

The Effect of Uncertainties on the Tourism Industry: A Literature Review

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Abstract. Tourism is an extensive and intensive global industry of firms in various areas. Since tourism is a product of pleasure and business, it provides people an opportunity to enhance their living standards and offers many career choices. Nevertheless, tourism is fragile, and the damage caused by various social issues will cause severe consequences for the overall economy. To provide the public with a general review of the condition of tourism, this article discusses the impacts of three types of economic uncertainties on the tourism industry, including pandemic uncertainty, financial crisis, political policies, and the use of China as a case study during COVID-19 to talk about its impact on tourism sectors individually. Through analyzing multiple pieces of research conducted before, this paper aims to provide insights for people who are curious about the tourism sector, offer them an overview of the influences this sector may receive, and suggest practical ideas for officials to implement appropriate policies to recover the damages of economic slowdowns or disruptions in the future.

Keywords: tourism \cdot economic uncertainty \cdot COVID-19 \cdot Chinese tourism \cdot financial crisis \cdot political uncertaint

1 Introduction

As one of the significant contributors to the overall economy, tourism has boosted living standards, created more employment opportunities, improved the general revenues of the economy, and established relationships between people with different cultural backgrounds. This sector contains three types of tourism: domestic tourism, inbound tourism, and outbound tourism, which describe the travelers who travel only within and outside of a country for tours. The tourism industry comprises transportation, hospitality, travel facilitation and information, and entertainment; hence, this sector generates thousands of jobs for employees to choose from. Nevertheless, the tourism sector has been hit hard by COVID-19. The implementations of lockdown policies, travel restrictions, and work-from-home recommendations have put this sector into hardship and led to economic downturns in tourism-dependent countries, such as Mexico, Panama, etc. Also, COVID-19 has caused millions of workers to become unemployed and face income insecurity. Even though some policies are launched to protect these workers temporarily, they still need to wait for the whole sector to recover and keep suffering from the

unpredictable future. Because tourism is vulnerable and gets disrupted easily by many crises, the world has taken seriously evaluating the tourism sector from both the global and the regional levels while experiencing pandemics and uncertainties. And this paper tries to identify the effects of three types of uncertainties on the tourism sector.

Economic uncertainty often refers to a future perspective when the financial system demonstrates a great possibility of encountering negative, adverse, and unpredictable events. Usually, these events will cause the economy to slow down and lead to a recession. In previous studies, [1] has used China as a case study and found a negative relationship between political uncertainty and tourism. If the government implements an anti-corruption campaign, the tourism sector businesses will significantly reduce their firm values. Similarly, another study uses a mixed-frequency vector autoregressive model to suggest to policymakers and tourism stakeholders that better to maintain the expected tourism demand during economic uncertainty, they should create targeted marketing plans [2]. Even though there was research on the relationship between economic uncertainties and the tourism sector, there was still relatively little research to summarize different types of possible uncertainties that affect tourism within a paper and focus on tourism at the global level instead of a single country. To help close this gap, this paper aims to review the past studies of tourism industries under the effects of different economic uncertainties, including health pandemics, financial crises, and policy uncertainties. Hopefully, this paper may allow its readers to have an overview or general background of how these various uncertainties cause economic slowdowns in tourism industries. It tries to provide insights and practical ideas for governments, tourism industries, and tourism sector employees to understand the current condition and consider relevant policies to be incorporated in the future. Positively, it may also help some tourism employees to reconsider their job careers with a perspective of thinking critically and to prepare forehead if any similar situation happens again in the future.

The remaining papers are structured as follows. Section 2 talks about the pandemic uncertainty, discussing COVID-19 and SARS. Section 3 discusses the relationship between the financial crisis and the tourism industry. Section 4 focuses on the policy uncertainty in the tourism sector. Section 5 uses China as a case study to investigate the effects of COVID-19 on different perspectives of tourism. And the last section presents a conclusion of the article about how these various uncertainties affect the tourism sector and further studies recommendation.

2 Pandemic Uncertainty and Tourism Sector

A pandemic is regarded as a period of spreading an infectious virus and affecting millions of individuals. It usually infects large amounts of regions, such as multiple countries. During these years, the COVID-19 pandemic has been brought to the public's attention since it has caused the overall economy to confront downturns and forced substantial amounts of workers to lose their jobs. Among these unemployed workers, the tourism sector is one of the most affected by the virus. As the overall impact of the COVID-19 on global tourism is pervasive, some evidence demonstrates that industries such as airlines, hotels, and travel agencies have experienced devastating damage during the pandemic. Since COVID-19 is unprecedented in human history, the existing evidence

and knowledge are limited to drawing relationships between the pandemic and tourism. Thus, to better understand this novel global condition in the tourism sector, this section is divided into two parts by reviewing previous and recent studies on the tourism sector during these health pandemic uncertainties.

Because travelers can transmit the virus during their flights or be exposed to another virus during their travel, such virus-based contagious disease can become detrimental to regional and international tourism sectors. In previous studies, much tourism research placed greater attention on the impacts of SARS. [3] used survey data and an inputoutput model to assess the effects of SARS. They concluded that the tourism sector was hit hardest, with a 50–60% decrease in international tourism revenue, a 10% decrease in domestic tourism revenue, and a loss of US\$25.3 billion to the overall Chinese economy. Then, [4] and [5] offered objective accounts of the event and assessed its impact using data on changes in tourist arrivals, hotel occupation, and tourism industry sectors.

Even though there is a limited number of existing pieces of evidence on COVID-19, most research on this pandemic concentrates on its influences on a global level. Based on available statistics online or information from journals, websites, government documents, research reports, and other information from various media formats. Researchers have conducted studies to examine the effects of COVID-19 on the tourism sector. [6] used a qualitative descriptive method to investigate the impacts of COVID-19 on the hotel industry in Asian countries. It found that because of the cancelation of domestic and international airlines to China, the hotel occupancy rate has declined by 75% from January 14 in 2020. The hotel occupancy is impacted because many travelers decide to cancel and refund their booking hotel because of the travel ban and lockdown policies and quarantine regulations. Overall, the average decline of hotel occupancy in Asian countries amounted to 58.74%. As fewer visitors travel, the reduction in hotel occupancy has caused about 63.4 million employees in this industry to lose their jobs and face income insecurity, leading to a more knock-on effect on the employability of the tourism industry.

Moreover, as the COVID-19 pandemic has caused an unprecedented stasis of most economic activities within the tourism sector, governments have decided to introduce various economic stimulus packages to relieve the tourism workers' pressure and mitigate the damages as soon as possible. According to research conducted in 2021, [7] used the data from 136 countries to examine the relationship between the size of the tourism sector and the implementation of economic policies. The findings suggest that in response to the COVID-19 pandemic, the larger the tourism sector, the more aggressive economic stimulus packages the government chooses to mitigate the adverse effects caused by the pandemic and reanimate the overall economy.

The COVID-19 pandemic has impacted the tourism sector abruptly, and many international tourism-related activities have been violated to decrease the possibility of infection. The imposed travel restrictions caused international tourist arrivals to drop by 20% for the first quarter of 2020. The March 2020 arrivals were reduced by over 50%, and a further 58% - 78% fall in international tourist arrivals is expected [8]. Even though the government has already tried its best to launch policies to recover the damage and protect the workers temporarily, the adverse effects are far more complex. They will take a long-term period to be fully rebounded.

3 Financial Crisis and Tourism Industry

A financial crisis is often related to banking panics when firms and buyers cannot pay their debts, financial institutions must undergo liquidity shortages, or the value of assets suddenly declines in price. Generally, financial crises usually result in devastating effects, such as lowering GDP growth and increasing the number of unemployed. And among all sectors, the tourism sector is the one that usually gets a harsh impact under the financial crises. [9] examines different financial ciries, including inflation crises, stock market crashes, etc. Through evaluating the data set of 200 countries from 1995 to 2010, the findings illustrate that international tourism flows can be negatively affected in both the host and originating countries by inflation crisis while positively related to the domestic debt crisis in the host countries but gets depressed in developing countries. Moreover, the study implies that the crisis's impact on international tourism flows differs. For instance, the banking crisis seriously dampens international tourism flows in America and Latin America, but the effect is not evident in Asia and the Middle East countries.

Moreover, [10] aims to determine the influences of the global financial crises on tourism in North America. They conducted a "backgrounder" analysis by interpreting the descriptive statistics on tourism in North American countries. The results demonstrate that the global financial crisis significantly impacted Canadian and United States tourism. Such influence shows a higher possibility to continue in the future.

In addition, since the financial crisis is unpredictable, some countries must prepare ahead to reduce the probability of its damages down to its minimum extent. [11] summarizes the causes of the Asian financial crisis and investigates the potential factors that may cause a decrease in the number of tourist arrivals. The article closely reviews the initial impacts on Australia's tourism industry and examines the Australian Government's response to the financial crisis. However, the finding suggests that the government fails to focus on the effects of the situation on the tourism industry, and the launched policies do not necessarily ensure the security of the tourism sector.

Tourism is a fragile sector because many people are involved in the industry. If any economic crisis happens, consumers and firms will have difficulty with their money flows, negatively affecting the overall tourism sector and leading to a recession for the whole economy. However, tourism can become a tool that contributes to a country's economy and helps it recover rapidly; thus, special consideration is needed for the tourism sector to better recover from any financial crisis.

4 Policy Uncertainty and Tourism Sector

Policy uncertainty is a government-related concept that emphasizes two main parts of the policy: the policymaker and its impact. Based on some existing ideas, such uncertainty is related to three components: who is the policymaker, what are the economic consequences after the policy has been launched, and who is responsible for these results. Such uncertainty is risky and unpredictable in the government's regulatory system, so it may cause firms and consumers to stop or postpone their investments or spending in consumption due to the incredible performance of the market. Within these various kinds of consumption, tourism is affected, and most of the research has proved that economic

policy uncertainty decreases tourism spending in the long run. [12] discovers the relationship between economic policy uncertainty and demand for international tourism. Since such uncertainty is directly related to an individual's income level, the market or spending on international tourism is also affected. This study suggests that a higher economic policy uncertainty creates more departures and more total expenditures—however, the expenses on tourism decrease under the higher possibility of the unforeseeable future. People may travel more with less money, implying a trip to short-distance places. Moreover, the study concludes that such a contradicted relationship between the increasing demand for tourism and decreasing spending in tourist expenditures happens more in low or lower-middle-income countries.

Another study investigates the causality between European economic policy uncertainty and some European countries' tourism activities. It employs the annual data in tourism from 1995 to 2015 to shape a wavelet-based approach and implies a unidirectional causal influence of European EPU on international tourism receipts (ITR) in the short run and a bidirectional causal influence of European EPU on ITR in European countries in the long run." Based on this finding, the authors recommend an increasing demand for tourism to expand the tourism supply in the future [13].

The last research uses Turkey as a case study to analyze the impacts of economic policy on stock prices of the tourism companies in Turkey from 2002 to 2013. The finding illustrates that since the stock returns of the Turkish tourism companies are primarily made on domestic and international demands, economic policy uncertainty in Turkey negatively affects its tourism index returns [14].

From these three studies, it is easy to see a negative relationship between economic policy uncertainty and returns on tourism. Even though the impact may not be immediate, the loss caused by this uncertainty will be shown in the long run. Therefore, to promote a country's income in tourism, it is vital to keep the level of uncertainty as low as possible while implementing a new economic policy.

5 A Case Study: Evidence from COVID-19 in China

Many people may wonder why COVID-19, a health crisis, has become an economic issue and pushed millions of people out of their working positions. Before reaching the global scale, COVID-19 spread quickly across the regions of China. Since the virus was infectious and the vaccines were not prepared yet, the Chinese government decided to implement lockdown measures, travel restrictions, and stay-at-home recommendations to reduce the possibility of infection. However, these policies have undoubtedly caused a devastating impact on the overall Chinese economy.

Because China was the first country that has been affected by the coronavirus, it also became the first one to go through economic downturns. As tourism essentially contributes to China's domestic economy, the coronavirus's influence will immediately disrupt all types of business activities within the tourism sector. [15]. Such a tourism-dependent country has triggered many researchers to evaluate the potential harms from different aspects. [16] utilize a CGE model built upon the ORANI-G model (Horridge, 2000) to assess choices and compare the outcome of public health policies by using China as a case study. They have concluded that Chinese real GDP would reduce by 11%

without a pandemic control policy, employment would decrease by 15%, and domestic and inbound tourism would decrease by about 88%. However, after implementing the control policy, the situation was mitigated, as indicated by a 4.2% reduction in real GDP, a 6.6% increase in the unemployment rate, and a 41.8% reduction in domestic tourism demand. [17] examine the gendered impacts of the COVID-19 pandemic on the Chinese migrants. They had returned to their hometowns for the Spring Festival before the Wuhan lockdown through the data from a nationally representative survey. They found that women migrants were less likely than men migrants to return to the cities and less likely to return to paid work after the pandemic. The research also indicated a strongly negative relationship between those who have children and their employment decisions; however, this concern is not illustrated in migrants' decisions. Thus, this finding implies gender inequality and a setback in improving Chinese women's status in the labor market during the COVID-19 pandemic.

And lastly, [18] incorporate large amounts of online surveys and interviews to compare the impacts of COVID-19 on Chinese nationals' tourism preferences. According to its quantitative survey data and qualitative interview data, they have found that COVID-19 significantly reduced Chinese preferences and choices to travel to countries with high infection numbers or geographically far away. Instead, after COVID-19 has been controlled for a while and the travel restrictions have been removed, most Chinese people prefer nature-based and rural destinations or trips with short travel distances.

These three kinds of research have analyzed how COVID-19 affected the tourism sector through the outcomes of policy implementation, employment choices, and travel preferences. There is no doubt to conclude that COVID-19 has significantly affected people's lives, including their attitudes, careers, and entertainment. Therefore, it is reasonable to view COVID-19 as a public health crisis and the root cause of global economic slowdowns.

6 Conclusions

Tourism is not only about holidays or new visits to different places. Instead, this sector is profitable and can improve a country's overall economic condition by supporting local firms to make up trillions of dollars of the global GDP. Thus, the significance of tourism to a country's economy is massive and cannot be ignored if any of the above uncertainty happens.

The COVID-19 pandemic has crushed the tourism industry and created economic and social disruptions worldwide in recent years. Though similar cases such as SARS have happened before, the unprecedented virus still catches the public by surprise. With no treatment and vaccines generated, the government decided to adopt international travel restrictions to lower the possibility of infection. However, this action places the tourism sector into virtual stasis or even setbacks due to airlines' cancellations, hotel occupation decrease, and lockdown policies. The loss of visitors has caused millions of workers in the tourism sector to face stress from unemployment and income security. And such loss undoubtedly exacerbates income inequality within and between countries. Even though some policies have been implemented to protect these workers temporarily, they still need to wait for the whole sector to recover to get back to their original positions, and tourism-dependent countries may need to require more years to rebound.

Moreover, the financial crisis is another challenge for tourism industries. Because such a crisis causes people to experience a reduced income for many households for a considerable period, it will adversely affect consumers' purchasing power and willingness to spend more money traveling around. This attitude will then lead to a reduction in tourists and lower the demand for international tourism services. Eventually, during the financial crisis, tourism-related activities were all severely affected.

Furthermore, policy uncertainty negatively impacts the tourism sector as well. Since nobody predicts the effect of implementing a new policy, it is more necessary for governments to analyze every possible result of the policy thoroughly. To better provide and expand the tourism supply, governments should promote the current demand in this sector and reduces the possibility of being uncertain about a policy.

As the tourism sector is helpful for a country's economy through the generation of income, employment, and foreign-exchange earnings, it is essential to place close attention to this sector and prepare ahead if any unpredictable events happen in the future. Therefore, this article aims to provide the public with a general review of the condition of tourism. Hopefully, it can enable the government and officials to think critically and make practical policies to recover the damages caused by any economic uncertainty. Moreover, since this paper is a review that summarizes all three types of delays, it does not suggest any causal relationship or right ideas for making the policies. Thus, further studies are encouraged to analyze each uncertainty in-depth and use data to make noticeable results that better help the public understand what actions should take immediately or prepare ahead of time to prevent additional damage to the tourism sector. For example, since the COVID-19 pandemic is still ongoing, China and United States have implemented contrary policies on wearing masks and quarantine requirements. China's attitude has decreased the number of visitors, and the enforcement of selfquarantine has continually caused many workers to work from home or lose jobs. On the contrary, the US decides to launch a mask-free policy and welcome visitors from other countries traveling to America. As time goes by, the tourism returns on these two countries' GDP will be shown with a massive difference in the long run. Thus, further study may continue to analyze the different attitudes of these two countries on their policy implementations and investigate the effects of the tourism sector or others under the new policy uncertainty and the continued pandemic uncertainty.

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