

ECONOMIC IMPACT OF THE COVID-19 PANDEMIC ON THE TOURISM INDUSTRY

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Abstract

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The tourism sector was the most negatively affected sector due to the COVID-19 pandemic, especially in areas that depend primarily on tourism, such as Petra, Jordan (World Tourism Organization [UNWTO], 2022). The researchers conducted a survey with the goal of measuring the economic impact of the COVID-19 pandemic on the tourism industry in Petra. Data were collected from 484 residents of Petra to survey their views on the degree of the pandemic's impact. The findings of the study showed that the COVID-19 pandemic increased unemployment in the region, decreased people's ability to pay bills and buy essential items, and decreased average salaries. The results also showed that businesses decreased the number of their employees, they were expected to make less money, and more businesses were expecting not to make any revenue. There was a larger economic impact on the residential areas of Wadi Musa and Umm Sayhoun because these residential areas are majorly focused on the tourism industry.

Keywords: Economic Impacts, Tourism COVID-19, Jordan, Petra

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1. INTRODUCTION

Tourism is one of the largest and most important economic sectors that links trade between countries contributing 9% of the global gross domestic product (GDP) (Colocassides, 2022; Rohmad, Probohudono, Wardojo, & Wibowo, 2016), it is generally considered when people travel for their own pleasure or for business. Tourism creates entire industries that are aimed at providing the wants and needs of tourists. Many people and cities exist in a certain area primarily due to tourism. Without

tourism, people would not be able to live in these cities because they would not be able to make any money. Petra, Jordan, is a region where the primary purpose is to meet the wants and needs of tourists. The tourism industry can be very volatile because circumstances can dictate a change in tourist activities in a region, and rapidly change the economy. The COVID-19 pandemic likely causes major changes in the economic activity in Petra because of the region's reliance on tourism. The purpose of this study is to evaluate the impact of COVID-19 on tourism in Petra

The tourism sector, locally and globally, was subjected to a severe economic shock, which was the largest in history, as a result of the decisions taken to limit the spread of COVID-19 in the world. Reports issued by the World Tourism Organization (UNWTO) indicated that the global tourism economy was the most affected by the crisis and that the health measures taken and the closure of borders between countries resulted in losses that reached more than 1.2 billion US dollars until the end of 2020, and the organization expected that 120 million people around the world would face the danger of losing their direct jobs as a result of financial damage to thousands of large investments in the accommodation and aviation sector and small and medium entrepreneurs in local communities (UNWTO, 2022).

The study hypothesis is that the tourism and hospitality industries of Petra are economically affected more than other industries in Jordan because it is the basic sector in the targeted area. The study applied a survey to measure the economic impacts of the COVID-19 pandemic on the tourism industry in Petra. Petra contains an ancient archaeological and historical site that is one of the seven new wonders of the world, which attracts many domestic and international tourists. Many businesses in the Petra region revolve around the tourism industry because of the archaeological site, therefore, it is a major means of foreign exchange. The tourism industry is a large source of employment, income, and foreign exchange for many countries (Xu, Zhang, Huang, Zhou, & Fan, 2022), and thus extremely important in developing countries because it is a large contributor to the country's economic growth which includes employment, income, and foreign exchange (Samimi, Sadeghi, & Sadeghi, 2011). In Jordan, researchers have determined a causal relationship between the tourism industry and the overall economic growth of the country (Muhtaseb & Daoud, 2017). The tourism industry is extremely important for the growth of Jordan and the livelihood of people in the region as a whole. Because of the COVID-19 pandemic, the Jordanian government placed a travel ban where many foreign tourists were not allowed into the country. This situation is likely to have a huge economic impact on Petra because of its heavy reliance on the tourism and hospitality industries. This limits the tourism industry in Petra to strictly domestic visitors, although the pandemic is like to decrease the number of domestic visitors as well.

Out of all the industries affected by the COVID-19 pandemic in the United States, it is estimated that the tourism and hospitality sector was economically affected the most (Nicola et al., 2020). The COVID-19 pandemic has affected the tourism industry all over the world and is expected to have residual effects in the coming years. COVID-19 has contributed to the transformation of customers and businesses into online buying and selling (Moon, Jongsik, Chu, & Han, 2022) and this is likely to create a new challenge for workers in the tourism sector in Petra.

Government and foreign aid are critical for helping people who work primarily in the tourism and hospitality industry, especially in developing countries whose GDP may heavily rely on this industry (Koh, 2020). During some months of the year, the archaeological site is visited by mostly

foreign tourists, foreign exchange is required for many tourist destinations to be profitable and support the region (Harb, Alhammad, Abuamoud, Hatough, & Hamdan, 2022).

The study aims at assessing the economic impact on the tourism sector in Petra due to the COVID-19 pandemic in terms of the following aspects: the extent to which the tourism income of individuals and tourism businesses is affected by the size, economic activity and target markets; the extent to which permanent and temporary jobs in tourism facilities are affected, taking into account gender; the ability to adapt, compete and continue after a crisis; putting forward proposals for the owners of tourism establishments in the economic sectors to recover from the crisis.

Like any other research, the structure of this paper consists of a general background on the impact of the pandemic on tourism in Jordan in Section 1. Section 2 reviews the relevant literature. Section 3 presents the methodology used in data collection and analysis, Section 4 explains the results and Section 5 introduces conclusions.

2. LITERATURE REVIEW

Developing countries that use tourism as a primary method of economic advancement often face difficulties due to a lack of resources and capital. The countries that often have the most successful tourism and hospitality sectors tend to have large capital reserves to fund the tourism industry when difficulties may arise (Weidenfeld, 2018; Dagdag, 2021). Petra's economy is primarily supported by tourism, which makes economic advancement during a pandemic extremely difficult, and Jordan does not have the capital to provide loans and aid under these circumstances even though the country relies on this industry.

Jordan's tourism strategy noted that Jordan should emphasize domestic tourism to make the industry less volatile as a whole (Ministry of Tourism and Antiquities [MoTA], 2021). However, Jordan still has a heavy reliance on international tourists which makes the industry less predictable (The World Bank, 2022). Developing countries cannot rely on volatile industries without strategies to support these industries in times of need.

Cultural heritage tourism has become a major source of income for many countries, due to its strong linkage with several industries (Hor, 2021). It plays a major role in strengthening and diversifying communities' economies (Amin, 2020). Jordan is one of the tourist destinations for millions of people due to its diversity in nature and depth of history and civilization. Most European and American tourists visiting Jordan are looking for warmth, sunny weather, and historic and cultural sites (Abuamoud, Libbin, Green, & AlRousan, 2014). Tourist activity is a major tributary of Jordan's national economy contributing 12%-15% of the GDP (MoTA, 2021). In addition, these sites represent an individual identity, and they have a high societal and recreational value for the local community. The demand for cultural heritage sites by tourists is influenced by the availability of services provided by the government as well as the willingness and viability of the local community to cooperate to stimulate tourism in historical sites (Esichaikul &

Chansawang, 2022; Lazrak, Nijkamp, Rietveld, & Rouwendal, 2009).

Petra has attractive features because of its historical, environmental, and cultural assets, and the Jordan government has implemented a number of development projects in Petra during the previous years using the resources and capabilities available in local communities.

The tourism sector faced a severe economic crisis due to the COVID-19 epidemic. The UNWTO reports indicate that the global tourism economy is the most affected by the crisis and that health measures related to closing borders between countries have caused losses that may reach \$1.2 trillion in 2020, and 120 million people around the world are expected to face losing their jobs as a result of the pandemic (UNWTO, 2022).

In Jordan, the COVID-19 crisis has resulted in the disruption of the tourism economic sector and social gains that were achieved in 2019, as tourism income rose in 2019 to \$5.8 billion, an increase of 10.3% compared to 2018, contributed 13% of the GDP, and provided 55,000 jobs. Direct and more than 200,000 indirect opportunities in local communities in rural and urban areas portend more serious economic and social consequences in the long run (MoTA, 2021).

Jordan attempted to manage the COVID-19 crisis immediately when it placed the health of the citizens at the forefront of government priorities, which resulted in an increase in the Jordanian society's confidence in government measures and a good reputation at the global level, and led to granting Jordan the "Safe Travel" stamp related to health and public safety measures from World Travel and Tourism Council. However, as a result of the strict measures, the economic challenges became no less important than the health challenge, which had many repercussions on the economic sectors in general and the tourism sector in particular (MoTA, 2021).

To protect the tourism sector from the consequences of COVID-19, the government announced a number of decisions. First, to allocate 150 million Jordanian dinars (JoD) from the Central Bank dedicated to the economic sectors to confront the COVID-19 crisis to cover salaries and operating expenses in the hotel and tourism sector. Second, exemptions and installments of amounts owed by the tourism sector without fines or interests for the years 2019, 2020 and 2021. Third, to reduce the general sales tax for hotels and tourist restaurants to 8% instead of 16%. Fourth, to enable the souvenir shops to benefit from the soft facilities programs available to tour guides, with a value of 3 million JoD. Fifth, to allow travel and tourism operators to liquidate their bank guarantees, finally providing an additional umbrella to protect workers in the tourism sector (Jordan Strategy Forum [JSF], n.d.).

The tourism industry in Petra is considered to be the basic sector and the highest source of employment in the region, hotels and accommodation. The sector witnessed a 15% increase in employment in 2019 due to an overall increase in demand for tourism in 2019. The hotel industry seems to be the one most directly affected by the number of tourists to the region after 2020, however, the number of tourists visiting

Petra has begun to increase again in early 2022 (Abuamoud, Alrawadieh, & Farajat, in press).

A newly published study by Gössling, Scott, and Hall (2021) analyzed the impact of the COVID-19 pandemic on the tourism sector. The study warned of the possibility that the outbreak of the COVID-19 pandemic could lead to a change in the behavior of people and negative effects on national economies in general and the tourism industry in particular. The study concluded that the negative impact of COVID-19 would be greater on the tourism industry and its supporting sectors in the whole world, especially poor countries (Koh, 2020). These negative effects may be further exacerbated if the nature of work in the hospitality sector changes, such as working for shorter hours or taking unpaid vacations (Stergiou & Farmaki, 2021).

Another study by Williams and Kayaoglu (2020) focused on the impact of COVID-19 on the tourism industry, the study indicated that nearly one-tenth of European non-financial economic activities related to tourism accounted for 9.5% of employment among the EU countries in 2016. The study also noted that the EU's accommodation and food and beverage sectors contributed 19.7% and 58.7% respectively of the total employment in the tourism and hospitality industry. On this basis, it is clear that the lockdown of tourism-related businesses has had an unprecedented social and economic impact. On the other hand, Tsionas (2020) expected that there would be a gradual adjustment in tourism and hospitality after the COVID-19 pandemic (Nicola et al., 2020). The results of the study conducted by Tsionas (2020) showed that the gradual reopening, which requires making small profits or covering costs, is quite possible while reopening the tourism and hospitality sector, which requires the same level of profits as in the period before the COVID-19 pandemic, remains significantly more difficult. Based on the results of this study, Tsionas (2010) concluded that the sector's recovery requires government support. In the same vein, a number of researchers indicated that the tourism industry faced many crises in the past, and therefore, warned that the current crisis results in the most severe impact on the tourism and hospitality sector (Fotiadis, Polyzos, & Huan, 2020; Assaf & Scuderi, 2020; Dolnicar & Zare, 2020).

3. DATA AND METHODOLOGY

The ancient archaeological site at Petra is a major tourist destination and travel restrictions due to the pandemic lead us to believe that the economy and the tourism industry will be heavily affected as a result.

The goal of this study is to assess the economic impact of the COVID-19 pandemic on the economy and tourism industry in Petra, as well as the residential areas of Wadi Musa and Umm Sayhoun. The study targeted all sectors operating in the tourism sector and included tourism and travel offices, hotels, tourist restaurants, traditional crafts, tourism transportation (busses, car rental, and air transport), events, and tour guides, in addition to the local communities. The data collected during this study are from a survey conducted by members

of the Petra Development and Tourism Region Authority (PDTRA). The survey was given to a random sample of citizens and businesses in the Petra region in June 2021. The Petra region has a population of roughly 37,000 people (PDTRA, in press). A total of 484 people filled out the survey. The responses consisted of citizens' answers to questions with the goal of comparing their personal finances, job security, ability to make payments and other factors from 2019 to these same questions but in 2021. Comparing personal and business finances, job security, people's ability to make payments, and other questions allowed the researchers to generally compare the economic differences between 2019 and 2021 and relatively quantify the impact of the COVID-19 pandemic on the region as a whole.

Table 1. Businesses profile in Petra

Name of the business	Industry workers	Percentage
Food services	52	11%
Manufacturing	15	3%
Construction	12	2%
Transportation/Warehousing	18	4%
Agriculture and food production	13	3%
Mining	5	1%
Retail	21	4%
Cleaning services	31	6%
Aesthetic services	12	2%
Health care service	15	3%
Financial service	8	2%
Professional services	11	2%
Utilities	11	2%
Tourism/Hospitality	101	21%
Other	159	33%
Total	484	1

Based on previous studies, a questionnaire was designed to answer some of the study questions. After completing the preparation of the questionnaire, it was presented to a group of specialists to evaluate the questionnaire. The questionnaire was divided into two parts. The first section included general questions related to information about tourism businesses, such as the nature of the economic activity, the number of employees and revenues. The second section includes six main themes (five closed-ended questions and one open-ended question). The format of the questions included: a binary yes or no scale, writing the response for monetary values, and selecting the best answer from the given list of questions. There was a separate response section for participants who were business owners to figure out how businesses were affected compared to individuals. The questions were meant to be straightforward to try to eliminate subjective responses. The response data is not large enough to make definitive statements, but it does give us a general overview of the trends in the region.

Data were collected from the respondents through training six undergraduate students from Al-Hussein University in the region for two days, two hours per day. The training dealt with the objective of the study and an explanation of the questions and methods of selecting respondents and filling out the questionnaires. The data collection continued for two weeks at a rate of 30 to 35 questionnaires per day.

4. RESULTS

The study was carried out using a quantitative method of collecting primary data; 484 questionnaires were analyzed using SPSS to administer this study. The survey included 46 questions and 484 responses, 66% of the survey responses were made by men who were between the ages of 18 and 54 (see Table 2). 15% of survey participants said they were laid off in 2020 and 23% were worried about being laid off by the end of the year. 27% were unable to meet financial obligations, such as rent or mortgage payments, and 30% said it was difficult to buy essential items like groceries.

Over 50% of people said they have experienced negative effects in the last year, and only 1% experienced positive effects. 80% of people said that their rent/mortgage payments were affected, and they had to save more than usual. Not only did tourists' spending at local businesses like hotels, restaurants, and grocery stores decrease, but local spending at these businesses also decreased. These stressful times had a measurable effect on people's economic well-being, but something important to remember is the effect that this has had on mental health, something we can't measure.

Table 2. Demographic factors

Description	Number	Percentage
<i>Gender</i>		
Male	316	66%
Female	165	34%
<i>Age brackets</i>		
Under 18	22	4.60%
18-24	92	19.25%
25-34	153	32.01%
35-44	107	22.38%
45-54	57	11.92%
55-64	36	7.53%
65+	8	1.67%
<i>Marital status</i>		
Single	151	31.33%
Married	282	58.51%
Separated	21	4.36%
Prefer not to say	27	5.60%
<i>Number of kids</i>		
None	195	40.63%
1-3	136	28.33%
4-6	95	19.79%
7+	38	7.92%
<i>Place of residence</i>		
Wadi Musa	193	39.96%
Taybeh	102	21.12%
Umm Sayhoun	86	17.81%
Amareen	25	5.18%
Dalageh	23	4.76%
Al Rajeaf	50	10.35%
Other	4	0.83%
<i>Work</i>		
Employer	62	14.00%
Operator	70	15.80%
Employee	246	55.53%
Out of work	65	14.67%
<i>Sector of business</i>		
Governmental	130	26.92%
Tourism private sector	89	18.43%
Associations	28	5.80%
Social leader	4	0.83%
Tourism sector non-private	45	9.32%
Other	86	17.81%
None of the above	98	20.29%

For a more detailed picture of the effects of the pandemic on individuals in the city, the study revealed that the average annual income in 2019 was 4356 JoD. The expected annual income in 2020 and 2021 was 1176. The expected income in 2020 and 2021 was about 25% of what their income had been previously. Out of 340 reported incomes in 2019, 23 people reported earning 0. In 2021, out of 90 reported expected incomes, 31 people expected to earn 0. The average expected income from tourism was 47.37 JoD. 100 out of 240 people expected to make no money from tourism, which

means that almost half the local economy relies on tourism for money.

Finally, some questions were answered by business owners comparing 2019 to 2021. In 2019, businesses averaged 19 employees, but this number dropped to 11 in 2020 and 2021. The average salaries paid by businesses in 2019 were 103,600 JoD compared to an expected salary of 61,915 JoD in 2021. We saw a similar trend with expenses, businesses had to save more in 2021. They averaged 16,630 JoD in expenses in 2019 versus 7,870 JoD in expected expenses in 2021.

Table 3. Responses to study questions

Questions	Number of answers	Percentage
I lost my job or main source of income on a temporary basis		
Yes	73	15%
No	411	85%
I lost my job or main source of income on a permanent basis		
Yes	71	15%
No	413	85%
I am concerned about losing my job or main source of income		
Yes	108	22%
No	376	78%
I am unable to meet financial obligations, such as rent or mortgage		
Yes	133	27%
No	351	73%
I am unable to meet essential needs, such as groceries, electricity, etc.		
Yes	141	29%
No	343	71%
I am using my savings to meet financial obligations		
Yes	108	22%
No	376	78%
My work was not affected		
Yes	43	9%
No	441	91%
My finances were not affected		
Yes	24	5%
No	460	95%
I have seen a positive impact, such as a raise or a new job		
Yes	9	2%
No	475	98%
Negative effect		
Yes	239	49%
No	245	51%
Do you own a home, or rent a place to live in		
Yes	315	65%
No	169	35%
COVID-19 affected your ability to pay your rent or mortgage?		
Yes	398	82%
No	86	18%
Did you save money because of the COVID-19 situation		
Yes	382	80%
No	102	20%

A separate analysis of Wadi Musa and Umm Sayhoun was performed because these areas of residence have businesses that are more involved in the tourism industry. The study hypothesized that the residents and businesses of Wadi Musa and Umm Sayhoun would be even more greatly affected by the COVID-19 pandemic because of their reliance on the tourism industry for income. As expected, a higher percentage of people couldn't pay bills/rent/mortgages, or buy essential items, and they had to save more money. Also, a higher percentage of people were laid off. These areas of residence had higher employment rates in 2019 and high unemployment rates in 2020 and 2021 than the surrounding areas of residence in Petra. The average income before 2020 was 5,535 JoD and about 25% of people reported 0 income. The average

expected income for 2021 was 2,633 JoD and over 30% of people reported 0 income.

Regarding businesses in Wadi Musa and Umm Sayhoun, the results were interesting. The average business revenue in 2019 was 124,780 JoD but only 10% of businesses made 0 revenue. The average business revenue in 2020 was 112,700 JoD but 50% of businesses made 0 revenue. This makes sense, because the bigger successful businesses may not have lost a ton of revenue, and some actually profited, but the smaller businesses that relied on tourism now will not make revenue. The average number of employees in 2019 was 22 and that number dropped to 14 in 2020 and to 9 in 2021. This is the same average change that the study found in the other areas of residence. The average salaries paid by businesses in 2019 were

148,040 JoD compared to an expected salary of 89,535 JoD in 2020. The study found a similar trend with expenses, businesses had to save more in 2021. They averaged 22,070 JoD in expenses in 2019 compared to 10,565 JoD in expected expenses in 2020 and 2021. A similar trend was found comparing all areas of residence. There was much greater variability in Wadi Musa and Umm Sayhoun, where some businesses increased revenue and a greater number of businesses expected to make 0 revenue.

Just as expected, the citizens and economy of Petra were greatly affected by the COVID-19 pandemic because of the city's heavy reliance on the tourism industry. Two specific areas of residence, Wadi Musa and Umm Sayhoun were affected even more by the pandemic because these areas of residence are more heavily involved in the tourism industry. The unemployment rate in Jordan averages above 20% but based on our data the unemployment rate in Petra for 2020, 2021 was expected to be around 30%. The results revealed a big change in people's ability to make payments and their need to save money. The economic effects of the pandemic on Petra were significant, but financial insecurity was the biggest change.

5. CONCLUSION

The researcher's original hypothesis stated that they expected the tourism and hospitality industries of Petra to be more economically affected by COVID-19 than other industries in Jordan. Measures of economic impacts included personal finances,

business data, and unemployment questions. Based on the survey results, the hypothesis was found to be true. In Petra, economic trends like wages and unemployment rates increased more than in other industries. The researchers also looked at the residential areas of Wadi Musa and Umm Sayhoun because their economy relies more heavily on tourism. Based on the survey results, these residential areas had more differences in wages, larger increases in unemployment, and more businesses who were struggling to make a profit.

Any time there are travel restrictions, industries that rely on foreign exchange tend to be affected the most. When industries are economically affected, it requires aid to help these industries because they are very important for the country's economy. Developing countries do not have a diverse portfolio of industries like larger countries do, and, therefore, they are affected more when these industries are not thriving.

By applying this study, we have been able to get a more in-depth understanding of the impact of the pandemic on the industries' growth in the region. In general, most businesses are clearly badly impacted, especially those that are more directly linked to the tourism industry. The researchers expect that one of the limitations of the study was the economic conditions during the data collection and the ambiguity of the future about the end of the pandemic, which affected significantly the results, this study may open a door to studying the economic and social impact of the pandemic after its end in the same region.

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