

Epidemic and terror and their impact on tourism

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Keywords | Tourism, Epidemic, impact, terror.

Objectives | As we know, terror and epidemics have a strong effect on tourism. The purpose of this study is to compare the effects of terror attacks and epidemics, as well as other factors, on the scope of tourism movements from certain countries of origin and to specific destination countries. In other words, the goal is to compare the effects of different types of crisis and to learn as which one has the strongest impact on tourism movements. In addition, the research tries to identify whether tourism originated in certain countries and towards certain destination countries is more sensitive to terror and to epidemics, compared to tourism to and from other countries.

Methodology | The data used for this research is an aggregate yearly data for the years 1995-2008, taken from the following sources: (a) tourist data taken from the world tourism organization publications; (b) data regarding epidemics (cases of influenza outbreak) taken from the world health organization data; (c) the number of people hurt in a terrorist event during the years of this research, for every destination country, were collected from the global terrorism dataset; and (d) data on the exchange rates taken from the economic research services of the U.S. department of agriculture.

For the countries of origin, we chose the countries that are top tourism spenders per capita, among the countries populated by more than 10 million people: the United States Of America, Germany, United Kingdom, Japan, France, Italy, China, Canada, Korea and Russia.

As the destination countries, we chose countries that suffered both from epidemics (outbreak of influenza) and from terrorist attacks: Egypt, the Netherlands, Thailand, Canada, China, United States of America, Indonesia, Hong Kong, Taiwan and Vietnam.

We examined the correlation between the percentage of change in the number of tourists coming from a specific country of origin to each of the chosen destination countries and (a) to the numbers of terrorist events in the destination countries, and (b) to the number of influenza events in the destination countries.

In order to examine the significant factors affecting the decrease in the extent of international tourism movements, we used a multiplying stepwise regression. The dependent variable was the number of international tourists from a certain country of origin, who visited a specific destination country. The explanatory variables included: the number of people hurt in a terrorist attack in the destination country, the number of people who caught the flu during the epidemic outbreak in the destination country, whether or not there was an economic crisis in the country of origin or in the destination country, and the exchange rate between both countries.

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Main results and contributions | The results show significant negative correlations between the number of terrorist attack events, which occurred in several destination countries and the decrease in the incoming tourism movements from certain countries of origin. In addition, we found negative correlations between the number of epidemic outbreaks in several destination countries and the decrease in the incoming tourism movements from certain countries of origin.

The results of the analytical model show that there is a large difference in the effects of terrorist events and epidemic events on the changes in tourism movements from different countries of origin and to different destination countries. For example, regarding the countries of origin, tourism movements from the United States of America, the UK and Japan were negatively affected by both terrorist attacks and epidemic outbreaks in the destination country, whereas outgoing tourism from Russia, Korea and China were negatively affected by terrorist attacks in the destination country but not by epidemic outbreaks. Moreover, we found that tourism from Germany was negatively affected by epidemic events in the destination country, but not by terror attacks, while Canada as a country of origin was not affected by either terror or epidemic events in the destination country.

As for the destination countries, we found that incoming tourism to Hong Kong and Canada was negatively affected by epidemic events in these destination countries, while incoming tourism to Vietnam and to the Netherlands was negatively affected by terror events in these countries. We also found that the USA as a destination country was only affected by terror events in the USA and only when China was the country of origin.

An economic crisis in the destination country or country of origin rarely affected the number of incoming tourists. The exchange rate between both countries affected countries of origin, such as the UK, China, Canada, Russia, Japan and Korea, but hardly affected Germany, France, Italy and the USA.

Limitations | The limitations of the study include the limited selection of countries and the fact that we used yearly data rather than monthly data, which could account for seasonal fluctuations; however, no monthly data were included in the World Tourism Organization publications.

Conclusions | Our results suggest that terrorist and epidemic events have different effects on tourism movements from various countries of origin and to various destination countries.

The results of this study may help design marketing strategies for destination countries, in order to reduce the negative impact of terror and epidemics on their incoming tourism from certain countries.