

What are the Factors that Determine the Number of People Coming to China?

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Abstract This paper studies the factors that affect people coming to China. We select the spending of United States and South Korea, GDP, railway transportation capacity of China as observations. Based on the data from 1988 to 2015, we use the ordinary least squares analysis regression model and present a most reasonable regression equation. It is found that South Korea's spending is negative to the number of visitors, whereas the spending of US is positive. On comparing the effect of other variables, the growth of railway transportation capacity and the overseas travel expenses of South Korea or United States, have almost no significant impact on the number of people coming to China. However, as China economic growth increasing rapidly, more and more people are willing to come.

Keywords Least squares analysis, regression, correlation coefficient.

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1. Introduction

China attract countless visitors all over the world every year. The factors that determine the number of people coming the China draws considerable attention from the government and the general public [3, 4]. On the one hand, knowing the specific amount of decision can help us to control the number of people coming to China to a certain extent. For example, if GDP of is positively related to the number of foreigners in China, government will boost GDP in order to gain bigger benefit from tourism [10]. In this way, this also makes a great contribution to China's GDP, resulting in a virtuous circle. On the other hand, it is useful to predict and analyze the future after knowing the parameters of the impact. Commercial firms can advertise precisely. Not only that, but government is able to have political propaganda as well.

Understanding the effect of factors control numbers of visitors traveling to China is curial for at least three reasons. The rise of tourism will bring many benefits. First of all, as an important emerging labor-intensive industry, tourism can provide an important role in solving the employment problem of labor force [12]. The types of talents required for tourism are diverse, and most of the practitioners have lower

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technical requirements and it is easier to master the training. Therefore, it is possible to provide more jobs for some unemployed people with lower education levels and make due contributions to the stability of society. What is more, tourism can bring huge economic income to the country and society, get rid of regional poverty, promote commercial consumption, and accelerate economic growth [13]. Reasonable and optimized the industrial structure sector, as a non-productive industry, led other related industries; the rapid development of cross-border tourism has also played a positive role in the country's foreign exchange earnings. In addition, preserving and promoting the unique culture of the region, tourism developed local culture, promoted cultural exchanges in various regions learned from each other, and achieved common progress [14]. Because these remarkable reasons, finding the factors affect number coming to China is vital for us.

There are a number of studies that have done related to our topic. Chu etc [1] study the effects of GDP on visiting numbers of China. Mejia etc [2] look at the effects of visitors from China to US, apparently, we do the opposite. They find no statistically significant effect of numbers of people arrived China between GDP (China) and other factors.

This paper looks at the effect of not limited to GDP of China and parameters, including spending cost of travel, railway transportation capacity. Apart from that, this paper chooses two symbolized countries: South Korea, which is the country with the largest number of tourists visiting China in Asia; United State, with the world's largest economy. We chose these factors for two reasons: it is somewhat easier to calculate, and its magnitude is easier to interpret.

2. Data

The data on visiting reasons was constructed in the following way. From Bloomberg database, we collected US and South Korea international travel spending data from 1998 to 2015. We summed the total spending of US and South Korea international travel respectively. Whether it is South Korea or the United States, the increase in the number of tourists traveling abroad will inevitably have some connection with the number of tourists coming to China. At present, we are unable to determine the specific degree of impact and related directions, but the introduction of data can make our research more intuitive.

Additionally, we measured China's real GDP per capita and railway transportation capacity(million passenger-km), which were collected from World Bank database*. The transportation capacity of the railway reflects the degree of perfection of the infrastructure, which is related to the tourist traffic of foreign tourists to China. We do not take GDP data directly but logarithmically. Furthermore, it is seen by the scatter graph that there is a u-type trend, so a quadratic term is added to the regression. The abbreviations used in this paper are list in Table 1, the fluctuation of the logarithm of the obtained variables from 1998 to 2015 are shown in Figure 1.

*<https://data.worldbank.org/indicator/IS.RRS.PASG.KM>