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- The role of cooperatives in the development of rural tourism: The example of Kuyucak
- The impact of global uncertainty and risks on the global tourism index
- Impact of geopolitical risk on BIST tourism index and tourist arrivals in Turkey
- Personality traits and employees' job performance in hotel industry
- Crisis management for pandemic in airlines



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Research article

The role of cooperatives in the development of rural tourism: The example of Kuyucak

Onur AKTÜRK, Şirvan Şen DEMİR

The role of cooperatives in the development of rural tourism: The example of Kuyucak

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Abstract

In the development of rural areas whose economy is based on agriculture and animal husbandry, rural tourism activities play an essential role in diversifying rural areas' economic activities and transforming the social structure, with its contribution to employment, income-generating effect, and bringing people from different cultures together. Similarly, cooperatives, an organizational structure where local people come together to meet their own needs in the sense of solidarity, also fulfill a vital function in the development of rural areas. In this direction, the study's primary purpose is to determine whether cooperatives can play an active role in rural tourism development in areas where rural tourism activities occur. Therefore, the study adopted a qualitative analysis method to obtain in-depth information from the participants. In the analysis process of the data, descriptive analysis was used. In addition, in-depth interviews were conducted with 21 participants consisting of the Women Entrepreneurs Cooperative and local people, established in Kuyucak Village of Keçiborlu District of Isparta Province, which constitute the research sample, and a semi-structured interview form was used in the interviews. Finally, the results in line with the findings were interpreted and some suggestions for future studies were presented.

Keywords: Rural tourism, Rural development, Cooperative, Underdevelopment.

1. Introduction

To understand the reason for the development differences of societies, researchers asked the following question. They sought an answer through various academic disciplines: "Why some societies still live without the most basic freedoms and rights, while some societies have shown remarkable progress in the historical process?" (Acemoglu & Robinson 2018; Sen, 2004). The answer to this question was tried to be sought with the concept of development, which questions the reasons that lead to the separation of developed and underdeveloped countries. At this point, the idea of development refers to a qualitative improvement, including economic growth, but far beyond economic growth and a structural transformation in socio-cultural, political, and technological terms (Slim, 1995). Therefore, one of the critical points in countries' development strategies is to eliminate the development gap between rural and urban areas and take actions that will pave the way for the development of the rural regions. At this point, the importance of the cooperative movement as one of the essential instruments of

achieving rural development goals is emphasized. Thus, the importance of the cooperative movement can be understood more closely, especially when it is considered that cooperatives based on mutual aid provide employment opportunities for approximately 9.4% of the workforce (279.4 million people) on a global scale and that the majority of this number consists of the population living in rural areas (Eum, 2017). In times of crisis, cooperatives also take important roles. For example, the World Labor Organization (ILO) stated that cooperatives based on self-help and mutual solidarity could provide a long-term solution in the face of crisis-affected human communities in building a solid structure again, building an environment of social dialogue, creating employment opportunities, adopting a democratic understanding among communities, meeting socio-economic needs, and addressing crises (ILO, 2001). At the same time, rural tourism, which can be expressed as one of the non-traditional rural development strategies, has similar effects with the cooperatives operating in rural areas, as it diversifies economic activities in rural areas, creates new job opportunities, and supports the increase in retail sales (Wilson et al., 2001).

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In this context, when the findings of the studies involving rural tourism and cooperatives within the scope of rural development are evaluated, the fact that the local people carry out the activities that they try to realize with their own efforts in an organized manner under the roof of the cooperative paves the way for the development of tourism activities in the rural areas. The women who are in the background in terms of participation in the workforce can be recruited to the workforce through cooperatives. In addition, it is seen that the regions that once lost their vitality due to environmental pollution have been revived and turned into a tourist attraction with the efforts of the cooperatives in the ecological field (Yang & Hung, 2014; Iakovidou, 1997; Verma, 2006; Tuğrul, 2018; Gladwell, 2015; Aref & Gill, 2009, Djokovic et al., 2017; Kazakopoulos & Gidarakou, 2003). In this context, the increase in the number of studies involving rural tourism activities and cooperatives and the discussion of the findings from a broader perspective by the relevant academic circles will constitute a roadmap for the steps to be taken to eliminate or reduce the impact of poverty identified with the countryside, and it is thought that it will increase awareness about rural tourism cooperatives. It is thought that this study will contribute to the literature in terms of both revealing the social and economic change experienced by rural women after their participation in the labor force and evaluating the effects of rural tourism activities carried out under the roof of cooperatives in terms of rural development and regional tourism. In this direction, the main purpose of the research is to determine whether cooperatives can play an active role in the development of rural tourism in areas where rural tourism activities take place. The sub-objectives of the research are as follows; 1) Analyzing the effects of rural tourism activities on village life, 2) Drawing a general framework about the steps to be taken as a result of determining the difficulties and needs to be encountered 3) Determining the potential values of the village to carry out rural tourism activities more effectively.

2. Literature

2.1. Rural tourism

In the literature and in daily life, it is seen that many different types of tourism such as agricultural tourism, farm tourism, village tourism, eco-tourism are used instead of the concept of rural tourism. In fact, rural tourism is a more general concept that includes these types of tourism (Uçar et al., 2012). United Nations World Tourism Organization (UNWTO) defines Rural Tourism as “*a type of tourism activity in which the visitor’s experience is related to a wide range of products generally linked to nature-based activities, agriculture, rural lifestyle/culture, angling, and sightseeing.*”

Rural tourism, one of the important instruments of rural development, comes into prominence as an increasingly important type of tourism in the world. The prominent factors in rural tourism gaining such importance can be expressed as follows; the search for alternatives to mass tourism, the

changes in the expectations and preferences of tourists, the desire to learn and experience different cultures, providing the participation of women living in rural areas into the workforce, and the dynamism of the local economy by providing diversity in the rural economy based on agriculture and contribute to rural development by preventing migration consequently.

The development of tourism in rural areas is considered as an important driving force for the eradication of poverty, sustainable development, and environmental protection (Ryan, Gu & Zhang, 2009). Since the seventies, the remarkable increase in tourism activities in rural areas in all developed countries worldwide has played a key role in the development of economically and socially depressed rural areas (Perales, 2002). In addition, rural tourism is seen as an important source of income for rural economies (Hummelbrunner & Miglbauer, 1994).

The crisis in the agricultural sector in the 1980s, especially in the Midwest of Europe, led to a decrease in the number of farmers and the restructuring of farm ownership, forcing them to leave farming or declare bankruptcy. In addition, as rural unemployment rates rose above urban levels, real income growth in rural areas ceased. These changes have limited the economic development options of rural communities and forced them to seek unconventional ways to ensure their sustainability (Shaw & Williams, 1994). One of the most popular non-traditional rural development strategies has been tourism and associated entrepreneurship opportunities (Wilson et al. 2001).

In Europe, with the decline of traditional agricultural industries, rural tourism has been relied on, widely supported, and promoted to overcome the social and economic challenges in rural areas (Wang, 2006). For many developed and developing countries, rural tourism is seen as one of the important tools of rural development. Especially in Europe, rural tourism finds strong support as a solution method to overcome the social and economic difficulties of the traditional agricultural industry (Ayhan, Taşlı, Özkök & Tatlı, 2020; Su, 2011). For example, the U.K. government invested in infrastructure for rural tourism in rural areas and provided financial support to farmers to develop tourism units (Robinson, 1990). Until 1980, the U.S. Department of Agriculture encouraged farmers to view farm tourism as a way to supplement their income and helped them establish the holiday farm cooperative (Luloff, Bridger, Graefe & Saylor, 1994). In many other countries, including Canada, Australia, New Zealand, Eastern Europe, and the Pacific region, tourism has been seen as the engine of economic growth and diversity in rural areas (Hall & Jenkins, 1998).

The development of rural tourism has been supported by many national and local organizations in many occasions. (Pearce, 1990). Studies have shown that rural tourism has contributed significantly to both the individual farmers and the region’s economy as a whole (Albright, 1991). A survey of four regions in the U.K. showed that the larger the farm

tourism and the more local ownership, the greater its impact on the local economy (Fleischer & Pizam, 1997). On the other hand, in some studies, it has been concluded that rural tourism is only an auxiliary source of income for the rural family that lives on agriculture (Davies, 1983; Hjalager, 1996).

Worldwide, rural tourism is seen as an important tool for the economic development of mountainous and other rural areas. That is because rural tourism raises living standards by providing additional income to rural people, prevents migration to the city by providing new job opportunities, contributes to the socio-economic development of the region by encouraging the improvement of infrastructure and superstructure, and supports rural development by reducing inter-regional imbalances (Soykan, 1999). Rural areas are attracting more and more tourists every day due to their historical and cultural traditions, ethnic and geographical features, and the advantages of an unspoiled natural environment. More and more European countries consider the development of rural tourism as a new opportunity and accept it as a sustainable local development strategy, as it provides an additional financial gain in rural areas based on agricultural trade. (Dashper, 2014). It is also seen as an essential tool in preserving and promoting cultural heritage (Soykan, 1999; Özçatalbaş, 2006).

In recent years, rural tourism has also shown significant developments in Turkey. As a general view on rural tourism, it has considerable potential to eliminate the development differences between underdeveloped rural areas and developed urban areas (Tuna, 2020).

2.2. Cooperatives

Cooperatives are an enterprise model that enables people to come together and achieve their social, economic, and cultural goals through democratic decision-making. It is an important way of sharing, solidarity, cooperation, and competing against strong capital (Emiroğlu, 2019). According to the definition in Cooperatives Law No. 1163., “*Cooperatives with legal entity are variable partnerships, and variable capital partnerships established by real and legal persons to provide and protect the specific economic interests of their members and especially their professional or livelihood needs through mutual assistance, cooperation, and bail.*” (Cooperatives Law, 1969). Moreover, the International Cooperative Alliance states that “*Cooperatives are people-centered enterprises owned, controlled and run by and for their members to realize their common economic, social, and cultural needs and demands.*” (ICA, 2018).

Cooperatives emerged in the world in the second half of the 19th century. For the first time, a consumer cooperative was established with 28 entrepreneurs in 1844 (Ünal & Yercan, 2006). Today, cooperatives operating in many different forms and all sectors exist in all countries. According to the World Cooperative Monitor (2020), more than 12% of the global population is a member of any of the 3 million cooperatives in the world. In addition, the data obtained show that

the total turnover of the largest 300 cooperatives has reached 2.146 billion USD. When the data is evaluated in terms of contribution to employment, it contributes to sustainable economic growth by providing job opportunities to 280 million people worldwide. In addition, establishing a strong cooperative network, including the European Union member states, is one of the important issues. In the strategic planning of 2020, it is stated that cooperatives are also an effective tool for a sustainable economy (CoopsEurope, 2012).

In Turkey, agricultural credit cooperatives started with “hometown funds” established and developed by Mithat Paşa between 1863-1867. This fund was closed in 1887, and Ziraat Bank was established in its place. The acceptance of cooperatives as a sector worldwide was after George Fauquet’s book “cooperative sector” was published in 1948. However, since the 1920s, Atatürk stated that the cooperatives were the third sector besides the state and the private sector, and that these three sectors should coexist in the development of the country and that the cooperative sector should be the driving force, especially in agricultural development (Mülayim, 1998). The first major developments regarding cooperatives in Turkey took place after the proclamation of the Republic, and many cooperatives were established, especially in agricultural areas (Hazar, 1990). Cooperatives Law was enacted in 1969. Today, 84,232 cooperatives operate in 34 different types and there are 8,109,225 members of these cooperatives in Turkey (Ticaret Bakanlığı, 2021).

The cooperative movement has a vital role in eliminating regional inequalities which is one of the aims of rural development, preventing migration, and diversifying the economic activities of rural areas whose economy is based on agriculture. However, many problems such as the small scale of the enterprises in rural areas, the limited income and savings of the people engaged in agriculture, the lack of information, the instability in the prices of agricultural products, the difficulties in the marketing phase make it necessary to develop an understanding of mutual aid and solidarity to improve the living standards of the rural people (Saner, Uçar & Ağır, 2012). Rural areas are at a disadvantage due to their unique difficulties in providing essential public services and attracting private sector investment. Cooperatives that are established in rural areas are regarded as one of the crucial rural development instruments in both developed and developing countries as a successful model with education, transportation, drinking water supply, market access, and employment opportunities (ILO, 2011).

Agricultural activities, which are the primary source of livelihood of the communities living in rural areas, greatly influence rural communities’ labor force participation and income generation. At the point of maintaining agricultural activities more effectively, the cooperative movement, in which the involvement of mainly small-scale producers as well as the participation of women and the young members in the workforce is supported, plays a vital role in the development of rural areas and reduction of poverty through

providing access to the markets, sharing information, and training provided (FAO, 2012). In addition, cooperatives acting in line with the principle of open membership play a key role in ensuring gender equality. Especially in rural areas, women, whose labor force participation rate is meager, increase their economic development and social competence by directly engaging in production activities through cooperatives. In February 2015, 581 people who participated in the research that was named “The Impact of Cooperatives on Women’s Empowerment and Gender Equality Compared to Other Types of Businesses” conducted by the International Cooperative Alliance (ICA) and the International Labor Organization (ILO) stated that cooperatives increased women’s participation in the workforce by 75% (ICA, 2018).

The reports published by countries also support the development of cooperatives in rural areas on a global scale. For example, while 58% of the electricity supplied to rural areas in Argentina is realized through cooperatives, it is estimated that approximately 900,000 people employed in the agricultural sector in Ethiopia obtain some of their income through cooperatives. In France, 3,200 agricultural cooperatives with 650,000 members employ 150,000 people. Cooperatives meet the needs of 67% of rural families in India. Twenty-eight million people living in rural areas in Iran are either members of cooperatives or benefit from cooperative initiatives. In Japan, 9.1 million farming families are members of the cooperative, and the cooperative employs 257,000 people (ILO, 2007).

3. Methodology

3.1. Sample

The study is a qualitative study aimed at identifying the contributions of the cooperative movement in rural tourism activities to both local people and cooperative members and analyzing the challenges faced and the tourism potential of the region. Qualitative studies are a research method (Corbin, 1997) that allows more detailed data to be obtained and more comprehensively understood. As Meriam (1998) points out, the findings obtained through qualitative studies are richer and more descriptive and are preferred because they allow for a comprehensive examination of data instead of quantitative studies (Bayyurt & Seggie, 2015). The population of the study is the local residents of Kuyucak Village in Keçiborlu District in Isparta Province. The research sample was made up of 21 participants from the cooperative members and local people who agreed to interview.

3.2. Data collection

During the implementation phase of the research, the interview technique was used, and a semi-structured interview form was used to obtain the data. The goal in using a semi-structured interview form within the study is to give the researcher specific flexibility, allowing the researcher the opportunity to move forward in line with the interview guide

and also enabling him to gather information in a deep and systematic way if needed (Gürbüz & Şahin, 2018). In the process of identifying the semi-structured interview form questions, Gladwell’s (2015) study was used.

The reason for the selection of Kuyucak Village of Keçiborlu District of Isparta Province as the research population is the revival of rural tourism in this region with the start of lavender cultivation in the village, which does not have a livelihood other than agriculture and animal husbandry. It will also be seen how much the women entrepreneurship cooperative established in 2015 has increased the tourism revenues in the village especially favored by local tourists. During the data collection process, Kuyucak Village, where the Lavender Scented Women Entrepreneurs Cooperative is located, was visited in July, when tourists visit the region the most. Prior to the interview with co-op members and locals, the head of the co-op was contacted to ensure the meeting continued uninterrupted. With the guidance of the head of the cooperative, the research sample consisted of 21 participants from the cooperative members and local people who agreed to interview. To analyze the views obtained during the interview in detail, permission from the participants for audio recording was obtained. To provide the necessary environment of trust and that the participants could answer the questions sincerely, the participants were informed that the credentials of the participants would remain confidential and that the answers obtained would not be used except for scientific study.

3.3. Data analysis

Descriptive analysis was used in the analysis process of the data. The main purpose of the descriptive analysis is to present the findings to the reader in a regular and summarized form. For this reason, the data obtained is first systematically depicted, and in the next phase, these descriptions are interpreted by the researcher to examine the cause-and-effect relationships and reach several conclusions (Yıldırım & Şimşek, 2016). In terms of the reliability of the study, direct citations in line with the participants’ views are included in the study. For the analysis to be done correctly, the expressions of participants from research questions of each sub-theme previously identified by the researcher were analyzed by transferring them from the voice recorder to the text. In addition, out of 21 participants, local people were coded as Y1, Y2, Y3..., Y11, while cooperative members were coded as K1, K2, K3..., K10.

3.4. Demographic characteristics of the participants

During the interviews, the views of people from as many different age groups and professions as possible were consulted to establish different perspectives to gain in-depth knowledge. Information on gender, age, occupation, educational status of the 21 interviewed participants are presented in the table below.

Table 1. Demographic characteristics of the participants

Participants	Gender	Education	Age	Profession
K1	Woman	Associate degree	38	Head of Co-op
K2	Woman	Elementary school	48	Vice President of co-op
K3	Woman	Elementary school	68	Housewife
K4	Woman	Elementary school	45	Housewife
K5	Woman	Elementary school	68	Housewife
K6	Woman	Associate degree	24	Housewife
K7	Woman	High school	36	Housewife
K8	Woman	Bachelor's degree	39	Housewife
K9	Woman	Elementary school	59	Retired
K10	Woman	Elementary school	36	Housewife
Y1	Woman	High school	19	Unemployed
Y2	Man	Bachelor's degree	72	Retired
Y3	Man	Bachelor's degree	35	Farmer
Y4	Woman	High school	17	Student
Y5	Woman	Elementary school	49	Housewife
Y6	Woman	Elementary school	68	Housewife
Y7	Man	Elementary school	68	Retired
Y8	Woman	Elementary school	44	Housewife
Y9	Woman	High school	38	Housewife
Y10	Woman	Bachelor's degree	38	Teacher
Y11	Woman	Elementary school	44	Housewife

Of the 21 participants consisting of local people and cooperative members, 14% were male (3 participants) participants while 86% were women (18 participants), as seen in Table 1. Of the participants whose views were consulted, the youngest was a 17-year-old high school student who helped her family sell lavender while the oldest participant was a 72-year-old retired teacher. The average age of the participants is 45. Of the respondents, 57% are housewives, 14% are retired, 5% is teacher, 5% is student, 9% are cooperative presidents and vice presidents, 5% do not have any profession, while 5% engage in farming. Moreover, the percentages for participants' educational status are as follows. 52% of the respondents (11 participants) elementary school, 5% (1 participant) secondary school, 14% (3 participants) high school, 10% (2 participants) associate degree, 19% (4 participants) undergraduate graduate.

4. Results

In this section, the groups involved in sampling were asked to assess the good aspects of village life and its challenges. In this respect, local people and cooperative members were asked about the challenges of village life, its strengths, the basic livelihood of the region, what can be done to make village life better, what alternative work can be done to improve the livelihood of local people. In the first section, the village life's strengths and challenges were identified and whether there were other products of added value in the village other than lavender. It is thought that the research findings will both contribute to determining the tourism potential of the region and enable the identification of local products of added value that can be evaluated in the field of tourism. In this regard, the participants were first asked what the good aspects of living in the village for them-

selves were, and all of the participants answered this question; saying that a natural life free of stress has a calming quality, that a life away from the stresses and crowds of city life is a great chance for them. Moreover, the Y6-coded participant expressed their views on the good aspects of village life, stressing that *"the most positive side of village life is above all a very comfortable lifestyle, escape from stress, a natural environment, everyone knows each other in the village, and communication, solidarity, and cooperation are stronger than city life."* The emphasis on solidarity and unity coincides with mutual aid and solidarity, which underpins cooperatives. Then, on the difficulties encountered in village life, to the question: *"Are there any difficulties in village life? If yes, what are your views on this matter?"* While most participants expressed the lack of irrigation water as the main problem, participants with the codes K1, K2, K4, Y5 especially emphasized the migration problem that arises due to the lack of employment opportunities, which is the main problem of rural areas. *"Migration is a big problem; people are going out because of education and lack of jobs. People are leaving the village because there is no opportunity to earn income."* Due to the limited opportunities of rural areas, the inability to diversify economic activities and the basic problems such as income insufficiency and unemployment caused by this situation result in the migration of the young population and families from the village. However, in addition to the disadvantages mentioned, rural areas which are still trying to preserve their nature, traditions, and cultural values also carry great potential.

Based on this idea, to diversify the economic activities in Kuyucak Village, whose main livelihood is based on lavender, rose, and animal husbandry, the participants were asked what kind of alternative jobs could be done, and quotations about the opinions of the participants were included. *"What*

kind of alternative jobs can be created to increase the income level of people in village life?" All of the participants stated that they could not do any activity other than the production of lavender, which does not need much water due to the lack of irrigation water. Researchers especially asked the opinions of the participants about alternative jobs that can be done apart from tourism, but all of the participants stated that tourism is the only alternative activity that generates income for the region. However, the participant with the code K10 stated that the local people earned a good income from carpet and rug weaving long before lavender production, but these activities are now forgotten and are not carried out. "For example, there is not much in this village because there is no irrigation water. Kuyucak takes its name from the well. We used to draw the water from there. We didn't have it in our fountain in the past. What else can it be? First, there was carpet business, and carpet business is finished, the profit from carpet business was excellent, we used to weave rugs, we had sheep and wool was spun."

The question "What is the main source of livelihood of the region?" was asked by the researchers to all participants. All of the participants answered the question as lavender, rose production, and animal husbandry as the main livelihood of the region. In addition, within the scope of the "Youth Returning to the Village Project," participant K1 stated that she came to the village to do beekeeping. "The main livelihood of the region is agriculture. Animal husbandry is not what it used to be, and it is not seen as a profitable business because animal feed is expensive. Therefore, rose and lavender is the main source of livelihood. Also, I came here to do beekeeping four years ago as part of the youth returning to the village project. I have been beekeeping for four years." Similarly, participants coded K10, Y11 and K13 also stated that beekeeping is the main source of income of the region, along with lavender and rose.

Table 2. Themes and sub-themes of village life

Main theme	Title	Subtitle
Village life	Strengths of village life	A sense of unity and solidarity
		Distance from crowds and stress
		Natural life and natural nutrition
	Difficulties of village life	Unemployment
		Migration
		Inability to produce alternative agricultural products due to lack of irrigation water
	Basic livelihood	Lavender, Rose, Beekeeping
	Diversifying economic activities	Rural tourism is seen as the only alternative
		Carpet and rug weaving lost values

Under the theme of tourism, primarily with the development of tourism activities in the region, the effects of tourism on local people and its potential and constraints in the

context of rural development have been tried to be determined by researchers from different perspectives through both the questions posed and the observations made in the field. First of all, the participants were asked, "Do the tourism activities that develop in the region have an impact on your income?" All of the participants stated that they started to earn income with the development of tourism in the region. However, they stated that their income decreased this year due to the pandemic process, but they still earned a satisfactory wage this year due to the visitor's arrival above their expectations. During the interview, the participant with the code K2 stated that with the tourism opportunities that develop in the region, they could contribute to the family budget by earning additional income. "Tourism has become an additional income, tourism activities resulting from lavender have also contributed to the village. Since I work here, I also contribute to my home." Then, the participants were asked, "Who is the tourist profile visiting the region?" to determine the tourist profile visiting the region.

To the question posed as (Is it mostly foreign or domestic tourists?), while the participants with the codes K20, Y14, and K13 stated that until last year, mostly foreign tourists visited the region, participants with the codes Y14 and K13 noted that the foreign tourist profile mainly consisted of visitors from Asian countries, but the flow of foreign tourists decreased considerably due to the pandemic. "More locals are coming to the region. Last year, the tours were mostly foreigners, there were people from Korea and other Asian countries, but this year it has decreased a lot due to pandemic." The participants were asked a question in order to determine whether the establishment of the cooperative in the region, which is one of the primary aims of the research, has a direct effect on the number of tourists visiting the area, and the participants with the codes K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, Y1, Y2, Y3, Y5, Y6, Y7, Y8, Y9, Y10, Y11 stated that touristic visits to the region started through cooperatives. They stated that it continued to increase until this year due to the promotions, but this year there was a great decrease in the number of visitors, especially in the number of foreign tourists, due to the pandemic process.

The participant coded Y4, on the other hand, stated that there was an increase in tours with the establishment of the women's entrepreneurial cooperative and stated that the cooperative had an indirect effect on the increase in the number of visitors to the region. "After establishing the women's entrepreneurship cooperative here, there has been an increase in the number of tours to the region. We can generate more income when there are tours. In this sense, of course, the cooperative has an impact on the increase in the number of visitors."

Considering that the tourism activities that emerged and developed with the establishment of the women's entrepreneurship cooperative in the region feed each other positively, it is important to evaluate the development potential of rural tourism in the region from the perspective of the local people, who are at the center of these activities. In this

direction, the participants were asked, “Do you think that rural tourism activities in the region can develop more than the current situation? What are your views on this matter?” The question was asked, and the rest of the participants, except for the participant with the code K10, stated that tourism has development potential in the region but that commercial concerns will affect tourism negatively in the long term. The views of the participant coded K10 on this subject are striking. “I don’t see much potential for the development of tourism. There is livestock, but there is no cheese or milk production; they have a milking animal, but he goes and eats the yogurt sold in the supermarket. I am looking for milk to buy in this village, but I cannot find it. There is no one producing local products, we have pickles and tomato paste, but these are not sold at the stands. The price of 400 grams of rose water is 50 liras. These should be inspected, and if it goes like this, tourists will not come to this region in the long run. The wholesaler will come and inspect first. The primary purpose of the cooperative is to promote our goods, not to make a profit. Tourists who encounter these prices will not come to this region again.”

In order to learn about the existence of touristic values specific to the region, the participants were asked what kind of products or traditional activities could attract the attention of tourists visiting the region. In addition, to obtain more information by expanding the content of the question, the presence of endemic plant species-specific to the region, handicrafts, local cuisine, historical artifacts, local clothing style were added to the question and asked the participants. The majority of the participants stated that the village did not have a unique value except lavender, and this situation was due to the Yörük culture. Participants K1, K10, Y7, and Y9 stated that carpet weaving in the sense of local handicrafts was done in the past, but it has disappeared and is no longer made today. “Our culture is very weak, and we don’t have any local food of our own. Everything is bought from the supermarkets, and there is no production here. Carpet and rug weaving has disappeared, but if these are revived, it will contribute a lot. We have ropes, and we can weave carpets and rugs. Let us provide a loom.” It is thought that determining the positive and negative effects of tourism on the local people and thus expressing the existing problems from the perspective of the local people, the steps to be taken to eliminate the problems will pave the way for the development of rural tourism activities in the region. Thus, the cooperative activities can be carried out more effectively in a sustainable way. For this purpose, the participants were asked, “What are the positive and negative effects of tourism?” While all participants emphasized the income increase as a positive aspect, the participants with the codes Y5, P13, Y17 stated that the social structure changed thanks to the interaction with the tourists positively. “As a positive aspect, the recognition of the village increased. The village women were not used to so many people before, it was a closed society, but now many people visit the region. On tour from Antalya, people swim in the “Salda” lake and come here also, tourists visiting the village in their bikinis and

swimsuits have now become commonplace for the villagers. At first, the village people were strange to the way tourists dressed in this sense, but now everyone has gotten used to it. Tourism also generates income.”

When the participants were asked about the negative effects of the development of tourism in the region, the participants with the code Y14, Y5, K13, Y17 stated that environmental pollution and the ambition to gain more income began to be observed among the local people and this situation was an important problem. “Negatively, the villagers started bickering with each other. Apart from this situation, it does not have a negative effect, but the local visitors are damaging the gardens, they are throwing stones into the lavender, I removed the stone thrown by the visitors out of about 30 or 40 lavenders, and when they throw the stone into the lavender, the lavender is broken. “Are there suitable places for visitors to stay? If yes, can it meet the demand in peak seasons?” Participants with the codes K18 and K21 stated that there are hostels where visitors can stay, but the number is not enough during the peak season. “Visitors can stay in village houses. There are hostels in Kılıç Village and Keçi- borlu district, but they are insufficient here.”

Table 3. Main theme and sub-themes of tourism

Main theme	Title	Subtitle
Tourism	Impacts of tourism (positive)	Income-generating effect
		Interaction with visitors <ul style="list-style-type: none"> • Overcoming prejudices about foreign tourists in terms of local people, • cultural exchange
	Impacts of tourism (negative)	Environmental pollution
		Increased competition and commercial concerns conflict with cooperative principles
	Tourist profile (domestic-foreign)	The pre-pandemic Asian market, pandemic-era domestic market
	Presence of touristic values	Lavender is the only alternative Carpet and rug weaving are local values that have been lost in the process but have touristic potential.
Change in the number of visitors (before and after the establishment of the cooperative)	The establishment of the cooperative is the main reason for the increase in the number of visitors.	
Accommodation capacity	Insufficient in peak season	

The questions asked under the cooperative theme were directed to 10 participants who are cooperative members and asked only how Kuyucak Women’s Initiative Cooperative contributes to the development of rural tourism in the region to all participants under the cooperative theme. First of all, the researchers asked the participants, “What do you think

are the benefits of establishing a cooperative?” Participants coded as K2, K3, K4, K5, K6, K7, K8, K9, K10 stated that they gained an additional income by being a cooperative member, and that realized the promotion of the region through the cooperative. Participant K1 emphasized that women’s contribution to the family economy through the women’s entrepreneurial cooperative increased the self-confidence of women participating in the workforce and that the cooperative increased the sense of unity and solidarity among the villagers. *“It provides unity and togetherness. We support women, and they feel safe both financially and morally. As they earn money from here, their self-confidence has increased because their position at home has changed as they provide financial support to their house.”* The participant coded K2 expressed her views on the benefits provided by the cooperative as follows. *“Many people became shopkeepers because of the cooperative, and they generate an income from there. The establishment of the cooperative has also contributed to other villages, and they establish hostels and markets so that they can sell.”* and then, *“Are there any negative aspects of being a part of the cooperative?”* asked the researchers to the cooperative members. The participants stated that there was no negative side of being a part of the cooperative, and the researchers tried to expand the scope by asking the participants questions about whether they encountered a problem arising from the internal functioning of the cooperative and whether they received sufficient support from the stakeholders to obtain more in-depth information. Among the participants, K1 stated that they could not get enough support from the authorities and that they tried to achieve something with their efforts, *“Cooperatives are not supported, we earn money from the service we provide, but we cannot get enough support during the establishment and development of the cooperative,”* also K10 stated that people who are not in the production stage are also members of the cooperative and that they are uncomfortable because of this situation. *“There is a downside to being a member of the cooperative. The problem is that the person does not reside here and does not produce, but his daughter or daughter-in-law becomes a member of the cooperative. They also bring women from other villages to work. Members should come and work, so those who do not work should not send bundles.”*

To determine the socio-economic effects of establishing the cooperative in the region on the local people, *“What changes occurred in your current life before you became a part of the cooperative and after you became a member?”* K1 coded participant said that *“After becoming a part of the cooperative, we learn something from the visitors by communicating one-on-one, and they also learn something from us. We also earn money.”* She emphasized that after becoming a part of the cooperative, she both had income and learned a lot by interacting with the visitors. The participant with the code K4 said, *“As a member of the cooperative, the self-confidence of every woman here has increased because we earn our own money.”* She stated that with women’s direct participation in economic life in the community they

live in, their position in the community has changed positively. K16, on the other hand, stated that by becoming a member of the cooperative, she was able to use lavender economically and started to earn money from this business. *“What kind of contributions did Kuyucak Women’s Enterprise Cooperative make to the development of rural tourism in the region?”* directed by the researchers to all participants. The views of the participant coded K2 about the question are as follows. *“With the establishment of the cooperative, everyone started their own business, they started to make money on that. It has also benefited for the nearby villages. They can start hostels and supermarkets in their villages and make money.”* The participant coded Y9 stated that the region’s recognition increased with the establishment of the Women’s Enterprise Cooperative. *“With the establishment of the women’s entrepreneurial cooperative, the recognition of the region increased. The touristic value of the region increased when it was promoted on the internet. With the establishment of the cooperative, lavender came into prominence, and visitors began to come to the region. We had lavender before, but with the establishment of the cooperative and promotion, visitors came.”*

Table 4. Sub-themes of the cooperative theme

Main theme	Hood	Subtitle
Cooperative	Contributions to the development of rural tourism	Increase in the number of small-scale touristic businesses (Cafeteria, hostel, house rooms are reserved for the accommodation of visitors)
		Environmental arrangements (creation of photo shooting areas in lavender gardens, establishment of souvenir sales stands),
		Increasing the recognition of the region through the cooperative (Increase in the number of visitors)
	Effects of being a part of the cooperative (before becoming a member - after being a member)	Income increase
		The feeling of financial and moral security
	Activities related to rural tourism (education-projects)	Positive change in the position of the women in the community after participating in the workforce
Training (Hygiene, sales, diction, product packaging)		
		Project (Lavender Museum, accommodation facility)

Considering that the training given to the members for tourism within the cooperative will lead to the more effective execution of the cooperative activities in the long run and that rural tourism can develop more in the region as a result of the practical activities of the cooperative, the participants are asked, K1, K2, K3, K4, K5, K6, K7, K8, K9, K10 coded participants stated that they received training on sales, diction, product packaging, and hygiene. *“I completed*

the courses and got my documents. A sales and hygiene course was given, and we received a course completion certificate on how to host guests. There was a souvenir-making course in the winter, but I could not participate." The participant coded K1 shared his views that the implementation phase of the theoretical training should also be followed up. "The cooperative members are trained in every subject during the course by educators about packaging, diction, decoration, speaking, but the important thing is not to give a course, but the period after that is more important than just giving a course" Finally, the question of whether the cooperative has a road map for the development of rural tourism was asked by the researchers. Participant K1 stated that they have projects in the long term, that the lavender museum planned for the future will increase the number of visitors and have thoughts for an accommodation facility project. "There are projects we have determined. Among them, the lavender museum is significant, and we need to extend the season." However, she also emphasized that they need serious support to realize these projects.

5. Conclusion

The study, in which the multidimensional effects of the tourism activities in rural areas and the cooperative movement are evaluated from the perspective of the local people, is shaped around three main themes. First of all, under the main theme of village life, village life has been tried to be discussed with different dimensions. In addition, before the analysis is detailed under the main themes of tourism and cooperatives, a general framework has been drawn to the study, and it has been tried to determine the current problems of the village and the idle values that can create added value under the title of rural development. In line with the interviews made with both the members of the cooperative and the participants from the local people, the following question was asked to the participants in order to determine the elements that make the village life attractive, "What do you think are the good aspects of village life?" The participants stated that the village life provides them with natural living conditions away from stress, the feeling of unity and solidarity still continues in the village life, and this situation is very important for them. When the background of current discourses is subjected to a more comprehensive analysis, it will be a superficial point of view to determine that village life only offers an environment for natural life and away from stress. In the interview with the participants, the majority of the participants consisted of individuals living in different districts or cities, who left the village to find a job or for their children's education, retired, and returning to their village, especially in the summer months. Considering that the majority of the population migrating from rural to urban areas works in informal sectors and without social security, the unbreakable bond with village life provides some social and economic support to these people.

In summary, the policy of not breaking the existing ties with the village to prevent urban poverty, which is one of the

problems that arise as a result of migration and still maintains its existence as a support mechanism, serves as a buffer against the social and economic difficulties brought by urban life, and also fulfills an essential function by opening a space where people can feel safe. When the participants were asked what the main problems they encountered in village life were, the chronic problems of the countryside were generally emphasized. At the beginning of these problems is the migration phenomenon that occurs due to the lack of employment and inadequate education conditions, specifically the lack of irrigation water. At this point, the opinions of the participants and the observations made in the field show that the continuation of rural tourism activities on lavender, which is the only value-added product of the village, and the fact that it is carried out in an organized manner under the roof of a cooperative brings a short-term solution to the existing problems, even if it is seasonal. The common view is that the commitment to lavender production, which needs less water due to the lack of irrigation water, is the biggest obstacle to the spread of tourism activities throughout the season and other economic activities that can be created.

After trying to take a general picture of the current situation under the theme of village life, the effects of rural tourism activities on local people, which is one of the main subjects of the study, the presence of touristic values in order to diversify tourism activities other than lavender, the profile of tourists visiting the region and finally the opinions of the participants were consulted on whether the establishment of the cooperative led to the development of tourism in the region and an increase in the number of visitors. In order to determine the general profile of the tourists visiting the region, the opinions of the participants were consulted, and as a result, it was stated by the participants that there was a significant increase in the number of domestic tourists during the pandemic process, while visitors from Asian countries came to the region intensively before the pandemic. At this point, the local people clearly differentiated between domestic and foreign tourists regarding their level of awareness and expressed with various examples that domestic tourists seriously harm the environment. However, the perception of tourism is quite positive in all of the participants.

The income-generating effect of tourism has been frequently mentioned by the participants as the positive aspect of tourism, but the more important point to be emphasized is the destruction of some prejudices specific to closed communities as a result of the participants' communication with the visitors. It was stated by the participants that a lot of things were learned as a result of the dialogue with the tourists visiting the region. In addition, in the first years when tourism developed in the region, the clothing preferences of the visitors from Antalya on tours were initially found strange by the local people, but later this situation was considered quite natural, and the dialogue with a foreigner visiting the village is now more attentive, and in the words of the participants, it was stated that while it was quite rude before, it is now much more polite. In fact, this situation is a

sign that the local people are transforming not only economically but also socially and culturally, and points to a structural transformation in the definition of development. It is also a common opinion that lavender has been cultivated in the region for a long time, but the cooperative plays a leading role in turning this situation into a commercial and touristic activity. In short, tourism development has caused a significant increase in the number of visitors in the region, but the local people show the reason for the emergence of tourism as the establishment of a women's entrepreneurship cooperative. At this point, rural tourism and cooperatives are evaluated by the local people from an integrated perspective without being separated from each other. Similar findings are in line with the study of Iakidou (1997).

When asked about the negative situations brought about by tourism within the scope of the research, the participants emphasized two issues in particular. The first of these issues is the damage to lavender fields and environmental pollution, especially by local visitors. The second issue is that the ambition of making more profit is at the forefront rather than offering quality products to the visitors, which contradicts the understanding of cooperatives and is frequently emphasized by the villagers. Thus, local people prefer to act more individually. This situation both contradicts the understanding of cooperatives and harms the relations within the community. In other words, the participants frequently express the concern that more tourists visit the region, and over time, the members of the cooperative move away from acting under the roof of the cooperative and tend to make individual sales, keep the prices higher than they should be, and this situation will cause the tourists to move away from the region over time. When a general situation assessment is made considering the opinions under the tourism theme, the development of tourism in the region has opened an additional source of income to the local people by opening small-scale hostels and markets.

However, the lack of a larger scale accommodation facility for those who visit the region during the peak season, insufficient parking space is a problem for visitors. In addition, considering that some of the visitors are families with children, the lack of an area where children can also spend time, in short, the inadequacy of the touristic infrastructure prevents even the full use of the tourism potential created by the only field of activity, lavender.

The general opinion, obtained from the questions and answers received from the participants under the theme of the cooperative and supported by the findings, is that the cooperative plays a direct and leading role in the initiation of rural tourism activities. All of the participants stated that lavender has existed in the village for about 50 years, but the awareness of the village has increased through the women's entrepreneurship cooperative established in the village, and the village has become a touristic destination. When the effects of establishing the cooperative on the local people are evaluated, the prominent opinions bear many similarities with the effects of tourism activities. This situation results from

the fact that rural tourism activities and cooperatives have a structure that feeds each other. These two instruments of rural development, which are integrated, have a significant impact, even seasonally, as they are the factor that triggers the change of the socio-economic structure, with their feature of contributing economically to the local people, acting with a sense of unity and solidarity. Furthermore, the fact that village women provide an additional income to their families with their participation in economic life, especially through the cooperative, also positively affects the position of women in the rural community, and the participants emphasize this. However, the lack of awareness of cooperatives among the local people harms the sustainability of the cooperative movement, as the commercial concerns mentioned under the theme of tourism come into prominence and the individual movement takes the place of the collective movement over time. It is thought that the training given in this direction plays an important role in the evaluation of the impact of the cooperative movement in the context of tourism. Considering the studies in which cooperatives and rural tourism are evaluated together, it is seen that cooperatives provide an additional income opportunity to the local people in economic terms and that the financial savings obtained are used to improve basic and touristic infrastructure opportunities (Yang & Hung, 2014). It is seen that cooperatives contribute to the strengthening of their social status in the community by ensuring the participation of women in the workforce (Iakovidou, 1997), play an important role in the preservation of the ecosystem (Verma, 2006) and that the success achieved in the commercial sense revitalizes not only the individuals but also the economy of the region. (Tuğrul, 2018). As a result, it is seen that the number of studies in which rural cooperatives and rural tourism activities are evaluated together, and their effects on rural development are investigated, is not sufficient. The fact that the study was carried out in a village located in the countryside of a city that has tourism potential but hosts a low number of visitors is important in terms of investigating the reasons and effects behind the cooperative's transformation of the village into a tourist attraction during the summer period.

6. Recommendations and limitations

Due to the pandemic process, the necessity of doing the study within a limited time and without expanding its scope is among the study's limitations. In order to create a roadmap for future research, much more comprehensive stakeholder analysis can be carried out by consulting the opinions of experts from universities and public institutions on the subject of cooperatives.

Recommendations within the scope of the research can be expressed as follows;

- Under the name of the village theme, the village's main problem is the lack of irrigation water. In order to produce at least an alternative to this problem, the suitable planting for the climate and soil structure of the region, such as lavender, which does not need much water and has added

value, can be realized by conducting research projects under the leadership of the university.

- Reviving the lost values such as carpet and rug weaving will provide additional income and job opportunities to the local people in terms of diversifying economic activities apart from lavender.

- Kuyucak Village of Isparta province can be turned into a center where many cooperatives from different parts of the country come together and promote their products at their stands. In this direction, choosing the months of July and August, when the village hosts the most visitors and holding the organization in a festive atmosphere, will contribute more to the promotion of the region as well as strengthen the sense of solidarity among the cooperatives.

- In order for the effectiveness of tourism activities to continue increasing, and effective planning mechanism that brings together all stakeholders should be implemented in the long term. At this point, it is necessary to explain the cooperative consciousness to the local people more effectively.

- The lack of a data bank on the activities of cooperatives creates an obstacle to the interpretation of researches supported by official statistics and makes it difficult to make statistical predictions about the future of the activities of cooperatives. At this point, it is very important to collect statistical data in certain periods and to create a data bank in order to make the analyzes correctly.

Author contribution statements

Authors contributed equally to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Disclosure statement

No potential conflict of interest was reported by the authors.

Ethics committee approval

This research has Ethics Committee Approval from Isparta University of Applied Sciences with 21/05/2020 date and 53/1 number. All responsibility belongs to the researchers. All parties were involved in the research of their own free will.

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Research article

The impact of global uncertainty and risks on the global tourism index

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The impact of global uncertainty and risks on the global tourism index

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Abstract

Uncertainties and risks are two leading factors affecting investors' decisions. In the presence of uncertainty, investors may postpone consumption and investment decisions due to a wait-and-see policy, whereas consumption and investment decisions may be abandoned in risky situations. Due to its high demand elasticity, in particular, it renders tourism one of the sectors most affected by the increase in uncertainty and risks. It is aimed to determine whether or not any relationship between the global Economic Policy Uncertainty index (EPU), global Geopolitical Risk Index (GPR), global Volatility Index (VIX), and global tourism index STOXX Global 1800 T&L exists. The probable relationships among the variables are tested using the monthly data obtained over the period from August 2006 to December 2018 via the Johansen cointegration test and DOLS and FMOLS cointegration coefficient estimators. As a result of the study, it is found that there is a long-term relationship between the related indexes and the global tourism index. Additionally, the VIX and the EPU indexes have adverse impacts on the tourism index.

Keywords: Stock exchange index, EPU, Geopolitical Risk, VIX, Cointegration analysis, FMOLS and DOLS.

1. Introduction

In the finance literature, uncertainty is expressed as unmeasurable risks. However, the development of new methods for the measurement of uncertainty in recent years may indicate that there will be new theoretical developments for finance literature after a while. New techniques for calculating risks and uncertainties that have been introduced in recent years are based on the repetition of certain keywords in country newspapers or the number of articles written on certain topics. These numbers may indicate some developments and trends in the economy of the relevant country. One of these indexes, the Global Economic Policy Uncertainty Index (EPU), was calculated for the IMF using the method developed by Baker et al. (2016). Similarly, the Geopolitical Risk Index was developed by Caldara and Locavillo (2018) using an algorithm based on the number of news stories containing geopolitical tensions in 11 international newspapers.

Another type of uncertainty is uncertainty in terms of investors' investment processes. In this regard, risk appetite is used as a measure of investors' willingness to take risks in financial markets. In the applied study, the risk appetite is determined by the volatility measurements emerging in the

financial markets. Calculated using S&P500 stock options prices, the VIX indicates the expected volatility of the market, and hence, the uncertainty processes related to the investment. Under the uncertainty in financial markets, decision-making processes regarding the future are delayed and market actors wait for the uncertain processes to end. This situation causes the funds to remain idle in the economy, stagnation in the market, and consequently, high costs. As in all other sectors, the tourism sector is also affected by risks and uncertainties.

The tourism sector, in which the price elasticity of demand is high, has been one of the sectors most affected by many risk factors. For this purpose, uncertainties in economic policies, geopolitical risks, and financial risks that cause volatility in global markets are expected to affect the tourism sector of countries. This study aims to determine whether the related uncertainties and risks have impacts on the stock prices of tourism firms. For this purpose, the relationships between STOXX Global 1800 T&L and EPU, GPR, and VIX fear index are analyzed with the cointegration and cointegration coefficient estimators (DOLS/FMOLS) tests. The study consists of five sections. Firstly, the subject is introduced, and in the next section,

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there is a literature review for the variables that are the subject of the study. Afterward, information regarding the methodology and data used in the study is given, and then the findings obtained from the study are mentioned. In the next section, the findings are interpreted and suggestions are made.

2. Literature review

The studies in the literature on whether the EPU, GPR, and VIX fear index, independent variables in the study, have impacts on stock market indexes are summarized below. In related studies, it was stated that risk and uncertainty indexes were generally effective on stock market indexes, but in a few studies, no relationship could be found among the variables. Kang and Ratti (2013) was one of the first studies conducted on the relationship between the uncertainty in economic policies, and stock market indexes.

In the study conducted in the USA, it was stated that the uncertainties in economic policies had a negative effect on the returns of stock market indexes. Another study, Li et al., (2015) was conducted in the USA. In the related study, it was determined that the shocks in the EPU negatively affected the stocks. Another study carried out in the same year was Bayar and Aytemiz (2015). In the study using data obtained from European Union countries, no causal relationship from EPU to stock market indexes could be determined. Similarly, Donadelli (2015), in which the relationship between the stock market index of 10 Asian countries and the uncertainties in the economic policies of the USA was tested, stated that no causality relationship could be detected.

Baker et al., (2016) was one of the first studies conducted on the relationship between the EPU index and stock market indexes. In the related study, the EPU index was created by scanning the words expressing uncertainty from the national newspapers and it was determined that there was a close relationship between the EPU and the share price volatility. Wu et al., (2016), in which the causality relationship between EPU and stock market indexes of 10 selected countries was tested, detected a causal relationship from EPU to stock market indexes only for the United Kingdom. Chen et al., (2017), which was carried out specifically for China, determined that the uncertainties in China's economic policies negatively affect the return of stock market indexes. In the study of Hu et al. (2018), which tested the relationship between China's stock market indexes and the USA's EPU index, it was stated that the shocks in the EPU negatively affected the stock market index with a one-week delay.

Korkmaz and Güngör (2018), which was conducted on the effect of the global economic policy uncertainty index on BIST indexes, concluded that the EPU decreased the returns of the relevant indexes and that the indexes had a significant positive relationship with the return volatility. Similar to the previous study, Tiryaki and Tiryaki (2019), which was carried out specifically for Turkey, stated that the EPU

index of the USA had a negative effect on stock market indexes in the short and long run. Chaing (2019), in which G7 countries' data were used, claimed that the EPU had a negative effect on the stock market index returns. In the Jeon (2019) study conducted in Korea in the same year, it was concluded that the USA's EPU index had a negative effect on Korea's stock market indexes. Another independent variable used in the study was the GPR index. İltaş et al. (2017) was one of the first studies aimed at determining the relationship between the geopolitical risk index and stock market indexes. In the study, the relationship between the GPR index and the returns of the stocks of 204 companies traded on the BIST was analyzed using the regression method.

As a result, it was stated that geopolitical risks negatively affected stock returns. Akdağ et al. (2018), in which panel cointegration and panel causality analyses were performed, similarly investigated the effect of the GPR index on the stock market indexes of 12 countries. A long-term relationship among the variables was determined. It was stated that GPR had a negative effect on stock market indexes. Moreover, in the related study, unilateral causality was found from the change in the GPR to the change in stock market prices. Similarly, Apergis et al. (2018), in which causality analysis was used, tested the relationship between the GPR and both the returns and volatility of the stocks of 24 global defense companies. As a result of the analysis, it was stated that GPR was successful in predicting the volatility of stocks, but not in predicting stock returns. Balcilar et al., (2018), in which BRIC countries' data were used, tested the relationship between geopolitical risk and the returns and volatility of the stock market indexes of the countries performing the quantile causality analysis. As a result of the analysis, it was stated that geopolitical risks increased the volatility of stocks. Besides, it was stated that Russia was the country most affected by geopolitical risks, whereas India was the country most resistant to geopolitical risks. Pan (2018), in which panel regression analysis was used, tested the relationship between the GPR index and the stock returns of 17 countries.

According to the test results, it was stated that the increase in the GPR index negatively affected the stock returns. In the same year, Rawat and Arif's (2018) study, which performed the quantile regression analysis using the data obtained from BRIC countries, stated that Brazilian and Russian stock market indexes were more sensitive to geopolitical risks and were negatively affected, but Indian and Chinese stock markets were resistant to geopolitical risks. In the study of Bouras et al., (2019) using the GARCH method, the relationship between the GPR index and the returns and volatility of the stock market indexes of 18 developing countries was tested. The study stated that the GPR index did not affect the stock market returns much, but had a significant effect on the volatility of the stock markets. Bouri et al. (2019), in which a non-parametric causality test was performed, tested the relationship between the GPR index and the Dow Jones Islamic World stock index. According to the

test results, it was stated that the GPR index affected the volatility of the Dow Jones Islamic World index, but not its returns.

Demiralay and Kılınçarslan (2019), in which four global tourism and travel indexes (TOXX Travel & Leisure Global, STOXX Travel & Leisure Asia-Pacific, STOXX Travel & Leisure Europe, and STOXX Travel & Leisure North America) were used as dependent variables, tested the effects of the relevant indexes of geopolitical risks on global tourism and travel indexes via both linear regression and quantile regression analyses.

The results of the analyses stated that geopolitical risks generally had a negative effect on tourism and travel indexes and such effects were more affected by negative developments related to geopolitical risks. Fleming et al. (1995) was one of the first studies conducted in the USA to determine the relationship between VIX and stock market indexes, and it concluded that the VIX was successful in estimating the volatility in the S&P 100 index and had a negative effect.

Giot (2005), another study conducted in the USA, stated that there was a negative relationship between the returns of stock market indexes and the VIX. The data obtained from 15 countries were used in the study of Korkmaz and Çevik (2009). It was stated that the VIX affected the stock market indexes. In Sarwar's (2012) study, it was stated that there was a negative relationship between the VIX and the returns of the US, India, China, and Brazil stock market indexes. However, a similar relationship could not be detected with the stock market indexes of Russia. In Kaya et al. (2014) utilizing OECD countries' data, it was stated that there was a long-term relationship between OECD countries' stocks and VIX. Kaya and Coşkun (2015), which was carried out in Turkey, stated that there was unidirectional causality from VIX to BIST 100 index and VIX negatively affected BIST 100 index.

Similarly, in Erdoğan and Baykut (2016) conducted specifically for Turkey, a long-term relationship could not be determined between VIX and BIST Bank index, but unilateral causality was determined from VIX to BIST Bank index. Chen et al., (2017) found that VIX had a negative and significant effect on Chinese stock market indexes. Sarwan and Khan (2017), which was conducted in the same year, stated that the VIX negatively affected the stock returns of Latin American countries.

In the study of İskenderoğlu and Akdağ (2018), the relationship between stock market indexes of 11 countries and VIX was tested. It was stated that there was causality from the VIX to the stock market indexes of nine other countries, excluding the Germany and USA. In another study, Akdağ et al. (2019) investigated the effect of VIX on tourism indexes. According to the findings of the study, the changes in the VIX in a significant part of the countries under examination, the increase in the tourism index was found to be the cause of the decrease.

3. Data and method

In the study, the monthly frequency data of EPU, GPR, and VIX risk appetite index and STOXX Global 1800 T&L index obtained over the period between August 2006 and December 2018 were used. STOXX Global 1800 T&L index, which is one of the independent variables of the study, consists of tourism companies from various Countries of Europe and Asia, most of which are US tourism companies, that have tourism company characteristics (www.stoxx.com). The Economic policy uncertainty (EP) index, which is calculated using the method developed by Baker et al., (2016), is calculated on a monthly basis, and it is calculated separately for Europe in general and 26 countries, especially the global economic policy uncertainty index. The EPB index is calculated by scanning the national newspapers of the countries and considering various keywords such as economic policy and uncertainty.

The EPB was obtained from the website www.policyuncertainty.com. The geopolitical risk (GPR) index has been started to be calculated at the Federal Reserve Board with the study of Caldara and Iacoviello (2017). In the related study, geopolitical risk is defined as the risk associated with wars, acts of terrorism, and tensions between states that affect the normal and peaceful course of international relations. The geopolitical risk index has been created with an algorithm that counts the frequency of the articles in the newspapers published in the USA, England, and Canada on the international geopolitical risks. GPR data were obtained from the website www.policyuncertainty.com. The volatility index (VIX), which is also accepted as the global risk appetite index, is calculated by using the American-style call and put option price activity, which includes the S&P 100 index, which has been calculated since 1993 and has 30 days to maturity. VIX data was obtained from the Chicago Options Exchange (CBOE) website <http://www.cboe.com/>.

Determining whether the dependent and independent variables used in the study are stationary is the primary step of the application in similar studies. Stationarity can be examined by means of unit root tests. Yule (1926) stated in his study that in the case of analysis with economic data, the data should be stationary. The Augmented Dickey Fuller-ADF- tests developed in the study of Dickey and Fuller (1981) and The Philips & Perron-PP- tests developed in the study of Philips and Peron (1988) are the most frequently used unit root tests. ADF assumes that the error terms are statistically independent and have constant variance (Asteriou and Hall, 2011:345). The PP test, conversely, has weaker assumptions and is generally accepted to be more reliable than the ADF test (Fabozzi et al., 2014:197).

Cointegration analyzes are used to determine whether there is a long-term equilibrium relationship between the variables (Gujarati and Porter, 2012:762). To perform a cointegration analysis between the variables, the related series must be equally integrated and not stationary. (Dikmen, 2012:321). Johansen cointegration test was developed in the

study of Johansen (1988) and Johansen and Juselius (1990) and is based on VAR analysis, which includes the level and lag value of stationary series at the same level. (Tari and Yildirim, 2009:100). Related VAR Model is given in Equation (1) (Greene, 2012:1006).

$$y_t = \Gamma_1 y_{t-1} + \Gamma_2 y_{t-2} + \dots + \Gamma_p y_{t-p} + \varepsilon_t \quad (1)$$

The cointegration relationship can be tested with the "trace statistics". The trace statistics can be shown as in Equation (2) (Greene, 2012).

$$\gamma_{tr} = -T \sum_{i=r+1}^M \ln[1 - (r_i^*)^2] \quad (2)$$

DOLS (Dynamic Ordinary Least Square - Dynamic Least Squares) developed in the study of Saikkonen (1991) and Stock and Watson (1993), and FMOLS (Full Modified Ordinary Least Square - Fully Transformed Least Squares) developed in the study of Phillips and Hansen (1990), Cointegration They are the most widely used methods for estimating the coefficients. DOLS and FMOLS estimator is given in equation (3) and equation (4 and 5) (Breitung and Pesaran 2008:310; Narayan and Wong, 2009:2774).

$$y_{it} = \hat{\beta} x_{it} + \sum_{k=-\infty}^{\infty} \gamma_k \Delta x_{it-k} + \mu_{it} \quad (3)$$

$$y_{it} = \alpha_{it} + \beta x_{it} + \varepsilon_{it} \quad (4)$$

$$x_{it} = x_{i,t-1} + \varepsilon_{it} \quad (5)$$

Below is the explanation of the symbols.

β : cointegration vector, x_{it} : independent variable, y_{it} : dependent variable, μ : error term

4. Findings

This study, in which the relationship between the EPU, GPR, and VIX risk appetite index and the STOXX Global 1800 T&L index was tested, first of all, calculates the descriptive statistics of the data of the variables used in the analysis. The relevant statistics are presented in Table 1.

Upon evaluating the descriptive, it is seen that the highest volatility is in the GPR; whereas the lowest volatility is in the STOXX Global 1800 T&L index. In the study, the unit root tests are performed on the variables prior to the Johansen Cointegration analysis and the cointegration coefficient estimators DOLS and FMOLS analysis. Unit root test results are presented in Table 1.

As regards the cointegration test results shown in Table 3, it is determined that there are at least two cointegrating vectors among the variables, so there are long-term relationships among the variables. In Table 4, the cointegration coefficient estimator DOLS and FMOLS test results are presented. Upon evaluating the unit root test results, it is determined that the series are not stationary at the level, but are stationary in the difference series. The results of the Johansen cointegration test performed to determine whether a long-term relationship exists among the variables used in the analysis are presented in Table 3.

Table 1. Descriptive statistics

Variables	Mean	Maximum	Minimum	Standard Deviation
lnSTOXX Global 1800 T&L	5.650640	6.211744	4.890349	0.341243
lnEPU	4.828111	5.741603	3.916534	0.387150
lnGPR	4.449560	5.481530	3.701455	0.432169
lnVIX	2.888588	4.092510	2.252344	0.369125

Table 2. Unit root test results

Variables	PP		ADF	
	Constant	Constant & Trend	Constant	Constant & Trend
lnSTOXX Global 1800 T&L	-0.2661	-1.8675	-0.2563	-1.8595
Δ lnSTOXX Global 1800 T&L	-19.3571*	-11.9722*	-4.0290*	-4.1411*
lnEPU	-2.1832	-3.4996**	-2.0876	-2.9748
Δ lnEPU	-13.8036*	-13.7540*	-13.8313*	-13.7836*
lnGPR	-3.5397**	-7.0080*	-1.3907	-1.9248
Δ lnGPR	-62.1969*	-57.5975*	-15.9931*	-15.9442*
lnVIX	-2.4242	-3.5406**	-1.8289	-3.2036
Δ lnVIX	-14.9329*	-14.9174*	-14.9570*	-14.9301*

*Significant at the 1% significance level.

Table 3. Johansen cointegration test results

STOXX Global 1800 T&L = $\alpha + \beta_1 EPB_{t-i} + \beta_2 JPR_{t-i} + \beta_3 VIX_{t-i} + \varepsilon_t$			
H ₀	H ₁	Trace Statistics	Maximum Eigenvalue Statistics
r = 0	r ≥ 1	79.1942*	39.8414*
r ≤ 1	r ≥ 2	39.3528**	25.7358**
r ≤ 2	r ≥ 3	13.6169	10.2854
r ≤ 3	r ≥ 4	3.3315	3.3315

* Significant at 1%, **5% significance level.

Table 4. DOLS and FMOLS test results

DOLS Results		
	Coefficient	t – statistics
lnEPU	-0.1406	-3.2182*
lnGPR	0.0641	1.3560
lnVIX	-0.2867	-8.5421*
FMOLS Results		
	Coefficient	t – statistics
lnEPU	-0.1957	-1.9483**
lnGPR	0.0655	0.7641
lnVIX	-0.3369	-3.9249*

* Significant at 1%, ** Significant at 5%

According to the DOLS and FMOLS results presented in Table 4, it is determined that increases in the EPU and VIX risk appetite index negatively affected the STOXX Global 1800 T&L index. Results on the EPU index comply with of Kang and Ratti (2013), Li, Zhang and Gao (2015), Chen, Jiang and Tong, (2017), Hu et al., (2018), Korkmaz and Güngör (2018), Tiryakioğlu and Tiryakioğlu (2019), Chaing (2019) and Jeon (2019) study. However, the results of the study differ from the studies of Bayar and Aytemiz (2015) and Donadelli (2015), in which different data ranges, different countries, and different stock market indexes are used.

The results for VIX are in Fleming et al. (1995), Giot (2005), Korkmaz and Cevik (2009), Sarwar (2012), Kaya et al., (2014), Kaya and Coşkun (2015), Chen et al., (2017), Sarwan and Khan (2017) and İskenderoğlu and Akdağ (2018). However, it differs from the study of Erdoğan and Baykut (2016). Furthermore, it is seen that the VIX has a greater impact on the STOXX Global 1800 T&L index than the EPU index. It is found to have a statistically significant effect on the GPR index. Although the related result is in line with the results of Apergis et al., (2018) and Bouri et al., (2019), it does not comply with of the studies such as İltaş, Arslan and Kayhan, (2017), Akdağ, Yıldırım and Kesebir, (2018), Pan (2018) and Demiralay et al. Kılınçarslan (2019), in which different data ranges and different indexes were used.

5. Conclusion and discussion

Uncertainty and risks are among the factors that affect investors' investment decisions. In cases of uncertainty, investors delay their investment decisions due to the wait-and-see policy. In risky situations, investors may abandon their investment decisions. In this study, it is tested whether uncertainty and risk indicators have an effect on the stocks of tourism firms. In this context, the relationship between the global economic policy uncertainty index (EPU), the World uncertainty index (WUI), the global geopolitical risk index (GPR) and the global risk appetite index (VIX), and the global tourism index (STOXX Global 1800 T&L) is tested with the Johansen cointegration, DOLS and FMOLS tests.

In the study, the monthly data of the relevant indexes obtained over the period between August 2006 and December 2018 are used. As a result of the study, a long-term relation-

ship is determined among the tourism index and the uncertainty and risk indexes included in the analysis. It is determined that the independent variables EPU and VIX risk appetite index have a negative and significant effect on the STOXX Global 1800 T&L index. It is also found that VIX affected the STOXX Global 1800 T&L index more than the EPU index. It is determined that the GPR index does not have a significant effect on the STOXX Global 1800 T&L index.

When the results are evaluated, the effects of EPU and VIX risk appetite index on tourism stock indexes are found to be compatible with expectations. As a matter of fact, the increase in the relevant indexes indicates that the uncertainties and risks in global markets have increased, and the increasing uncertainty and risk both affect the decisions of investors and affect the consumers' spending preferences. When the uncertainty and risks in the market increase, investors would avoid investing in stocks. Because stock markets are one of the investment tools most affected by this situation (Whaley, 2000:17).

In addition, consumers will be able to reduce or postpone their consumption expenditures against the possibility of crisis due to uncertainties in the markets. In this case, the first cut in expenditures will occur in holiday expenditures with high demand-price elasticity (Song et al., 2010:378). The best example of this situation is the 2008 global crisis, which caused high levels of uncertainty in the markets. In the relevant period, it caused great decreases in tourism revenues (Papatheodorou et al., 2010:39).

Consequently, it can be suggested that investors who would invest in tourism companies should monitor micro and macroeconomic factors as well as uncertainty and risk indicators such as EPU and VIX risk appetite index during their investment decision-making process. In terms of tourism companies, it can be recommended to follow the changes in uncertainty and risk indexes such as EPU and VIX as well as economic factors in their projections and planning for the future. The analysis is carried out only on the global tourism index. It is thought that performing analyses using tourism indexes of both developed and developing countries in future studies would contribute to the literature.

Author contribution statements

S Akdağ and Ö. İskenderoğlu contributed equally to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Disclosure statement

No potential competing interest was reported by the authors.

Ethics committee approval

All responsibility belongs to the researchers. All parties were involved in the research of their own free will.

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Impact of geopolitical risk on BIST tourism index and tourist arrivals in Turkey

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Impact of geopolitical risk on BIST tourism index and tourist arrivals in Turkey

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Abstract

This study aims to explore the effects of geopolitical risk on the Borsa İstanbul (BIST) tourism index and tourist arrivals. The effects of the geopolitical risk index on the BIST tourism index and tourist arrivals were analyzed based on the data between January 1998 and October 2020, and the findings were presented. Time series analysis methods were used in the study. To investigate the relationship between variables, it was first tested whether the series of variables are stationary or not. Then, Lee-Strazicich unit root test was applied, considering the structural breaks. Finally, the causality relationship between variables and the direction of this relationship was determined by the Hatemi-J causality test. According to the findings, there is an asymmetrical relationship between Turkey's geopolitical risks with BIST tourism index. The increase in Turkey's geopolitical risks, causes a significant decrease in tourism BIST returns. Likewise, when the risk decreases, BIST tourism returns increase. On the other hand, the reduction of geopolitical risk in Turkey causes an increase in tourist arrivals.

Keywords: Geopolitical risk, BIST tourism index, Tourist arrivals, Borsa İstanbul.

1. Introduction

Income flow from tourism activities is an important driver of economic growth, especially for developing countries. Tourist arrivals to the host country stimulate the economy through various channels such as attracting foreign investment, generating foreign currency income, creating other tax-related revenues and employment opportunities. Therefore, developing countries need to promote and maintain a favorable tourism environment to attract visitors from all over the world (Tiwari, Das, & Dutta, 2019). From the perspective of developing countries such as Turkey, although tourism is a significant economic benefit created by the return in terms of these countries it is the fact that several risks in the host.

These risks, which are generally referred to as geopolitical risks, cause problems such as wars, terrorist incidents, tensions, risks related to ethnic and political violence, and a decrease in the flow of tourism to these regions by greatly affecting the socio-economic environment (Balli, Uddin, & Shahzad, 2019). When geopolitical risks increase in a country, tourists' concerns about their personal safety lead them

to delay or cancel their travel plans (Demir, Simonyan, Chen, & Marco Lau, 2020).

The increase in geopolitical risks raises concerns about personal safety and stability which lead to the delay or cancellation of travel plans. Visitors are not willing to visit a country when geopolitical risks are high. This not only leads to a decrease in the number of inbound tourists, but also a decrease in tourism expenditures (Demir, Gozgor, & Paramati, 2019). While the perception of risk is an important factor that affects passengers' changing their travel plans (Kozak, 2007), passengers are willing to pay extra for products and services if more security is provided (Slevitch & Sharma, 2008).

While the development of tourism is not the only determinant of economic growth, it confirms that countries with well-developed tourism sectors generally exhibit higher rates of economic growth than others. In order to maximize the economic benefits that can be gained from the development of tourism businesses, there is a need to adequately identify risk factors affecting the tourism sector and develop possible tools to mitigate impacts. The sensitivity of the

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tourism sector to external shocks such as geopolitical risks is key among these risk factors (Lee, Olasehinde-Williams, & Akadiri, 2020). In this context, considering the importance of tourism for global and national economies, it is important to analyze and monitor global risks at national and regional level (Asgary & Ozdemir, 2020). Previous studies on geopolitical risks mainly focused on the linear (symmetrical) relationship on tourism demand among variables such as oil prices, uncertainty, exchange rates, and geopolitical risk indices. Unlike previous research, this study examines, the impact of geopolitical risk on BIST tourism index and tourist arrivals to Turkey by using Hatemi-J asymmetric causality analysis. In this way, it is aimed to contribute to the literature by investigating the variables that have not been discovered before in the literature.

There are summaries of literature research on the subject. The third part consists of the methodology part. The method and methodology used in the analyzes are introduced. In addition, the findings obtained from the analyzes are shared as tables. Lastly, in the 4th part of the study, the findings obtained from the analyzes were interpreted and presented in comparison with the literature.

2. Literature review

The literature shows that most of the studies associated with tourism and risk are grouped under political headings. Hall and O'Sullivan (1996) found that political instability and perceptions of violence deeply affect tourist visits. Eilat and Einav (2004) state that the political risk of a destination country is a very important issue in the tourism economy. Endo (2006) shows that political or economic risks significantly affect foreign direct investment in tourism. Ghalia et al. (2019) found that the prevalence of political turbulence can cause a significant number of service providers and operators in the tourism industry to suspend their business activities (Eilat & Einav, 2004; Endo, 2006; Ghalia, Fidrmuc, Samargandi, & Sohag, 2019). According to Manaliyo (2016), the international tourism demand of emerging economies is significantly affected by political risk.

In addition to these, a limited number of studies have been associated with geopolitical risk and tourism. In a study by Asgary and Ozdemir (2020), aimed to measure global risk perceptions by conducting an 18-question online survey of participants from the tourism sector in Turkey. According to the results of the study, they stated that global economic and geopolitical risks are more likely and have more impact on the participants than environmental and technological risks. Demir et al. (2019) conducted the study panel data analysis on 166 hospitality firms, emerging seven economies such as Malaysia, Mexico, Thailand, Turkey, Argentina, Brazil and China using the data from 2017-2018. According to results they stated that geopolitical risks negatively affect the cash holdings of hospitality firms. It also results in confirms the high dependence of hospitality firms on geopolitical risk volatility.

Balli et al., (2019) using the wavelet squared coherence approach investigated the impact of geopolitical risk (GPR) on international tourism demand in emerging economies (Malaysia, Indonesia, Philippines, Thailand, Turkey, Mexico, South Africa, South Korea) and found that the impact of geopolitical risk is not homogeneous for each country. Some countries are heavily affected by GPR, while others are mostly immune to GPR shocks and GPR impact is minimal for countries with attractive tourism destinations.

Akadiri et al. (2020) examined the relationship between Turkey's geopolitical risk index with tourism and economic growth. The quarterly frequency data between 1985 and 2017 were evaluated using Toda-Yamamoto causality analysis. According to the findings of the study, they determined that there is a one-way causality from the geopolitical risk index to economic growth and tourism. In addition, it has been determined that sudden shocks to geopolitical risk have a negative effect on tourism and economic growth in the short and long term.

Tiwari et al. (2019) examined using monthly data (174 observations) from January 2003 to June 2017 with wavelet analysis of how geopolitical risks and the economic policy uncertainties affect tourist arrivals in developing India and found that the impact of geopolitical risks is stronger than economic policy uncertainties. Moreover, while geopolitical risks have long-term effects, economic policy uncertainties have short-term consequences on tourist arrivals. Demir et al. (2019) investigated fixed-effects (FE) and the least-squares dummy variable corrected (LSDVC) estimations of the effect of geopolitical risk index on foreign tourist arrivals using panel data of 18 countries between 1995 and 2016. According to the results, geopolitical risks negatively affect foreign tourist arrivals. They also stated that geopolitical risks are an obstacle to the development of the tourism sector.

Demir et al. (2020) explored the impact of geopolitical risk on tourist arrivals. The data, period for 1990-2018 were analyzed by using the NARDL test. According to the findings, the impact of geopolitical risks on tourist arrivals is asymmetrical in the short term. In addition, it has been determined that while the increase in geopolitical risks decreases the number of tourists, the decrease in geopolitical risks has no effect in the short term. Lee et al. (2020) analyzed the data of 16 countries between 2005 and 2017 using panel data analysis to understand how geopolitical risks affect international tourism demand. According to the findings, they found that geopolitical risk negatively affects tourism demand. They also found that outbreaks aggravate the negative impact of geopolitical risks on tourism demand. On the other hand, according to the panel causality results, they determined that geopolitical risk is an important determinant of tourism demand.

Gürsoy (2021) investigated the relationship between EPU indexes of the Germany, Russia and UK which are considered important for Turkey's tourism sector, and BIST

tourism index. According to the results of the study, it has been seen that the increase and decrease of the economic and political uncertainty in Germany and Russia have an effect on the BIST tourism index. Unlike previous studies, we add the number of the tourist arrivals to Turkey besides to Borsa Istanbul tourism index, which is a new variable, to the measurement of geopolitical risk indices, and examine the causality relationship between them using the Hatemi-J (2012) method. As far as we know, the geopolitical risk index, which is a new phenomenon, has not yet been associated with the BIST tourism index. Therefore, we hope that our research will bring a new perspective to the literature.

3. Methodology

3.1. Aim of the research and method

This study examines the potential impacts of geopolitical risk which calculated for turkey to BIST tourism returns and foreign entries. therefore, it was investigated asymmetric causal relationship between the geopolitical risks and BIST tourism, foreign entries return. To investigate the relationship between variables, the Lee-Strazicich unit root test, which also considers structural breaks and tests stationarity, was used. The analysis started by considering the Schwarz Information Criterion (SC), which tests the optimal lag length for the series. Asymmetric causality analysis was used by Hatemi-J (2012) to determine whether there is any causality between the series or not, if there is causality, to determine the direction. Gauss 10 econometric analysis package program was used in the analysis of the study.

3.2. Data set

The data on geopolitical risk index, BIST tourism index and tourist arrivals were arranged as monthly data (274 observations), covering the period from January 1998 to October 2020. The data between 1998 and 2020 reflect the widest time interval of the variables. The Geopolitical risk index, which we used in the study was developed by Caldara and Iacoviello. The index is composed of the number of words on geopolitical risks in 11 leading international newspapers. The GPR index reflects the automatic text search results of electronic archives of 11 international newspapers (Caldara and Iacoviello 2019). Geopolitical risk index data were obtained from policyuncertainty.com, BIST tourism index data were obtained from investing.com, and tourist arrivals data were obtained from <http://tyd.org.tr/tr/turizm-istatistikleri>. The abbreviations, period range and source of the variables are given in table 1 below.

3.3. Research Hypotheses

The hypotheses related to the research are organized as follows.

H_0 : There is no causal relationship between JEORISK variable and XTRZM, TNUMR variables.

H_1 : There is causal relationship between JEORISK variable and XTRZM, TNUMR variables.

3.4. Lee-Strazicich Unit Root Test

In terms of reliability of results in time series; In order to prevent spurious regression, stationarity condition is sought. In order to investigate the relationship between variables, the stationarity of variables (whether unit-rooted or not) should be tested first. Augmented Dickey Fuller- ADF (1981), Phillips-Perron (1988), Ng Peron (2001) etc. unit root tests are also some of the stationarity tests (Oğuz, 2020: 32).

Unlike conventional ADF based structural break unit root tests, the LM unit root test also allows breaks under the null hypothesis. Accordingly, the LM unit root test has several advantages. Since the breakpoints are initially determined as endogenous, the test is not subject to false refusals in case of breaks and the presence of the unit root. The most important thing is that if the alternative hypothesis is correct, there are no false rejections.

In the LM test, the rejection of the null hypothesis necessarily refers to the rejection of the unit root without fractures, but without fractures (Özcan, 2012:10). As a correction to these criticisms by Lee and Strazicich (2003, 2004), a new unit root test has been added to the literature. According to this new test, structural breakage can be allowed in each of the basic and alternative hypotheses.

The method used in the LM unit root test is as follows;

$$y_1 = \delta Z_t + e_t \quad e_t = \beta e_{t-1} + \varepsilon_t \quad (1)$$

In equation (1), the Z_t exogenous variables vector denotes error terms with the property $\varepsilon_t \sim iid N(0, \sigma^2)$. The model that includes two changes in the level is expressed as $A Z_t = [1, t, D_{1t}, D_{2t}]$ Here; for $D_{jt} = 1, t \geq T_{bj} + 1, j = 1, 2$ and 0 for other cases. T_{bj} shows the break time.

Model C contains 2 changes in trend and level, model $Z_t = [1, t, D_{1t}, D_{2t}, DT_{1t}, DT_{2t}]$. Here; $DT_{jt} = t - T_{bj}$ for $t \geq T_{bj} + 1, j = 1, 2$ and 0 for other cases. While the process of data creation (DGP) includes breaks under the basic hypothesis ($\beta = 1$), it is in the form of an alternative hypothesis ($\beta < 1$). Lee and Strazicich used the following equation to obtain the LM unit root test statistics.

Lee and Strazicich used the following equation to obtain LM unit root test statistics.

$$\Delta y_t = \delta' \Delta Z_t + \phi \tilde{\delta}_{t-1} + u \quad (2)$$

Here; $\tilde{\delta}_t = y_t - \tilde{\psi}_x - Z_t \delta, t=2, \dots, T$; and $\tilde{\delta}$ value is the coefficient obtained from ΔZ_t in the regression of Δy_t . $\tilde{\psi}_x$ is found with $y_1 - Z_1 \delta$ where y_1 and Z_1 are the first elements of y_t and Z_t in the order specified (Lee and Strazicich 2003: 1083).

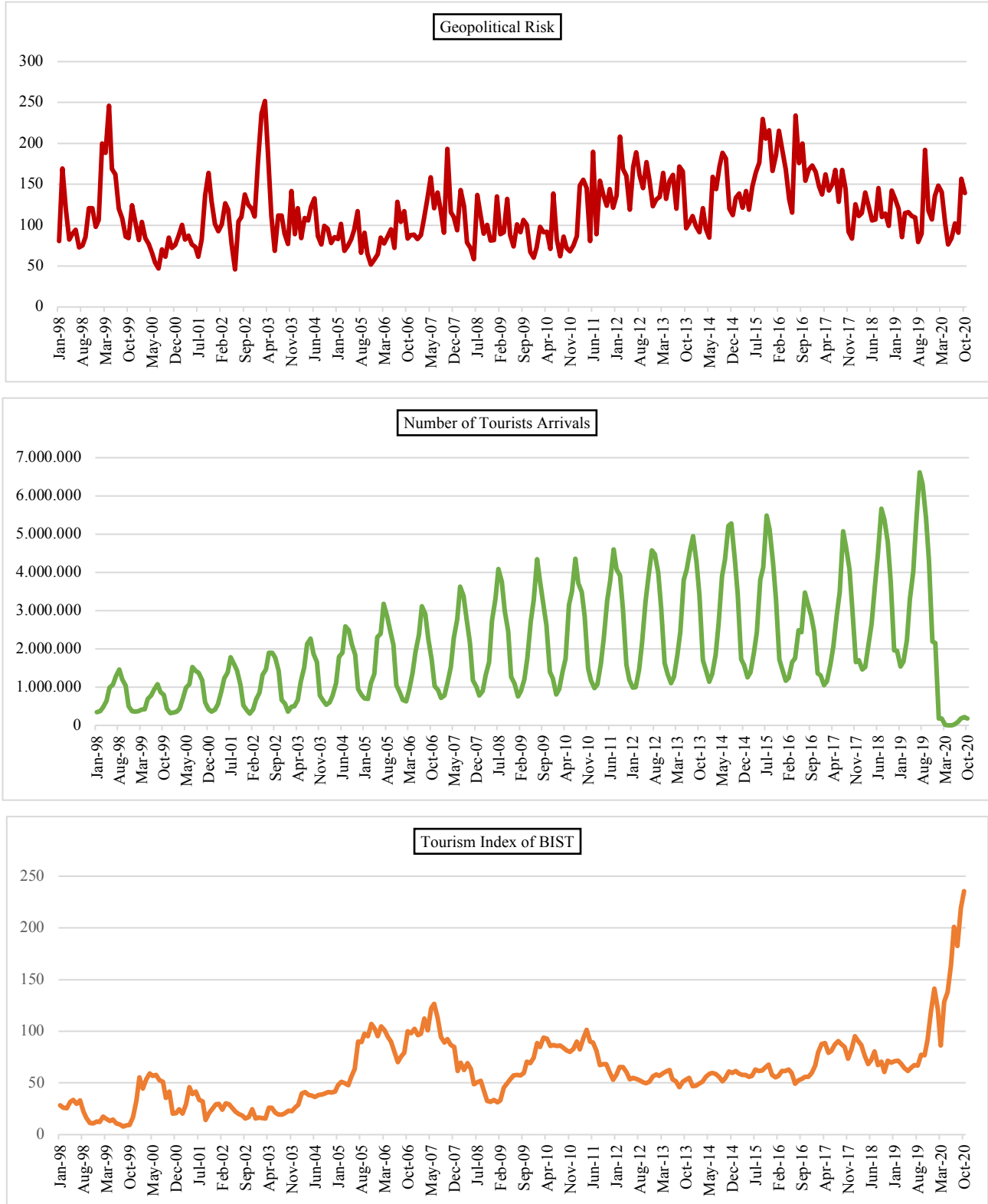
While determining the break times, the points where the $\tilde{\tau}$ test statistic value is the smallest are selected;

$$LM_\tau = \inf_{\lambda} \tilde{\tau}(\lambda) \quad (3)$$

Table 1. Data Set

Variables	Variable description	Time period	Period of data
JEORISK	Turkey Geopolitical risk index	January 1998	policyuncertainty.com
XTRZM	Closing prices of the tourism index of BIST	-	tr.investing.com
TNUMR	Number of the tourist arrivals to Turkey	October 2020	http://ttyd.org.tr/tr/turizm-istatistikleri
		Monthly data	

Figure 1. Charts of series



The formula $\lambda_i = T/TB_i, i = 1, 2$ is used to show the break point. T, here refers to observations. While single break (LM) unit root test critical values are obtained from Lee and Strazicich (2004), the critical values of the unit root test with two break (LM) can be obtained from Lee and Strazicich (2003). If the test statistical values found as a result of the analysis exceed the critical value, the unit root base hypothesis with structural break is rejected (Yilanci, 2009: 330-331).

3.5. Hatemi-J asymmetric causality analysis

The asymmetric causality test, which was first introduced to the literature by Granger and Yoon (2002), was developed by Hatemi-J (2012), and causality is investigated by dividing variables into positive and negative components. In this asymmetric causality analysis, it is aimed to find hidden relationships that will help to understand the dynamics of the series and allow to develop possible predictions for the future (Yilanci and Bozoklu, 2014: 214).

In the case, we want to test the causality relationship between two integrated variables y_{1t} and y_{2t} (Hatemi-J, 2012: 449-450);

$$y_{1t} = y_{1t-1} + \varepsilon_{1t} = y_{10} + \sum_{i=1}^t \varepsilon_{1i}$$

and

$$y_{2t} = y_{2t-1} + \varepsilon_{2t} = y_{20} + \sum_{i=1}^t \varepsilon_{2i} \quad (4)$$

Here, $t = 1, 2, \dots, T$, denotes the constant terms, y_{1t} and y_{2t} denotes initial values, ε_{1i} and ε_{2i} error terms. Positive and negative shocks are expressed as in equation (2);

$$\varepsilon_{1i}^+ = \max(\varepsilon_{1i}, 0), \varepsilon_{2i}^+ = \max(\varepsilon_{2i}, 0), \varepsilon_{1i}^- = \min(\varepsilon_{1i}, 0) \text{ ve } \varepsilon_{2i}^- = \min(\varepsilon_{2i}, 0), \quad (5)$$

However, Its expressed as $\varepsilon_{1i} = \varepsilon_{1i}^+ + \varepsilon_{1i}^-$ and $\varepsilon_{2i} = \varepsilon_{2i}^+ + \varepsilon_{2i}^-$

Based on these, it is possible to rewrite equations (4) and (5) as follows

$$y_{1t} = y_{1t-1} + \varepsilon_{1t} = y_{1,0} + \sum_{i=1}^t \varepsilon_{1i}^+ + \sum_{i=1}^t \varepsilon_{1i}^-, \quad (6)$$

$$y_{2t} = y_{2t-1} + \varepsilon_{2t} = y_{2,0} + \sum_{i=1}^t \varepsilon_{2i}^+ + \sum_{i=1}^t \varepsilon_{2i}^-. \quad (7)$$

lastly, the positive and negative shocks in each variable are expressed in cumulative form as

$$y_{1t}^+ = \sum_{i=1}^t \varepsilon_{1i}^+, \quad y_{1t}^- = \sum_{i=1}^t \varepsilon_{1i}^-, \quad y_{2t}^+ = \sum_{i=1}^t \varepsilon_{2i}^+, \quad y_{2t}^- = \sum_{i=1}^t \varepsilon_{2i}^-, \quad (8)$$

Then, assuming that is $y_t^+ = y_{1t}^+, y_{2t}^+$, the causality relationship between the positive components is tested through

the p delayed vector autoregressive model (VAR). VAR (p) model is expressed as in equation (9);

$$y_t^+ = v + A_1 y_{t-1}^+ + \dots + A_p y_{t-p}^+ + u_t^+ \quad (9)$$

Here, y_t^+ indicates a variable vector of size 2×1 , v is constant variable vector of size 2×1 , u_t^+ is error term size of 2×1 , and A_r is expressed as a parameter matrix of "r" order, which is determined using 2×2 size delay length information criteria. The following equation is used to determine the optimal lag length:

$$HJC = \ln(|\hat{\Omega}_j|) + j \left(\frac{n^2 \ln T + 2n^2 \ln(\ln T)}{2T} \right),$$

$$j = 0, \dots, p \quad (10)$$

$(|\hat{\Omega}_j|)$ shows j length of the lag of, the estimated VAR model's error term is variance-covariance matrix, n is the number of equations in the VAR model, and T is the number of observations. After the lag length is determined, the Wald statistic is used to test the H_0 fundamental hypothesis, which indicates the absence of Granger-causality between series. The VAR model equation created in order to obtain the Wald statistics is as follows.

$Y = DZ + \delta$ the equation is more clearly expressed;

$$Y: = (y_1^+, y_2^+, \dots, y_T^+)$$

$$D: = (v, A_1, A_2, \dots, A_p)$$

$$Z_t: = \begin{bmatrix} 1 \\ y_t^+ \\ y_{t-1}^+ \\ \vdots \\ y_{t-p+1}^+ \end{bmatrix} \quad (11)$$

$$Z: = (Z_0, Z_1, \dots, Z_{T-1})$$

$$\delta: = (u_1^+, u_2^+, \dots, u_T^+)$$

According to equation (11): it refers to matrixes of different sizes $Y: (n \times T)$, $D: (n \times (1 + np))$, $Z_t: ((1 + np) \times 1)$, $Z: ((1 + np) \times T)$ and $\delta: (n \times T)$.

The basic hypothesis ($H_0: C\beta = 0$) which states that there is no Granger causality, is tested with the Wald statistic. The Wald statistics can be calculated with the help of the following equation;

$$Wald = (C\beta)' [c((z'z)^{-1} \otimes S_U) c']^{-1} (C\beta) \quad (12)$$

Equation in equation (12) is in the form of $\beta = vec(D)$ and indicates the column clustering operator. \otimes Kronecker, C represents the indicator function including constraints. The variance-covariance matrix calculated for the unconstrained VAR model is expressed as $S_U = \frac{\delta_U' \delta_U}{T-q}$. And here, the q h represents the number of lags in the VAR model.

3.6. Findings

3.6.1. Lee-Strazicich unit root test

In this study, the C model was considered to determine the breakage of the series in the Lee-Strazicich (LS) test. The first difference of the series that were not stationary at level was taken and LS unit root test was applied again. The findings obtained are shown in Table 2.

In the case of looking at the results of the Lee-Strazicich Unit Root Test for the variables used in the study, it was observed that the XTRZM and TNUMR variables

were stationary at the I (0) level, while the JEORISK variable became stationary at the I (1) level when a difference was taken.

3.6.2. The Results of the Hatemi-J Asymmetric Causality Analysis

The causality relations among the variables of the GEORISK, XTRZM, TNUMR indices in the study was analyzed with the asymmetric causality test brought to the literature by Hatemi-J (2012), and the findings obtained from the analysis are shared in Table 3.

Table 2. The results of Lee- Strazicich unit root test

Lee-Strazicich Unit Root Test (Model C)						
Variable	Level	Level breaking date	Critic Value	1. Difference	1. Difference Breaking date	Critic value
	Test statistics			Test Statistics		
GEORISK	-4.068755	May 2011	-4.076770	-9.130751**	January 2015	-4.000471
XTRZM	-4.134367**	November 2017	-3.951924	-	-	-
TNUMR	-4.572382**	October 2013	-4.023250	-	-	-

Note: *It is significant at 5% level.

Table 3. The results of the Hatemi-J asymmetric causality analysis

Direction of causality	Test statistics	Bootstrap critical values		
		%1	%5	%10
GEORISK (+)> XTRZM (+)	6.571	11.603	7.926	6.269
GEORISK (+)> XTRZM (-)	12.648**	12.290	8.043	6.403
GEORISK (-)> XTRZM (+)	9.997**	11.696	7.927	6.371
GEORISK (-)> XTRZM (-)	6.558	11.762	8.038	6.367
GEORISK (+)> TNUMR (+)	22.451**	12.123	8.110	6.390
GEORISK (+)> TNUMR (-)	26.592**	13.471	19.610	7.845
GEORISK (-)> TNUMR (+)	20.469**	11.866	8.025	6.385
GEORISK (-)> TNUMR (-)	16.684	11.927	17.954	6.451

Note: *It is significant at 5% level.

According to the results of the Hatemi-J asymmetric causality test, which investigates the causality relationship between the cumulative positive and negative changes of the variables, it was found that there were one-way and two-way partial causality relationships between GEORISK and TNUMR at the 5% significance level.

According to the results of the equation in which a positive causality relationship from the GEORISK index towards the XTRZM variable was tested, the (T) test statistic value (12.648) was found, and it is significant because it is more than the bootstrap critical value (8.043) H_0 hypothesis was not accepted H_1 hypothesis was accepted. In addition, according to the results from another positive equation, (T) test statistic value (6.571) was found, and it is not significant because it is less than the bootstrap critical value (7.926). Then, H_0 hypothesis was accepted and the H_1 hypothesis was rejected.

On the other hands, according to the results of the equation in which a negative causality relationship from the

GEORISK index towards the XTRZM variable was tested, the (T) test statistic value (22.451) was found, and it is significant because it is more than the bootstrap critical value (8.110) H_0 hypothesis was not accepted H_1 hypothesis was accepted. In addition, according to the results from another negative equation, (T) test statistic value (6.558) was found, and it is not significant because it is less than the bootstrap critical value (8.038). Then, H_0 hypothesis was accepted and the H_1 hypothesis was rejected.

It indicates that there is an asymmetric causality relationship from GEORISK to XTRZM. More clearly, GEORISK's positive shocks were found to be effective on XTRZM on negative shocks. However, it has been observed that the negative shocks of GEORISK have an effect on the positive shocks on the XTRZM. Looking at the causality effects on TNUMR from GEORISK, it is concluded that positive shocks more demonstrate. According to the results of the equation in which a positive causality relationship from the GEORISK index towards the TNUMR variable was tested,

the (T) test statistic value (12.648) was found, and it is significant because it is more than the bootstrap critical value (8.043) H_0 hypothesis was not accepted H_1 hypothesis was accepted. In addition, according to the results from another positive equation, (T) test statistic value (26.592) was found, and it is more than the bootstrap critical value (19.610). This time also, H_0 hypothesis was not accepted H_1 hypothesis was accepted.

According to the results of the equation in which a negative causality relationship from the GEORISK index towards the TNUMR variable was tested, the (T) test statistic value (20.469) was found, and it is significant because it is more than the bootstrap critical value (8.025) H_0 hypothesis was not accepted H_1 hypothesis was accepted. In addition, according to the results from another negative equation, (T) test statistic value (16.684) was found, and it is not significant because it is less than the bootstrap critical value (17.954). Then, H_0 hypothesis was accepted and the H_1 hypothesis was rejected. Here was seen that positive shocks in GEORISK are effective on both positive and negative shocks on TNUMR, while negative shocks in GEORISK have only effect on positive shocks on TNUMR.

4. Conclusion

Tourism revenues are very important for a country in terms of gaining foreign currency and supporting economic growth. Countries use various promotional methods to attract tourists to their countries and increase their numbers. For a foreign visitor, not only is the holiday attractive but also an atmosphere of trust is extremely important. For this reason, countries try to minimize some uncertain situations called geopolitical risks such as terrorism, internal complexity, war and create a safe environment in the country. From this point of view, it is important for countries to know whether geopolitical risks affect the number of tourists, and this perspective makes it a subject worth exploring. On the other hand, factors affecting stocks are the subject of many studies in the field of finance. Therefore, the tourism index variable has also been included in the study.

In this study, based on GEORISK, XTRZM, and TNUMR monthly data, the period between January 1998 and October 2020, the asymmetric causality relationship between variables was investigated. For this purpose, unit root tests developed by Lee and Strazicich, which also take structural breaks into account, were applied to determine whether the time series were stationary or not. Then, with the Hatemi-J test, whether there is any causality between the variables and the direction of this causality were determined.

According to the results obtained from January 1998 and October 2020 monthly data of Lee-Strazicich unit root tests, it was observed that the BIST Tourism index and foreign visitor variables were stable at I (0) level, while the geopolitical risk variable became stable at I (1) level, that is, when the first difference is taken.

According to the Hatemi-J asymmetric causality test results, it has been determined that positive shocks of the geopolitical risk were found to be effective on negative shocks of the BIST tourism index. Increases in geopolitical risk are the reason for a decrease in BIST tourism returns, while decreases in geopolitical risk are the reason for a positive increase in BIST tourism returns. On the other hand, that positive shocks in geopolitical risk are effective on both positive and negative shocks on the number of the Foreign entrance while negative shocks in geopolitical risk have only effect on positive shocks on Number of the Foreign entrance. These results are similar to the studies of Demir et al. (2019), Demir et al. (2020), Lee et al. (2020).

Author contribution statements

Authors contributed equally to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Disclosure statement

No potential competing interest was reported by the authors.

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All responsibility belongs to the researchers. All parties were involved in the research of their own free will.

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Personality traits and employees' job performance in hotel industry

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Personality traits and employees' job performance in hotel industry

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Abstract

Studies that examined the association between personality traits and employees' job performance in respect of hotels in Lagos State, Nigeria is under reported. The current study therefore filled this research gap. The study adopted a quantitative research design, hence used structured questionnaires to collect data from 332 employees of 63 hotels across the 20 LGAs in Lagos State. Data that were collected was analyzed using Partial Least Squares SEM. The result show that three of the five tested hypotheses, that is conscientiousness, openness to experience, and extraversion traits supported job performance in respect of hotels in Lagos State, Nigeria. This implies that exhibition of conscientiousness trait such as been dependable, organized, reliable, ambitious, perseveres and hard-working inclines to enhance job performance in hotel industry in Lagos State. In addition, demonstration of openness to experience attributes such as been original, curious, imaginative, refined, and multifaceted tend to stimulate job performance in hotel industry in Lagos State. Furthermore, displaying extraversion traits such as been sociable, passionate, and bold are essential for job performance in hotels in Lagos State. By confirming the link between personality traits and employees' performance, this study offers an insight on personality traits that stimulate job performance in hotels in Lagos State. Therefore, managers and operators of hotel business in Lagos State can maximize employees' performance in their respective organizations by implementing human resources policies gear towards recruitment of staff that believes in originality, teamwork and team-building including, training of staff to imbibe the culture of forgiveness, and acceptance of others' view. Again, sociable and enthusiasm staff should be assigned to strategic frontline units of the hotel.

Keywords: Personality Traits, Job performance, Lagos State, Hotel industry, PLS_SEM.

1. Introduction

Recent available reports show that investment in hotel industry, including other brands and independent accommodation establishments in Lagos State rose from 9,400 rooms in 2016 to 10,222 in 2018 (PricewaterhouseCoopers, 2018). This implies a favorable hotel investment outlook in the commercial capital city of Nigeria. Despite the favorable hotel investment outlook in Lagos State, the corresponding performances of the industry in the state is not encouraging, thus showing a decline at an increasing rate (JII, 2016, 2017 & 2018). The implication of this is that the physical capacity of hotel facilities in Lagos State are underutilized, hence resulting in revenue loss. This is one of the major concerns that motivated the conduct of this study to determine factors responsible for this negative hotel performance trend. It had been reported that many factors may be responsible for the decline in hotel performance. Major among these factors

based on empirical studies is issue of personality traits of hotel employees (Tuteja & Sharma, 2017). Personality traits in this context explains the entirety of emotional and physical temperaments of an individual. It explains the combination of constant mental and physical features which gives identity to individuals (Ones et al., 2005; Golpayegan, 2017). According to Ryckman (2004), personality traits is a dynamic and organized set of characteristics possessed by an individual that uniquely influences his or her behavior, cognitions, and motivations in various situations, including job performance. Job performance therefore explains recurring activities to establish organizational goals, monitor progress toward the goals, and adjust achieve those goals more effectively and efficiently (Dhaifallah et al. 2013). Nmadu (2013) sees employees' job performance as a degree of accomplishment of tasks measured against pre-set standards of accuracy, completeness, cost and speed.

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Findings from a meta-analysis suggested that personality traits are dispositional predictors of employees' job performance (Judge & Bono, 2001). Erdheim et al. (2006) declared that personality traits play a crucial role in developing job performance which results in increased output. Various studies had been conducted to validate the link between personality traits and employees' job performance. Iqra et al. (2013) investigated the effect of personality traits on job performance of employees of banking sector in Pakistan. Nadiah et al. (2016) studied leader's personality traits and employees' job performance in public sector in Putrajaya, Malaysia. Noraini et al. (2015) explored the association between personality traits and job performance among Malaysian public secondary school teachers. Neelu & Sharma (2018) determined the link between job performance and the big five personality traits of employees of IT sector in Chandigarh. Maryam and Muhammad (2017) examined the effects of big five personality traits on employee job performance among university lecturers in Peshawar City. One of the gaps based on these empirical studies is that research on personality traits and job performance have been popular in the banking industry, public sector, education institutions, and IT companies with limited focus on the hotel industry. Aside, another gap that motivated the conduct of this study is that previous studies on personality traits and job performance were popular in respect of companies and institutions in Pakistan, Malaysia, and China with limited study focusing on hotels in Nigeria, especially in Lagos State. In view of these gaps, the current study therefore aims to explore the association between each of the dimensions of personality traits and job performance in respect of hotel employees in Lagos State. It is pertinent to state that Lagos State has the highest concentration of hotels and other forms of lodging facilities put at 65% of total hotel room stock in Nigeria (JLL, 2018). Therefore, the outcome of this study can be generalized for Nigeria. The map of Lagos State is shown in Figure 1.



Figure 1. Map of Lagos State.

2. Literature review

2.1. The concept of personality traits

Various definitions of personality traits had been offered by personality philosophers based on their understanding of the subject matter. Dabrowski (2008) defined personality traits as the entirety of emotional and physical temperaments of an individual. It explains the combination of constant

mental and physical features which gives identity to individuals (Ones et al., 2005; Golpayegan, 2017). Crage (2013) sees personality traits as the configurations and inclinations that explain individual's unique patterns of thought, emotion and behavior and recurring regularities or trends. Akinboye & Soaib (2016) and Beer & Brooks (2011) referred to personality traits as the behavioral patterns which are developed mainly during decisive years which differentiates one person from another person. It encompasses a person's relative stable feelings, thoughts, and behavioral patterns that differentiates a person from others (Barge, 2014; Pandey & KaviTha, 2015). According to Ryckman (2004), personality traits is seen as dynamic and organized set of characteristics possessed by an individual that uniquely influences his or her behavior, cognitions, and motivations in various situations. In these wise, personal traits explain different characteristics that can contribute to inferences about behavioral results (Liao & Lee, 2009; Zahari, 2016). The index in these definitions shows that personality traits explain the individual's unique, typical and preferred way of feeling, thinking and behavioral pattern that influences once decisions.

2.2. Dimensions of personality traits

The big five personality model is one of the most inclusive and personality taxonomies (Costa & McCrae, 1992). Goldberg (1981) used the big five model to delineate the five dimensions of personality traits, hence emotional stability, conscientiousness, agreeable, extraversion, and openness to experience. A brief review on each of the dimensions are as follow.

Conscientiousness dimension of personality trait is associated with trait adjectives such as been dependable, organized, reliable, ambitious, hardworking (Brice, 2004; Major et al., 2006; Zhao & Seibert, 2006; Zhao et al., 2010), while agreeableness dimension has adjectives such as been kind, cooperative, sympathetic, helpful, courteous, and warm (Brice, 2004; Zhao & Seibert, 2006; Zhao et al., 2010). On the other hand, emotional stability dimension has to do with been nervous, moody, emotional, insecure, and unstable character (Zhao & Seibert, 2006; Zhao et al., 2010; Méndez-Picazo et al., 2012). Openness to experience has to do with been curious, imaginative, creative, complex, refined, sophisticated (Brice, 2004, Major et al., 2006, Zhao & Seibert, 2006; Zhao et al., 2010), while extraversion is associated with adjective traits such as talkative, sociable, passionate, bold, dominant (Major et al., 2006; Zhao & Seibert, 2006; Zhao et al., 2010).

2.3. The notion of employees' job performance

There is no stereotyped definition for the term employees' performance. Munchinsky (2003) opined that employees' job performance is the set of employees' behaviors that can be measured, monitored, and evaluated. It emphasized on the measure of employees' morale, effective and efficient completion of mutually agreed tasks as set out by the employer (Gibson, 2012). In addition, employees' performance

explains recurring activities to establish organizational goals, monitor progress toward the goals, and adjust achieve those goals more effectively and efficiently (Dhaifallah et al. 2013). Platt & Sobotka (2010) defined employees' performance as quality and quantity achieved by individuals or group after fulfilling a task. Nmadu (2013) sees employees' performance as a degree of accomplishment of tasks measured against pre-set standards of accuracy, completeness, cost and speed. The concept is associated with quantity of output, quality of output, timeliness of output, presence or attendance on the job, morale at work, efficiency and effectiveness of work completed (Mathis et al. 2009). Lee, et al. (1999) has summarized the concept of employees' performance in respect of three dimensions such as quality, efficiency, and effectiveness of the employees. Efficiency in this context refers to the workers' output rate and the ability to achieve tasks before deadline (Lee et al. 1999). Effectiveness on the other hand refers to the workers' goal accomplishment, while quality refers to workers' error and complaint rate (Lee et al. 1999). Indices in these definitions show that employees' performance is the activities related to job and how well those activities were executed by employees. Therefore, the working definition for this study describe employees' performance to connote workers' output rate and the ability to achieve tasks before deadline, with limited error and complaint rate in line with organizational set goals.

3. Empirical review

3.1. Relationship between extraversion and employees' performance

Various studies had examined the correlation between extraversion and employees' performance (Barrick & Mount, 1991; Hurtz, & Donovan, 2000; Thoresen et al., 2004; Allameh et al., 2010; Solaja et al., 2016). The outcome of these studies show that extraversion has proven a significant and positive predictor of job performance of employees. Iqra et al. (2013) investigated the effect of personality traits on job performance of employees of banking sector in Pakistan. The result confirmed that extraversion has positive and significant effect on employees' job performance. Nadiah et al. (2016) studied the leader's personality traits and employees' job performance in public sector in Putrajaya. The finding shows that extraversion have a positive significant relationship with employee's job performance. An empirical study in the context of Germany shows a significant relationship between extraversion and job performance (Blickle et al., 2015). Rothman & Coetzer (2003) examined the influence of personality traits on job performance of pharmaceutical company.

The finding shows that extraversion has a significant influence on job performance. Neelu & Sharma (2018) determined the link between job performance and the big five personality traits of employees of IT sector in Chandigarh. The finding revealed that extraversion has significant correlation with job performance. Maryam, & Muhammad (2017) examined the effects of big five personality traits on employee

job performance among university lecturers in Peshawar city. The result show that among the Big Five personality dimensions, extraversion is positive but insignificant with employees' job performance. The gap base on these reviews shows that previous studies in this domain had focused on the banking, public sector, pharmaceutical, IT companies, and educational institutions. However, it appears that limited study had being reported on the link between extraversion and employees' performance in respect to hotel industry and more so in Lagos state, Nigeria. Aside, in view of inconsistencies in literature on the correlation between extraversion and employees' performance, this study hypothesized that:

H₁: There is positive and significant relationship between extraversion and employees' performance in respect of employees of hotel industry in Lagos state.

3.2. Relationship between agreeableness and employees' performance

Numerous studies had examined the link between agreeableness and employees' performance (Barrick & Mount, 1991; Thoresen et al., 2004; Judge & Zapata, 2015; Adeola et al., 2017). Findings from majority of these studies show that agreeableness predicts employees' performance. Other studies that confirmed a positive association between agreeableness and job performance include (Iqra et al., 2013; Nadiah et al., 2016; Neelu & Sharma, 2018). In a study of Maryam, & Muhammad (2017) on the effects of big five personality traits on employee job performance among university lecturers in Peshawar city. The result show that among the Big Five personality dimensions, agreeableness has positive and significant effects on employees' job performance. Noraini et al. (2015) explored the association between personality traits and job performance among Malaysian public secondary school teachers. The finding shows that there is a positive association between agreeableness and job performance. Alanoud & Amir (2016) explored the relationship between personality and job performance. The outcome of the research shows that agreeableness has a negative relationship with employees' job performance thus, suggesting inconsistencies in literature on the relationship between agreeableness and employees' performance. Other gap observed in literature suggests that limited study was reported on the link between agreeableness and employees' performance in respect to hotel industry in Lagos state. In view of this this study hypothesized that:

H₂: There is positive and significant relationship between agreeableness and employees' performance in respect of employees of hotel industry in Lagos state.

3.3. Relationship between neuroticism and employees' performance

Several studies had been done to establish the relationship between neuroticism and employees' performance (Judge et al, 1999; Niehoff, 2006; Byrne et al., 2015; Jeronimus et al., 2016). The outcome of these studies show that

neuroticism appears consistent negatively not correlated with employees' performance. In a study of Maryam, & Muhammad (2017) on the effects of big five personality traits on employee job performance among university lecturers in Peshawar city. The result show that among the Big Five personality dimensions, neuroticism is negative and insignificant. In the study of Noraini et al. (2015) on the association between personality traits and job performance among Malaysian public secondary school teachers. The result revealed that there is a negative association between neuroticism and job performance. Nadiah et al (2016) explored leader's personality traits and employees' job performance in public sector, in Putrajaya. The outcome shows that neuroticism found negatively related with employee job performance. Iqra et al. (2013) conducted an empirical study on effect of personality traits on job performance of employees in the banking sector of Pakistan. The result shows that neuroticism has negative effect on employees' job performance. Neelu & Sharma (2018) explored the link between job performance and big five personality traits of employees of IT sector in Chandigarh. Finding shows that neuroticism was found to be negatively related with job performance. Other gap observed in literature suggests that limited study was reported on the link between neuroticism and employees' performance in respect to hotel industry in Lagos state. In view of this this study hypothesized that:

H₃: There is positive and significant relationship between neuroticism and employees' performance in respect of employees of hotel industry in Lagos state.

3.4. Relationship between openness to experience and employees' performance

Various studies had been conducted to determine the association between openness to experience and employees' job performance (Mark & John, 2000; Thoresen et al., 2004; Tuteja & Sharma, 2017). Neal et al. (2012) examined the relationship between the five personality traits and nine dimensions of work role performance. The study found that openness to experience was positively related to proactivity. Eswaran et al. (2011) opined that openness to experience has a positive relationship with job performance. Maryam & Muhammad (2017) determined on the effects of big five personality traits on employee job performance among university lecturers in Peshawar city. The result show that among the Big Five personality dimensions, openness to experience has positive and significant effects on employees' job performance. Noraini et al. (2015) examined the association between personality traits and job performance among Malaysian public secondary school teachers. The result revealed that there is a positive association between openness to experience and job performance. Neelu & Sharma (2018) investigated the link between job performance and big five personality traits of employees of IT sector in Chandigarh. The result concluded that openness to experience has significant correlation with job performance. Nadiah et al. (2016) examined the leader's personality traits and employees' job

performance in public sector, in Putrajaya. The finding shows that openness to experience has significant and positive relationship with employees' job performance. McCrae & Allik (2012) has a contrary view about openness to experience individuals hence, opined that employees with this trait are quite ambiguous, debatable, and complex to understand and thus more research is required to investigate the link between this personality traits and job performance. However, it appears that limited study had being reported on the link between openness to experience and employees' performance in respect to hotel industry and more so in Lagos state, Nigeria. Aside, in view of inconsistencies in literature on the correlation between openness to experience and employees' performance, this study hypothesized that:

H₄: There is positive and significant relationship between openness to experience and employees' performance in respect of employees of hotel industry in Lagos state.

3.5. Relationship between conscientiousness and employees' performance

Studies that examined the correlation between conscientiousness and employees' performance had been widely reported in literature (Hurtz & Donovan, 2000; Rothmann & Coetzer, 2003; Leutner et al., 2014; Alanoud & Amir, 2016). The outcomes of these studies consistently show that conscientiousness have a positive and significant correlation with employee's job performance. Jiang et al. (2009) investigated the relationship between job performance and conscientiousness in a government training institution in China. The study found that conscientiousness was predictive of job performance among government employees in China. The outcome of an empirical study that examined the effect of personality on job performance of banking employees in Pakistan as reported in reported in Iqra, et al. (2013) shows that conscientiousness has positive and significant effect on employee's job performance. In a study of Maryam & Muhammad (2017) that determined the effects of big five personality traits on employees' job performance among university lecturers in Peshawar city.

The result show that among the Big Five personality dimensions, conscientiousness has positive and significant effects on employees' job performance. Nadiah et al. (2016) conducted a research on the leader's personality traits and employees' job performance in public sector, in Putrajaya. The result shows that conscientiousness has significant and positive correlation with employees' job performance. Rothman & Coetzer (2003) explored the influence of personality traits on job performance of employees in a pharmaceutical company. The outcome shows that conscientiousness has significant influence on job performance. Neelu & Sharma (2018) examined the link between job performance and the big five personality traits of employees of IT sector in Chandigarh. The result surprisingly shows that conscientiousness has no significant relationship with job performance. The gaps observed in literature suggests inconsistencies in research outcomes including, under reporting of studies on the

link between conscientiousness and employees' performance in respect to hotel industry in Lagos state. In view of this this study hypothesized that:

H₅: There is positive and significant relationship between conscientiousness and employees' performance in respect of employees of hotel industry in Lagos state.

3.6. Theoretical framework: The big five personality model

The big five personality model was adopted in this study. The model is one of the most comprehensive and parsimonious personality taxonomies (Costa & McCrae, 1992). Goldberg (1981) proposed and used the big five personality structure to delineate five dimensions of personality traits such as, Emotional stability, Conscientiousness, Agreeable, Extraversion, and Openness to experience to analyze individual's personality. Various studies had used the big five personality model to provide a general framework for examining the effects of personality traits on employees' performance (Abdul Ghania et al., 2015; Rusbadrol et al., 2015; Adeola et al., 2017; Tuteja & Sharma, 2017). As it applied to the current study, the big five personality model is being used to explain the connection between each of the five dimensions of the personality traits and employees' performance in respect of hotel in Lagos state.

4. Research methodology

This study adopted a quantitative research design to test the effect of each dimensions of personality traits on employees' performance in the context of hotels in Lagos State. A structured questionnaire used for this study is divided into 3 main parts (i.e., Part 1, 2 and 3). Part 1 of the questionnaire shows the personal information of the respondents. The items used to characterize the respondents are marital status, religion, education qualification, and years of work experience in the organization. Part 2 of the questionnaire measured employees' personality traits. A big five-dimensional personality scale developed by Adeola et al. (2017) that was used to examine the influence of personality traits and work commitment on job performance of public secondary teachers in Oyo South Senatorial District of Oyo State were adopted and modified. The modified instrument consists of 25 items which were measured on a 5-point Likert scale. Each item was rated by the respondents from 1 (Strongly Disagreed) to 5 (Strongly Agreed). The instrument was used to measure extraversion, openness to experience, agreeableness, conscientiousness, and neuroticism as dimensions of personality traits of staffs of hotels in Lagos State. Part 3 of the questionnaire measured employees' job performance. A six items instrument developed by Lee et al. (1999) were adopted and modified based on job performance literature in Şahin (2011) and Motowidlo and Van Scotter (1994). The modified instrument consists of 8 items which were measured on a 5-point Likert scale. Each item was rated by the respondents from 1 (Strongly Disagreed) to 5 (Strongly Agreed). The instrument was used to measure employees'

performance in terms of efficiency, effectiveness and quality in hotels in Lagos State.

The research population used in the study comprised of employees of the 792 registered hotels in the 20 LGAs in Lagos State. The sampling units used include employees of 63 registered hotels in the 20 LGAs in Lagos State. The sampled hotels were selected through a systematic random sampling technique. The researchers serially numbered all the registered hotels in each of the 20 LGAs in Lagos State and automatically picked the first hotel on the list in each of the LGAs while others were picked at an interval of 15 thus, 63 hotels were selected and used for the study. Since it is practically impossible for the researchers to sample the entire employees in each of the 63 selected hotels in the 20 LGAs in Lagos State, hence the researchers determined the proportion of the sample unit that constitutes the sample (i.e., the number of respondents which questionnaires will be administered to). Taro Yamane formula which is given as follows were adopted to determine the sample size:

$$n = \frac{X}{1 + N(e)^2}$$

Where n= sample size.

X= Observation Unit.

N= Population Size.

e= Sample Error or level of significance

To determine the sample size for the study, the researchers conceded to the method of proportional allocation suggested in Kothari (1990). Before applying the Taro Yamane formula as suggested in Sekaran (2003), the researchers contacted the management of the 63 selected hotels to obtain the total number of staffs on their employment thus, the populations size (N) of 1, 624 staff out of which the sample size of 332 were obtained. Convenience sampling technique were adopted by the researchers to administer the questionnaires in each of the 63 selected hotels until the sample size of 332 were met.

Partial Least Squares Structural Equation Modelling (PLS_SEM) approach that explore the linear relationships between multiple independent variables and a single or multiple dependent variable (Hair, et al., 2014) were adopted for the analysis of data collected in this study. This was done with the aid of *SmartPLS v3. Software*. The PLS_SEM relies on pre-specified networks of relationships between constructs as well as between construct and their measures (Hair, et al., 2014) thus, making it different from the regular regression approach.

5. Results

5.1. Demographic distribution of respondents

The gender distribution of the respondents indicates that 63.6% of the respondents are Males and 36.4% are Females. This implied that majority of the participants in this study are males. In terms of marital status, 66.6% of the respondents are Married, 32.5% are Singles, 0.6% are Others and

0.3% are Divorce. This implies that majority of the participants in this study are Married, followed by the Singles. The religion distribution of respondents used in the present study includes: Christianity (13.9%), Islam (72.0%) and others (14.2%). This shows that majority of participants in this study are Muslims followed by Christians with only very few Other's participants.

In respect to academic qualification distributions, 35.8% of the respondents are Bachelor degree holders, Masters (31.0%), and Doctorate (33.1%). This shows that majority of participants in this study are Bachelor degree holders followed by holders of Doctorate degree, and lastly holders of Master's degree. In term of age distributions of the respondents, 52.7% of the respondents are within the age bracket of 17-26 years, followed by 27-35 years (32.5%), and 36-44 years (14.2%). This shows that the age distribution of majority of participants in this study are 17-26 years, and closely followed by respondents whose age range is 27-35 years.

5.2. Assessment of measurement model

The hypothesized model of this study was evaluated for its construct reliability including, convergent and discriminants validity using SmartPLS 3.0 (Hair et al. 2014; Ringle et al., 2005). As part of the requirement for the evaluation of the validity and reliability of the hypothesized model, the researchers examined factor loadings of all items of the study variables. The result of the factor loadings of the initial hypothesized model shows that 9 out of 34 items (i.e., AGRE4, CONS3, CONS4, CONS5, EMPE1, EMPE2, EMPE5, EXTR3, EXTR4, and EXTR5) has factor loadings less than the acceptable threshold of 0.7 (Hair et al. 2012; 2014). In view of these 9 items were deleted from the initial hypothe-

sized model one item at a time starting from the lowest loading. Having deleted all the items with the low factor loading, the final hypothesized model yielded a better result hence, fit well with the data as shown in Figure 2.

Furthermore, the result of the final hypothesized measurement indicators such as Cronbach alpha (α), composite reliability (CR), and average variance extracted (AVE), including factor loadings of all items of the study variables yielded a better result as presented in Table 1. As shown in Table 1, the results of the convergent validity of the final hypothesized model shows that the factor loadings of all items of the study variables were statistically significant and exceeded the minimum acceptable threshold of 0.7 (Tabachnick & Fidell, 2007). Also, the average variance extracted (AVE) exceed the minimum acceptable threshold value of 0.5 (Hair et al., 2010).

In addition, the model was assessed for the internal consistency of the data hence, Cronbach Alpha (α), and Composite Reliability (CR) values for all the variables meet the required threshold as shown in Table 1. This implies that all the variables in this study have a satisfactory level of internal consistency.

Furthermore, the discriminant validity of the final hypothesized model was assessed to assure the external consistency of the data. Based on the correlation between the latent variables, the constructs were compared with the square root of AVEs (Hair et al., 2014). The result shown that the correlations between the constructs are lower than square root of AVEs along the diagonal as shown in Table 2. This validates fulfillment of discriminant validity requirement.

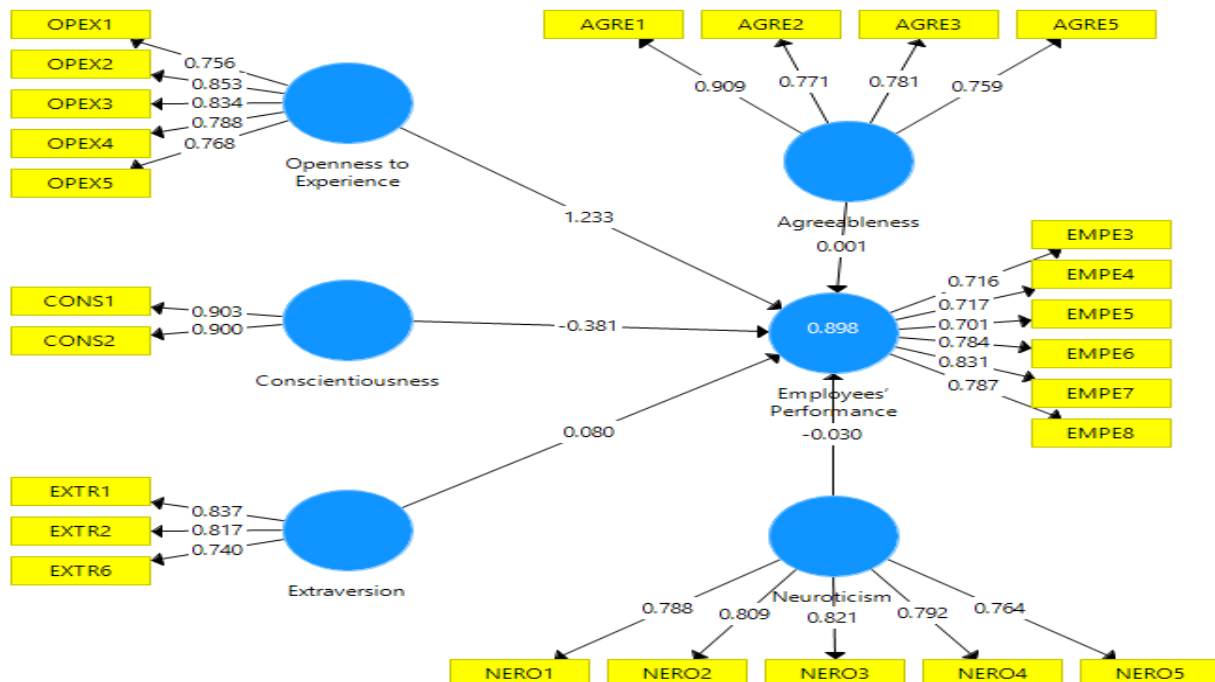


Figure 2. Hypothesized model with fit factor loadings. Source: Researchers Computation (2020).

Table 1. Results of the measurement model

Latent Variables	Items	Loadings	Cronbach Alpha	Composite Reliability	(AVE)
Extraversion	EXTR1	0.837	0.716	0.841	0.639
	EXTR2	0.817			
	EXTR6	0.740			
	EMPE3	0.716			
	EMPE4	0.717			
Employees' performance	EMPE5	0.701	0.854	0.889	0.574
	EMPE6	0.784			
	EMPE7	0.831			
	EMPE8	0.787			
	OPEX1	0.756			
Openness to experience	OPEX2	0.853	0.860	0.899	0.641
	OPEX3	0.834			
	OPEX4	0.788			
	OPEX5	0.768			
	AGRE1	0.909			
Agreeableness	AGRE2	0.771	0.842	0.881	0.651
	AGRE3	0.781			
	AGRE5	0.759			
	NERO1	0.788			
Neuroticism	NERO2	0.809	0.855	0.896	0.632
	NERO3	0.821			
	NERO4	0.792			
	NERO5	0.764			
	CONS1	0.903			
Conscientiousness	CONS2	0.900	0.770	0.897	0.813

Source: Researchers computation (2020).

Table 2. Discriminant validity of the variables

Constructs	1	2	3	4	5	6
1-Agreeableness	0.807					
2-Conscientiousness	0.071	0.902				
3-Employees' performance.	0.052	0.704	0.757			
4-Extraversion	0.083	0.423	0.471	0.799		
5-Neuroticism	0.067	0.431	0.474	0.830	0.795	
6-Openness to experience	0.060	0.863	0.327	0.467	0.488	0.801

Source: Researchers Computation (2020).

Table 3. Summary of direct hypothesis testing

S/n	Hypothesized Path	Path	Standard	t Value	Findings	f-squared	Effect size
1.	AGRE -> EMPE	-0.001	0.018	0.034	Not supported	0.000	Small
2.	CONS -> EMPE	0.381	0.038	10.008	Supported	0.364	Large
3.	EXTR -> EMPE	0.080	0.035	2.296	Supported	0.019	Small
4.	NERO -> EMPE	0.030	0.035	0.848	Not Supported	0.003	Small
5.	OPEX -> EMPE	1.233	0.033	37.060	Supported	3.564	Large

*P<0.05

Source: Researchers Computation (2020).

Table 4. Results of the Predictive Relevance of the Model

Total	SSO	SSE	Q ² (1-SSE/SSO)
Agreeableness	1328.000	1328.000	
Conscientiousness	664.000	664.000	
Employee performance	1992.000	1026.730	0.485
Extraversion	996.000	996.000	
Neuroticism	1660.000	1660.000	
Openness to experience	1660.000	1660.000	

Source: Researchers computation (2020).

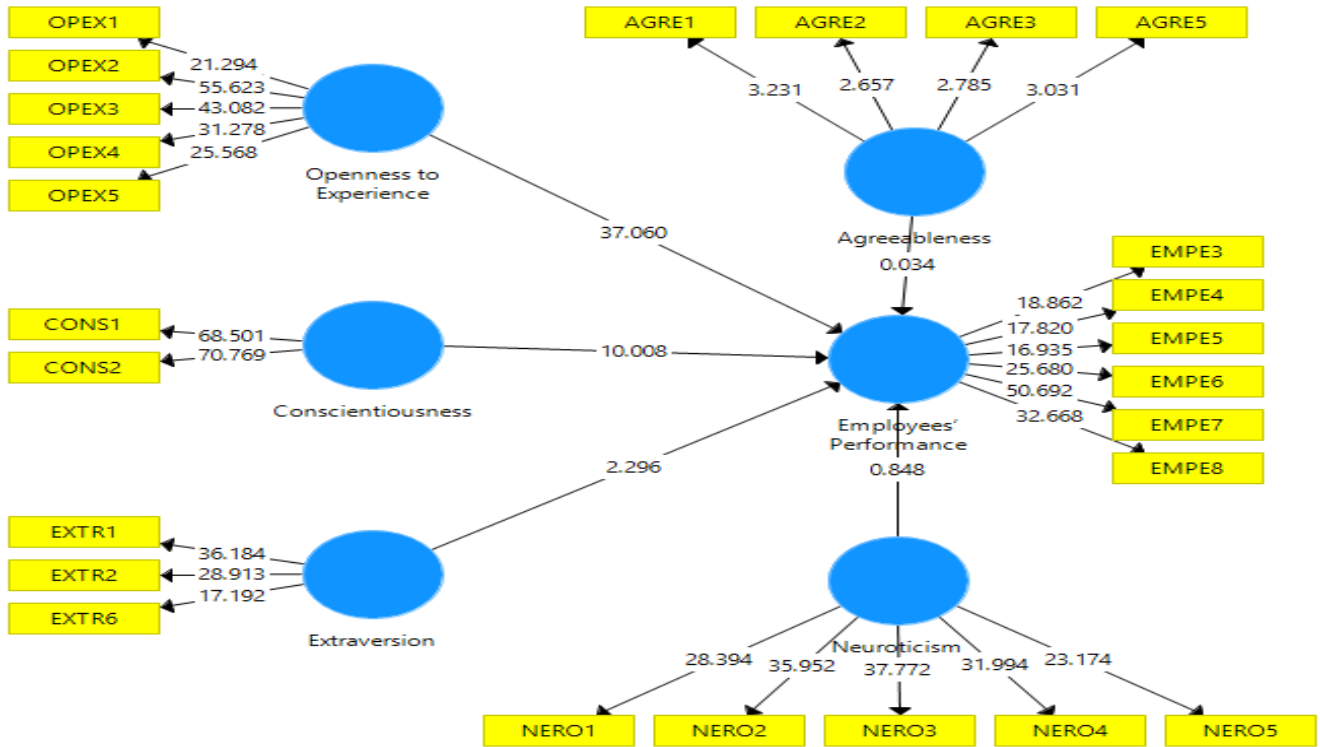


Figure 2. Final measurement model of the study

Source: Researchers computation (2020).

5.3. Structural model hypothesis testing

The significance of the path coefficients is determined by the beta values of the coefficient of the regression and t-values which is calculated using the bootstrapping method (Hair et al., 2014). The rule of thumb of critical values for a two-tailed test of 1.96 (significance level = 5%) is considered to be significant (Hair et al., 2014). As it applied to the current study, five direct hypothesized relationships were tested. The result shows that three of the relationships were proven to be supported and two not supported. Figure 2 show the results of the direct effect of latent variables on the dependent variable.

Furthermore, Table 3 show that hypotheses that were supported and accepted have t-value >1.96 while the rejected hypotheses have t-value < 1.96 hence, show the effect of individual latent constructs (i.e., personality traits) on the dependent variable (i.e., employee performance). The R-square value shows that all the constructs put together have the tendency of influencing 89.8% of changes in employees' performance. The remaining 10.2% is due to other factors and residuals.

5.4. Effect size

As shown in Table 3, the effect sizes of dimensions of personality traits (i.e., Conscientiousness, Extraversion, and Openness to Experience on the dependent variable (i.e., Em-

ployees' performance) were 0.40, 0.02, and 3.60 respectively. Therefore, following Cohen (1988) guideline, the effects sizes of Conscientiousness, Extraversion, and Openness to Experience on the dependent variable could be viewed as large, small and large respectively. In line with the argument of Chin et al. (2003), who emphasises that even the minutest strength of f^2 might be considered because, they can affect the dependent variable in their own way.

5.5. Predictive relevance of the model

This study used the blindfolding procedure to test the predictive relevance of the model (Hair et al., 2014). Predictive relevance is denoted by Q^2 hence, used to assess the parameter estimates, how values are built around the model including, explanations on the quality of the model (Hair et al., 2014). As it applied to the current study, the results were retrieved from the blindfolding output of PLS through the variable score out of which cross validated redundancy were extracted as shown in Table 4.

From Table 4, the results of construct cross validated redundancy show the predictive relevance of 0.485 for the turnover intention hence, implies that the model have predictive relevance.

6. Discussion of findings

The current study sought to establish the relationship between each of the five dimensions of personality traits and

employees' job performance in respect of hotels in Lagos State, Nigeria. Major findings of the study are as follows.

Regarding the relationship between extraversion trait and employees' job performance, the study found that extraversion positively correlates employees' job performance. This finding corresponds with existing literatures as reported in (Barrick & Mount, 1991; Hurtz, & Donovan, 2000; Thoresen et al., 2004; Allameh et al., 2010; Solaja et al., 2016). These studies validate the proposition that extraversion have a significant and positive correlation with employees' job performance. Aside, the outcome of this study also conforms to the report in Iqra et al. (2013) that investigated the effect of personality traits on job performance of employees of banking sector in Pakistan. The outcome of this study shows that extraversion trait has positive and significant effect on employees' job performance. Current study also conforms to the outcome of an empirical study in the context of Germany that shows a significant relationship between extraversion trait and job performance (Blickle et al., 2015). In respect of the relationship between agreeableness trait and employees' job performance, the finding in the current study shows that the relationship between the two constructs did not support each other. This finding is not in conformity with majority of previous studies in this domain of study as reported in (Barrick & Mount, 1991; Thoresen et al., 2004; Judge & Zapata, 2015; Adeola et al., 2017). Findings from these studies show that agreeableness trait predicts employees' job performance. However, the finding of the current study confirms the assertions in Alanoud & Amir (2016) that agreeableness trait has a negative relationship with employees' job performance.

Furthermore, on the relationship between neuroticism and employees' job performance, the current study found a non-significant relationship. This finding agrees with previous studies as reported in Judge et al, 1999; Niehoff, 2006; Byrne et al., 2015; Jeronimus et al., 2016). The outcome of these studies show that neuroticism appears consistent negatively not correlated with employees' job performance. Aside, the outcome of the current study also validates reports in Iqra et al. (2013) that investigated the effect of personality traits on job performance of employees in the banking sector in Pakistan. The result of the study shows that neuroticism has negative effect on employees' job performance. Neelu & Sharma (2018) explored the link between job performance and big five personality traits of employees of IT sector in Chandigarh. Finding shows that neuroticism was found to be negatively related with job performance.

In addition, the association between openness to experience and employees' job performance in respect of hotels in Lagos State, found a positive and significant relationship. This finding agrees with earlier reported studies such as (Mark & John, 2000; Thoresen et al., 2004; Tuteja & Sharma, 2017). These studies found that openness to experience was positively related to employees' job performance. In addition, the result of the current study correlates with the outcome of studies such as Neal et al. (2012) that

examined the relationship between the five personality traits and nine dimensions of work role performance. The study found that openness to experience was positively related to proactivity. Eswaran et al. (2011) opined that openness to experience has a positive relationship with job performance. Maryam & Muhammad (2017) investigated the effects of big five personality traits on employees' job performance among university lecturers in Peshawar City. The result show that openness to experience trait has positive and significant effects on employees' job performance.

Finally, the correlation between conscientiousness trait and employees' job performance in respect of hotels in Lagos State, found a positive and significant and relationship. This finding agrees with the previous studies as reported in Hurtz & Donovan, 2000; Rothmann & Coetzer, 2003; Leutner et al., 2014; Alanoud & Amir, 2016). The outcomes of these studies consistently show that conscientiousness have a positive and significant correlation with employee's job performance. The outcome of this study also validates report in Jiang et al. (2009) that investigated the relationship between conscientiousness traits of staff of government training institution and job performance in China. The study found that conscientiousness was predictive of job performance among government employees in China. The outcome of an empirical study that examined the effect of personality on job performance of banking employees in Pakistan as reported in reported in Iqra, et al. (2013) shows that conscientiousness has positive and significant effect on employee's job performance. In a study of Maryam & Muhammad (2017) that determined the effects of big five personality traits on employees' job performance among university lecturers in Peshawar city. The result show that among the Big Five personality dimensions, conscientiousness has positive and significant effects on employees' job performance.

6.1. Theoretical implications

Theoretically, the big five personality model was successfully applied in the present study to explaining the extent emotional stability, conscientiousness, agreeable, extraversion, and openness to experience traits predicts job performance in respect of hotel employees in Lagos State, Nigeria. The big five personality traits and employees' job performance model for hotels in Lagos State was proposed and validated in this study. The result shows a linear relationship between three of the five traits (i.e., Conscientiousness, Extraversion, and Openness to experience), and employees' job performance of hotels in Lagos State. The implication of this is that the new model offers an understanding of personality traits that informed employees' job performance in hotels in Lagos State.

6.2. Practical implications

The implications of the findings in this study shows that employees that are sociable, generates a lot of enthusiasm, and communicate freely with customers have tendency to perform well. Furthermore, staff that are creative, original,

active in imagination including, high sense of artistic, and aesthetic attributes are likely to perform well in hotel activities. Hotel staff that are graced with energy, considered to be reliable, makes plans and follows through, and perseveres until tasks are finished tend to perform well in hotel business. Aside, hotel managers in Lagos State should avoid employing staff with traits of finding faults with others, tend not to accept other's view, unforgiving in nature, and exhibits poor teamwork. These negative attributes tend to impact negatively on hotel business performance in the state. In addition, the study also confirmed that careless staff, easily depress and worried personnel are not likely to exhibits high performance in the hotel industry.

In view of the above, it is thus recommended that structuring of hotel human resources policy to embracing recruitment of staff who believes in teamwork and team-building. This we believe will enhance individual staff performance that may metamorphoses to organizational performance. Aside, hotel staff should always be trained to imbibe the culture of forgiveness, acceptance of others' view and helpfulness. Also, managers of hotels in Lagos State can enhance their organization performance if highly sociable, and enthusiasm staff are assigned to strategic frontline units of the hotel such as reception desk, restaurants, bar, and housekeeping. Finally, engagement and or training of hotel staff in the act of innovativeness, critical thinking, and placement of values in artistic, and aesthetic experiences is highly recommended to the contemporary hotel business operators hence, will go a long way to enhancing the performances of hotels in Lagos state.

6.3. Limitations of the study

Despite the incisive results, one of the major limitations of this study is that only hotel employees in Lagos State were focused, thus, did not consider hotel staff in other states across Nigeria. If this is done it may provide a more in-depth insight and more meaningful results.

Author contribution statements

M.B. Bello and Y.O. Bello contributed equally to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Disclosure statement

No potential competing interest was reported by the authors.

Ethics committee approval

All responsibility belongs to the researchers. All parties were involved in the research of their own free will.

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Review article

Crisis management for pandemic in airlines
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Crisis management for pandemic in airlines

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Abstract

Aviation has become the most used mode of transportation worldwide. As a result of this great usage, it has continued to grow rapidly. A new virus pandemic, which emerged during the period when aviation was used so intensely, affected aviation deeply and negatively. As a result of the rapid spread of the virus all over the world and its transformation into a pandemic, the aviation industry has suffered a great deal of financial damage as a result of some measures taken. In this study, the problems experienced by the aviation industry since the beginning of the virus epidemic were examined and it was shown how the results were obtained in line with the measures taken.

Keywords: Crisis management, Aviation, Pandemic, Airlines, Covid-19.

1. Introduction

From past to present, people have been in a constant movement and continue to be found. With the emergence and development of aviation, people have expanded their movements to wider areas and made new discoveries. With aviation, people can reach anywhere in the world in a shorter time than other types of transportation. As a result of this speed and comfort, aviation provides a great advantage in terms of travelling. People aim to get the most from their vacations by using air transport instead of spending their limited vacation periods on the roads. For this reason, the passenger transport of countries increases considerably, especially in tourism seasons.

The number of regular flights during the year rises considerably during the tourism periods and reaches the top point, thus, both the tourism sector and the aviation sector make a profit. However, with the COVID-19 virus that emerged at the end of 2019, a pandemic was declared worldwide. With this pandemic, the whole world has closed itself and the human movement has almost stopped. With this halt, the aviation industry slowed down and even stopped at certain times. As a result of this, the number of tourists traveling between countries has decreased and the tourism sector has taken a great damage as well. The purpose of this article is to show the first effects of the COVID-19 pandemic on

world civil aviation and the first measures taken by the aviation industry against these effects. Throughout this study which the world civil aviation is scoped, first of all, what the pandemic is will be explained then the situation of civil aviation before the COVID-19 pandemic will be explained and then the effects of the COVID-19 pandemic on civil aviation will be shown and finally the measures taken in civil aviation against the COVID-19 pandemic will be shown.

2. Literature review

2.1. What is COVID-19 pandemic?

The new coronavirus (COVID-19), which emerged in China at the end of 2019, was first identified in January 2020. In Turkey, it was first seen in March 2020. Studies have shown that the most basic symptoms of COVID-19 are fever, cough and shortness of breath (Sağlık Bakanlığı, 2020). The coronavirus caused by the SARS-COV-2 virus is transmitted when an infected person comes into contact with other people. The virus is transmitted through the mouth or nose of the infected person through tiny particles of fluid that are released when they cough, sneeze, speak, sing or breathe. These small liquid particles come in different sizes, from larger 'respiratory droplets' to smaller 'aerosols'. If other people meet with infected people less than 1 meter away, they can get the disease from the mouth, nose or eyes with tiny

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water droplets from the infected person. People can also get coronavirus disease, except that they contact each other at a distance of less than 1 meter. Aerosol transmission can be occurred when infected people stay in closed, crowded and poorly ventilated spaces such as restaurants, choirs, sports halls, night clubs, offices, etc. With this aerosol transmission, the coronavirus can be transmitted to another people. On the other hand, corona virus can also be transmitted when infected people touch places such as tables, chairs, doors, handrails and then if healthy people touch these places (WHO, 2020).

2.2. Aviation sector before COVID-19 pandemic

Throughout the history of the world, people have always tried to improve themselves. During this development effort, people were inspired by birds and entered into a desire to fly and started to work in this direction. After the discovery of the buoyancy force in the years after Christ, people realized that they could do this with the help of a machine, not their own power. And as a result, the aviation sector, which started with hot air balloons, has developed up to the technology of today's aircraft (Saldıraner, 2019).

With the development of aviation technology, people have started to use airplanes as a means of transportation. Considering the data of 2019, which is before the pandemic period, a total of 4.5 billion people used airways worldwide, with an increase of 3.6% compared to 2018 (ICAO, 2020). In the year of 2019, which was before pandemic, when the data were examined, it is found that the number of the visitors from abroad to Turkey was 51.747.199 people. From this total number, it's seen that, 6.688.913 people were the citizen of Turkey and who live in abroad and 45.058.286 people who were the rest of number were foreigner. According to data, the number of citizens residing abroad who visited Turkey in 2019 increased by 0.98%, while the number of foreigners visiting Turkey in 2019 increased by 14.11% compared to 2018. When looking at the countries which foreigners came from to visit Turkey in 2019, the top 5 countries have been Bulgaria with 228,800 visitors, Germany with 191,846 visitors, Georgia with 164,020 visitors, Iran with 134,768 visitors and the Russian Federation with 130,521 visitors. Lastly, when we have a look at which transportation routes have been used by the visitors who came to Turkey in 2019, air transportation has become first type of transportation with 44,787,827 visitors, has followed by land transportation with 14,576,627 visitors, sea transportation with 1,966,254 visitors and rail transportation with 67,003 visitors. As it can be clearly seen when the relevant data are examined that air transportation has become the most preferred mode of transportation for those who visited Turkey in 2019 (TÜRSAB, 2019).

3. Methodology

In this research article, the situation of the civil aviation sector before the COVID-19 pandemic is shown, then the effects of the COVID-19 pandemic on civil aviation and the

measures taken against the pandemic are shown by examining the statements and reports of the authorities and airlines. The scope of the study is the world civil aviation sector details with Turkish Civil Aviation. Qualitative and quantitative data were examined in this study, which was carried out with the descriptive research model. In the qualitative research, the decisions taken by the authorities and the measures taken against these decisions were shown. In the quantitative research, the data in the reports published by the airlines and authorities about the damages caused by the pandemic were analyzed. In these days, when the effects of the pandemic are just beginning to emerge, research has been carried out with these two methods in order to show both the measures taken by the authorities and the damage experienced in the face of the pandemic. The results were obtained by analyzing the financial reports and statements published by the authorities and airlines. With this study, the first effects of the COVID-19 pandemic on the world civil aviation industry were shown. With this study, in which the first effects of the pandemic are shown, it is thought that when the pandemic is over, it will guide the future studies that will show the damages of the pandemic to world civil aviation sector.

4. Findings

4.1. Impacts of COVID-19 on aviation sector

The new coronavirus (COVID-19), has adversely affected all world markets except human health. With the global coronavirus pandemic, a huge economic crisis has started around the world. The aviation industry has become one of the most affected markets in the world. As the COVID-19 pandemic has reached global dimensions, human movement has started to decrease, and naturally, the aviation sector was badly affected by this situation. Looking at the relationship between COVID-19 and civil aviation, it can be said that aviation helps in the spread of the coronavirus. The reason for this is that aviation is used by all people as it is an easy and fast form of transportation. The aviation industry, which is shown as one of the reasons for the spread of the virus, was seen by people with fear, and a decrease in passenger demands was observed. In addition, the industry has been badly affected by flight restrictions imposed by governments (Akça, 2020).

The first measure implemented in the aviation industry due to the virus was against flights from China. In line with the decision, all flights departing from China were suspended. After the Chinese ban, as the virus was seen gradually in other countries, flights stopped in countries where the virus was seen, and the aviation industry was deeply wounded. Due to the COVID-19 pandemic that affected the world, a serious decrease was experienced in the aviation industry, as in all sectors of the world. With this decline, airline companies both lost the number of passengers and experienced serious financial difficulties. As a result of the measures taken against coronavirus, either flights around the world have been restricted or completely banned. As a result

of these measures, the number of flights and passengers of the airline companies has decreased significantly. The aviation sector, which started to recover again with the reduction of the effect of the virus a little, started to decline with the increase of the virus again with the winter period (Armağan and Deniz, 2020).

When the total air traffic data has analyzed for 2019, the year before the pandemic, published by the General Directorate of State Airport Authority in Turkey, it has seen that a total of 2.033.430 flights have taken place in 2019. In 2020, when the pandemic has spread rapidly around the world, the total number of aircraft traffic has decreased by 48% to 1,057,247. On the other hand, analyzing the domestic and international passenger traffic data published by the same institution, it has seen that the total number of passenger traffic was 208,911,338 people in 2019, while this number decreased by 60.9% in 2020 to 81,657,070 people (DHMI, 2020). According to the data of EUROCONTROL, which is responsible for European air traffic, as of January 2020, there has been an extreme decrease in flights. From January, when the pandemic first appeared, there was a 1% decrease in February 2020. However, with the rapid spread of the pandemic, this decrease reached 41% in March 2020. In April 2020, when the pandemic had its effects all over the world, the decline reached its highest level of 88%. After these decreases, a slow recovery was experienced with the summer period and an increase in flights was observed until August 2020. However, despite this increase, the flight rate is 51% lower according to January 2020 data. According to the latest data from November 2020, the number of flights has decreased by 60% compared to January 2020 (EUROCONTROL, 2020).

According to the financial report which announced by Turkish Airlines, Turkish Airlines has lost a total of 5 Billion 588 Million TL in 2020 (THY, 2021). On the other hand, according to financial report which announced by Pegasus Airlines, Pegasus Airlines has lost a total of 1 Billion 965 Million TL in 2020 (Pegasus, 2021). According to the report which announced by International Civil Aviation Authority, the total loss of airlines around world is approximately 371 Billion USD (ICAO, 2021).

While the pandemic affected aviation negatively, it had a positive impact on air cargo transportation. With the closure of the whole world, passenger transportation has stopped, while the air cargo transportation has accelerated. Since air cargo transportation was not preferred much before the pandemic, airlines went to shrink in terms of cargo transportation. However, with the pandemic, air cargo transportation has grown rapidly. Before the pandemic, cargo typically made up around 12 percent of the sector's total revenue; that percentage tripled with pandemic (Bouwer et. all, 2021). When we examine air cargo transportation specifically for Turkish Cargo, Turkish Cargo continued its activities by taking various measures in this direction, according to the demand of cargo transportation with the pandemic. Turkish Cargo, which had a revenue share of 4.2% in 2019,

increased its revenue share to 5.1% in 2020. In addition, Turkish Cargo, which closed 2019 with a turnover of 1.72 billion dollars, increased its turnover by 61% in 2020 and achieved turnover of 2.7 billion dollars (THY, 2020).

4.2. Crisis management for pandemic

With the spread of the coronavirus, the whole world had started to stop its flights with China. After this stop, the countries had made an evacuation flight to save their citizens who remained in China and had started to quarantine their citizens by taking them to their countries. With these quarantine studies, countries have tried to protect themselves from the coronavirus epidemic. However, after a while, coronavirus started to be seen in all countries and the countries have gone to complete closure. With the complete closure, all flights were banned and airlines have grounded all their planes. During this period, only cargo flights were made and evacuation flights were made again when needed. In line with the statement made by EUROCONTROL, it can be seen that how much flights have decreased all over the world.

After the coronavirus affected the whole world, vaccine mobilization had started all over the world and all countries had tried to find a vaccine for the corona virus. There are 75 different vaccine studies that have been tested on humans all over the world. These vaccine studies are divided into various classes according to the test processes. These classes consist of "Preclinical testing, Phase 1 Safety Trials, Phase 2 Expanded Trials, Phase 3 Efficacy Trials, Early or Limited Approval, Approval, Combined Phase and Paused / Abandoned" classes. There are 12 vaccines which in the 2nd and 3rd phase among the vaccine studies carried out all over the world and 6 of these 12 vaccines have been started to be used as "early limited use" and the other 6 have been started to be used as "approved full use" against coronavirus (NY TIMES, 2021). According to the estimates of EUROCONTROL, if the vaccine is realized in 2021, recovery is expected by reaching 73% in 2021, 89% in 2022, 86% in 2023 and 103% in 2024. However, if the vaccine is found in 2022 instead of 2021, it is shown that this recovery process will be slower. In line with the estimation made, it is shown that if the vaccine is administered in 2022, it will only reach 92% in 2024 compared to 2019. However, if the vaccinations are not successful, it is predicted that it will only reach 75% in 2024 (EUROCONTROL, 2020).

In the face of this pandemic, some measures have been taken by the airline companies in Turkey in terms of passenger comfort and travel safety, in line with the measures of aviation authorities and health institutions. These; Online check-in to minimize contact at the airport, take only cabin luggage with personal belongings to avoid unnecessary luggage in the aircraft cabin, wearing a mask, non-contact check-in or boarding at the airport, special after each flight A number of measures have been taken, such as cleaning with cleaners, constantly cleaning the in-flight air with

HEPA filters, distributing hygiene sets during the flight and obtaining HES code before the flight (THY, 2020).

Measures against the COVID-19 outbreak have also been taken by authorities other than airline companies. According to the measures taken by the General Directorate of Civil Aviation, the exams to be made by the General Directorate were canceled, educational activities were stopped, and flights to certain countries were stopped in line with the recommendations given by the scientific board (SHGM, 2020).

5. Conclusion

Towards the end of 2019, the whole world was shocked by the news of the COVID-19 outbreak from China. Almost everyone living in today's world has begun to experience pandemic stories in today's world that have only read from history books. This new virus, which was ignored at first and only seen in China, has started to spread rapidly all over the world. Since the necessary precautions were not taken at first and people were behaving comfortably, this new virus has spread and affected the whole world rapidly. As a result of this spread, humanity has started to face enormous problems in terms of both health and financial.

After COVID-19 has gotten out of control and spread around the world, health mobilization has officially declared all over the world. And as a result of this mobilization, a pandemic has been officially declared. As a result of the announced pandemic, the whole world has started to take the necessary measures rapidly. First of all, although only the countries where COVID-19 cases are seen have taken precautions, gradually all countries of the world have started to take the necessary precautions against COVID-19. With the start of taking measures around the world, China has cut its connections with the whole world in the first place and stopped all flights. With China ceasing its flights, other countries have gradually decided to restrict flights with other countries. In cases where restrictions were not sufficient, all flights were stopped completely and countries have been isolated themselves from other countries.

With these flight bans, the aviation industry has officially stopped. This great crisis experienced by the aviation industry has also greatly affected the airline companies financially. In the beginning of the pandemic, the airline companies have made evacuation flights only for citizens who has stuck in other countries to return safely to their own countries. After these evacuation flights, cargo flights have started to continue gradually. However, almost all planes of the airline companies have been grounded, as the transportation of people has almost completely stopped. As a result of this crisis, airline companies, which could not generate any income, have made necessary assistance requests to protect themselves.

Serious efforts have been started around the world in order to get rid of this pandemic in the world. Almost all countries of the world have started studies for finding the

COVID-19 vaccine. However, the world was not expected to return to its former state in the near future, as vaccination studies cannot be concluded immediately and naturally it will take serious time. As of today, there are certain levels and accepted vaccines for COVID-19 around the world. Countries have wanted to quickly administer these vaccines to their citizens and wanted to get rid of the COVID-19 pandemic as soon as possible and return to normal. Along with the vaccination studies, normalization studies, which are called new normal, have been started all over the world.

Although COVID-19 vaccination has started worldwide as of December 13, 2020, the vaccine has not reached all people today. Considering the vaccine data applied worldwide, it is seen that, as April 1 2021, 596 million people have been vaccinated all over the world. Considering the world population, the number of people vaccinated so far accounts for approximately 7.8% of the world. Although this rate will progress gradually, vaccines reach some countries but not so quickly to the others. For example, while Israel has administered the vaccine to all its citizens, when we look at African countries, it is seen that the vaccine has reached them very little amount yet. For this reason, although some countries have vaccinated all of their citizens, it is thought that it will take a little longer to wait for the COVID-19 vaccine to be fully implemented all over the world, as other countries have not yet completed the vaccination. Considering the consequences of this worldwide pandemic and the speed of vaccination, people should also pay attention to their daily lives. If this epidemic is to end and the sectors are to be improved, all humanity should also take care of their own health (NY Times, 2021).

With the new normal that will be obtained as a result of this vaccination, the whole world is expected to gradually return to its old state. After the year 2019, when the pandemic first broke out, the aviation industry has suddenly turned upside down. As a result of the estimations made, it is shown that the aviation sector will recover rapidly once the pandemic period is over or a vaccine is available. However, it is expected that this recovery period will be much longer if there is no vaccine or if the vaccine does not work. With the recovery of the aviation sector, it is expected that people who are not sitting or stuck in a certain area will start to travel, and as a result, there will be heavy human traffic around the world.

Although the aviation sector, like many other sectors, has been negatively affected by the COVID-19 pandemic, we should know that this situation is temporary. Due to this negative process, the sector has suffered financial losses. However, airlines with strategic management and strategic planning managed to survive with minimal losses. Instead of laying off its staff, airlines that successfully managed this process reduced their financial expenses and deducted staff salaries and other expenses. Thus, both the rights of the company and the rights of the employees are protected. Being prepared for crisis situations such as pandemic processes that have happened differently in previous years and having

good crisis management has come to the forefront here. The COVID-19 process, which has been going on for about a year, will also end with solutions that develop and are implemented over time. After COVID-19 is over, the aviation sector will continue to work quickly from where it left off and will cover the damage suffered during this time.

To conclude in general terms, the aviation industry, which turned upside down with the pandemic, will quickly return to its former state after the pandemic and will get rid of this crisis and reach old good days again. With the return of the old days, a rapid recovery is expected in all sectors. As a result of this rapid recovery, it is expected that the economic problems, experienced with the pandemic, will be overcome.

6. Future researches

After the COVID-19 pandemic has started to spread around the world, the whole world has been adversely affected. Research which has made as a result of this influence has shown that how it affects from the pandemic in today's conditions. The study conducted under these conditions is also the data obtained as a result of today's conditions. However, the COVID-19 pandemic will be surely ended one day. With the new studies to be done after the end of the COVID-19 pandemic, it will be better understood that how the COVID-19 pandemic has influenced negatively the whole world. According to this situation, as a result of this study, we have shown that how the COVID-19 pandemic affected the aviation industry in today's conditions. However, for more accurate and definite results, studies to be done after the pandemic is over will be more accurate. In this direction, after the pandemic is over, a study can be carried out on how the aviation sector is affected by the pandemic and more accurate results can be obtained.

Author contribution statements

S. Ulufer Kansoy and K. Bakanoğlu contributed equally to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

Disclosure statement

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Ethics committee approval

All responsibility belongs to the researchers. All parties were involved in the research of their own free will.

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