Distance, Tourism Demand, Tourism Demand Modeling

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