

Assessing the Impacts of Sanctions on Iran's Tourism Zones Using the Multi-Criteria Decision-Making Methods

* ¹ Dr. shahrzad.moghadam

¹ & Faculty of Earth Sciences, Shahid Beheshti University, Tehran, Iran

Abstract

This article examines the impact of Iran's tourism zones on sanctions and evaluates the role of each criterion in the intensity and severity of the impact. The research method was descriptive-comparative whose type was applied. Ranking was done using the VIKOR technique and Expert Choice software by the four main criteria (attraction, advertising and marketing, tourism and investment, and infrastructure) and ten sub-criteria. The results show that the northern zone with a value of 0.00 has received the least effect from the international sanctions. The northwestern zone ranked the next with a value of 0.224. Based on the Expert Choice output, the central zone with a value of 0.248 was in the first rank due to the decrease in the number of foreign tourists and investments, which has suffered the most from the sanctions. The northern zone with a value of 0.236 has been less affected by the sanctions.

Keywords: Tourism; Multi-Criteria Decision-Making; Expert Choice; Sanctions; Iran.

1. Introduction

Tourism as the world's largest industry draws the attention of planners (Liu et.,2013) due to its positive association with economic growth (Dritsakis, 2012; Eeckels, Phyllis, and Leonard, 2012) and economic change in developed and developing countries (Garcia-melon et al, 2012). The industry is recognized as one of the drivers of economic development (Manzoor et al., 2019) because of capital accumulation, poverty reduction, improving Social welfare (Li, Jin, and Shi, 2018), increase in government tax revenues (Gnangnon, 2020) through government's entrepreneurship as key stakeholder (Pharino and Pearce, 2020) to attract tourists and investors (Ruggieri, 2016), and providing high-quality services that has been effective for tourists (Jandaghi et al., 2020).

Hence, it is one of the largest promising industries in the world in the economic sectors and service industries (Delavari, 2015). According to the latest UNWTO report (2019), tourism is the third largest export group (1.5 trillion\$). The world can be used as a platform for economic development (Talebi, Modiri, and Tarhani.,2017). The success of tourism policies depends directly on good understanding of aspects of domestic conditions such as economic, institutional (Zarei,2019), and proper distribution of infrastructure and Tourism services as well as external economic factors such as quality and manner of involvement of global, national and regional agents, foreign direct investment, fluctuations Exchange rates (DeVita, 2014), global economic conditions, international peace and stability, a positive image of the destination and the imposition of visa restrictions on tourism(Pazhuhan and Shiri, 2020; Pratt & Liu 2016).

Despite Iran's high potential in tourism, little attention has been paid to it due to the pristine market, the political dichotomy, and the image of Iran in the world (Khodadadi, 2016). As a result, the number of tourists entering Iran since the beginning of 1990 has decreased (Ghorbani, 2013). According to the report of the World Economic Forum, Iran is ranked 114th in the world in the field of tourism. It is lower than all the countries in the Middle East and among the last ranks of world tourism(Parsapour, 2019). It is in contrast with the 20-year vision document based on which the number of foreign tourists in Iran in 1404 would reach 20 million. Meanwhile, the countries of the region have been able to capture the larger market of tourism demand, and every day new destinations appeared in their tourism market. In a simple comparison between the number of tourists entering Iran and some other developing countries such as Turkey (27 million tourists), Malaysia (24 million tourists), UAE (7 million tourists), and Syria (6 Million tourists) the critical situation of this industry in Iran becomes more obvious.

Recently, with the withdrawal of the United States from the UN Security Council (Holpuch, 2018), the increase in international sanctions, decrease in oil exports, attempts to find alternatives (Parsapour,2019), the importance of tourism in international trade and the impact of international policies as sanctions in this delicate and dynamic industry, this article seeks to consider the effects of political relations, especially international sanctions on Iran's tourism industry. It examines the heterogeneous impact of sanctions on zones, given the geopolitics of tourism. Although the review of the related literature shows that other studies focus on sanctions and Iran, the relationship between international sanctions and tourism is an emerging research topic that needs further study. Because of the impact of sanctions on the information and communication millennium, the formation of the global village and the compactness of time and space have become very complex.

This article has been compiled into 4 sections. Section 1 describes the theoretical foundations of the tourism industry and economic sanctions. Section 2 provides the research method and how to collect and analyze data. Sections 3 and 4 contain the findings and conclusions, respectively. This article contributes to the current literature in three ways. First, identifying the relationship between economic sanctions and tourism in a country like Iran which is under heavy economic sanctions. Second, investigate the impact of different tourism zones on economic sanctions. Third,

introduce the effective components and effectiveness of the components and criteria in the management of Iran's tourism destination to plan for the embargo period and attract tourists to Iran's tourism zones.

2. Theoretical Background

2.1 Iran's tourism industry faces international sanctions

Tourism has political implications for the movement of people from one country to another (Song, Gartner & Tasci, 2012) and is associated with the international political climate and diplomacy (Suntikul & Butler, 2010). As a result, tourism development in any country is affected by the political sphere and governance (Joppe, 2017). Meanwhile, it has to be stated that sanctions have had significant consequences (Seyfi & Hall, 2018a; 2019) in this vulnerable industry (Samitas, Asteriou, Polyzos & Kenourgios, 2018).

Economic sanctions are not a new phenomenon (Oechslein, 2014), and from the beginning of World War I until 1990, an average of 1.5 sanctions have been imposed annually. but in recent times due to coercive policies more humane than military conflicts, recognition of sanctions through the Security Council (Cortright & Lopez, 2018), the passage of the Enemy Deal Act by Congress in 1917, and recognition for management of the world's security (Allen & Lektzian, 2013), Sanctions have become more diverse as the share of trade sanctions decreases and financial or travel sanctions increase. Trade sanctions have a negative but heterogeneous effect on trade (Attia, Grauvogel, Soest: 2020).

Studies have demonstrated that sanctions have significant consequences for tourism (Seyfi and Hall, 2018a; Seyfi and Hall, 2019; Seyfi, Hall and Fagnoni, 2019) including direct effects, restrictions on international transportation, airlines, export of the tourism software and technology, and blocking the access to the international financial institutions. Indirect impacts include the negative effects on the destination image, difficulty in foreign exchange transactions, attraction of the foreign investments (Fereidouni & Al-mulali 2014) and increased perceived risk for the travelers (Pratt and Alizadeh, 2017; Seyfi and Hall, 2018a; Seyfi and Hall, 2019b; Seyfi et al., 2019a). The above-mentioned factors exert great influence on the tourism in the destinations affected by the sanctions in terms of management and marketing. Over time, sanctions have had a negative effect on the economic growth as a result of inflation, which has reduced the purchasing power, widened the poverty gap (Kahrami, 2019), and caused income inequality (Afesorgbor & Mahadevan, 2016) in the destinations under sanctions.

The history of tourism planning and policy-making in Iran is not separated from the history of national planning. The Fourth Development Plan has also paid attention to the tourism (Zargham-Boroujeni. and Bazrafshan, 2015), and the category of tourism has been viewed from a reductionist and culturally controlled perspective (Veisi, 2017).

Tourism development in Iran is influenced by various factors such as marketing and advertising, negative image of security destination, political instability in the Middle East, poor management and decision-making among tourism officials (Ghaderi and Henderson, 2012), social and cultural issues like the requirement for women to wear the hijab and the prohibition of alcohol consumption (Seifi and Hall, 2019), economic infrastructure, tourism facilities (Zarei, 2019), security of domestic investment (Modiri et al., 2017), and attracting foreign tourists with diverse tastes (Zamani-Farahani and Musa, 2012). It should be stated that each of these factors has been affected by sanctions in some ways.

Numerous sanctions have been imposed on Iran by international countries and institutions since 1979 (Laleh and Farahani, 2013; Prat and Alizadeh, 2018). These sanctions have mainly targetted Iran's nuclear program. The result is the referral of its case from the International Atomic Energy Agency to the Security Council (Delavari, 2015). Consequently, the six-stage US sanctions against the Islamic Republic of Iran (Orakhlashvili, 2015) were intensified to the extent that some believe the sanctions imposed on Iran in 2012 were one of the largest punishments (Farahani & Shabani, 2013).

In spite of the international sanctions, Iran's economy improved sharply in 2016 (Khodadadi, 2018) and GDP grew from 7.4% in 2012 to 13.3% in 2016 (World Bank, 2018). Although after the revolution, due to the war conditions in the country, the tourism sector was severely weakened and the number of international tourists was reduced to a minimum (Baum & O'Gorman, 2010), from 2008 to 2011, the arrival of international tourists has grown by 11.2 percent per year. In 2017, more than five million incoming tourists visited Iran, which is almost 3 times the number of incoming tourists in 2009. The number of tourists visiting Iran has increased significantly in recent years, from 2 million in 2009 to more than 6 million in 2017 (Euromonitor International, 2017). The nuclear deal and imposition of sanctions against Iran in 2015 led to the immediate growth of the tourism industry, making Iran a thriving international tourism destination.

While the sanctions were being imposed, Cox and Kings, as one of the world's most famous and long-established travel companies predicted that Iran would be among the hottest tourist destinations in 2017. Forbes Magazine also introduced Iran as one of the 10 most interesting places to visit in 2017 (Khodadadi, 2016). As a result of this agreement, Iran was able to upgrade the significant investments in the field of tourism infrastructure such as construction of the international chain hotels and various international centers (Euromonitor International, 2016), air infrastructure, construction of the new terminals, development of the airports in large cities like Tehran, Isfahan, Tabriz, Mashhad and Shiraz as well as the development of rail transport (Seyfi and Hall, 2018b). Taking the current situation and the prevailing trend of easing sanctions into consideration, tourism researchers believe that 10 to 15

percent annual growth in international tourism is a cautious goal for Iran. In addition to the growth of tourism, policies, infrastructure, and environmental management in Iran are not endangered (Pratt, & Alizadeh, 2017). However, after the withdrawal of the United States from the nuclear deal (Holpuch, 2018), the sanctions covered a wide range of economic, scientific, technological, military and strategic activities. Mohammadi Khabazan's research has shown that the sanctions have a negative effect on the macroeconomic variables including total exports and imports, GDP, and household welfare. These impacts are much greater under the banking sanctions than the oil sanctions (Mohammadi Khabazan, 2015). These sanctions focused on Iran's one-dimensional economy and its dependence on oil (Sadeghi-Boroujerdi, 2012) aiming at hurting Iran's growth ultimately (Nephew, 2017). Meanwhile, the Iranian government named tourism as a tool to reduce the dependence of government revenue on oil (Pazhuhani and Shiri, 2020). In this regard, the Ministry of Cultural Heritage and Tourism has taken great steps to develop tourism in Iran and reduce the pressure and impact of sanctions since 2019 (Nematpour, Khodadadi, Rezaei, and Makian, 2020). In order to compensate the currency camp, in 2019, only about 7.2 million foreign tourists entered Iran (UNWTO, 2019) including participants in nature and cultural tours and mainly Iranians living abroad who visited their friends and relatives (Ghaderi and Henderson, 2012). This growing trend not only materialized but also had many negative effects on the Iranian tourism industry (Khodadadi, 2016) like some predictions caused the regression of this sector. The spatial manifestation of this matter shows decline in the tourist arrivals by 19% to the extent that the Kazakh Ambassador in Iran noted, "Sanctions hinder the development of tourism and trade in Iran and Kazakhstan. Regarding the medical tourism sector which was in a better position prior to the sanctions, it should be claimed that the number of tourists decreased.

In the continuation of this process, a lot of pressure was put on the organizers of big tours such as propaganda and bad news about Iran, restriction of the international financial transactions, removal of Iran from the field of online tourism, removing the Iran's name from the list of tour sales, and restricting the travel information about Iran in the reputable sites like as Trip Advisor. In order to overcome this adverse psychological atmosphere and prevent losing the tourists, Iran took some measures including receiving a cash tour, issuing a one-way visa for the European citizens, exempting the Chinese citizens from obtaining the visas, and lack of registering the entry and exit stamp to Iran in the passports of the foreign citizens to increase the resilience of the tourism industry during the embargo, and use this industry as a tool to solve the economic and currency problems during the embargo (Ghorbani, 2013).

Obviously, the sanctions have influenced the Iran's tourism industry at two levels of infrastructure development and attraction of the foreign tourists (Shokrollahi, 2018). Zarei has mentioned that the currency fluctuations and sanctions have reduced the number of tourists entering Shiraz (2019). Sanctions have been introduced as one of the most important threats to the foreign tourism in Isfahan province (Ranjbarian and Khazaei-Poul, 2013). Farahani and Shabani believe that the sanctions against Iran have had positive (increasing the number of incoming and outgoing visitors) and negative effects (reducing the number of outbound tourists) on the Iranian tourism.

A survey of the country's elite aviation industry revealed that the air sanctions have influenced four areas of airlines, tourism, aviation, and airport development, respectively. It has also confirmed that the tourism industry depends on the aviation industry, therefore, the impact of sanctions on the airlines was determined (Bayati Doosti, 2013). Consequently, they were found to influence the economy, and the tourism was considered as a tool to get out of the conditions created by .sanctions. Furthermore, appropriate solutions were provided to improve the tourism situation in Iran to deal with the economic sanctions (Laleh and Farahani, 2013; Farahi, 2015).

In general, there are two views on the impact of international sanctions on tourism. First, some believe that the low price in the destination and occurrence of some events lead to the reduction of the demand for the destination which can cause the formation of cheap destinations and attract less tourists (Samitas et al, 2018). Due to the cheap tourist destination (Blanc and things, 2013), exchange rate fluctuations and competitive advantage for foreign tourism, even in the face of sanctions, Iran has experienced an increase in tourism (Khodadadi, 2016) since exchange rate fluctuations usually affect the cost of tourism in the country. Destination, tourism demand Destination, and tourist arrival are also effective (Lee, Blake and Cooper, 2010). On the other hand, following the devaluation of the national currency and increase in the cost of foreign travel, domestic tourism grew and the attention of 80 million people were drawn to domestic destinations which is an opportunity to develop domestic tourism (Farahani and Shabani 2013 and Euromonitor International, 2017).

The second theory is that if economic sanctions, the erosion of the country's aviation fleet and the prevention of the sale of aircraft spare parts and the banning of tourists from some countries of origin, tourism growth could have been greater (Khodadadi 2016). Proponents of this theory assume that although Iran is a cheap tourist destination, obstacles such as credit card restrictions and the poor image of Iran (Ranjbarian, Forghani, and Ghaffari, 2013), and visa restrictions on incoming tourists (Li & Song, 2013) reduce tourist arrivals. In terms of domestic tourist growth, owing to the erosion of infrastructure and heterogeneous investment in tourism destinations in the period of sanctions, only domestic destinations that have provided suitable infrastructure and bases for tourists have been welcomed.

3. Material and Methods

Initially, to examine the relationship between economic sanctions and tourism, all articles in academic journals at the Science Direct Scopus, Sage Web of Science, Alzier, and Emerald databases were reviewed. In situations where different criteria are not aligned, decision-making must take place in a multidimensional space. In such cases, multi-criteria evaluation methods are used since they suppose that each criterion is a separate axis or dimension. Therefore, tourism data and information in 2019 were collected and prepared from the Statistical Center of Iran (SCI) and the Organization of Cultural Heritage, Tourism, and Handicrafts. According to the studied components and available data, the prevailing approach of this research was descriptive-analytical. The study area is Iran. Four main criteria (attraction, advertising and marketing, tourism and investment, and infrastructure) in the form of ten sub-criteria (cultural attractions, historical attractions, number of tourists, number of trips, number of visits to the historical sites and museums, production of the radio and television programs and newspapers, cyberspace and internet access, number of accommodation, and current and construction investments) were considered to rank Iran's tourist zones concerning the opinion of the experts and access to the selected data. Fig. 1 illustrates the conceptual model of the research and the used components. The group analytic hierarchy process (AHP) method and Expert Choice software were utilized to weight the indices in the normalized matrix. The software output demonstrates the prioritization of the tourism zones based on the effect of the sanctions in addition to weighting the criteria and sub-criteria. The sensitivity of the priority of tourism zones was discussed in the form of functional, dynamic, slope, two-dimensional, and difference sensitivities. The decision-making matrix of the indicators was completed by the experts, tourism officials, and professors in this field randomly due to the expert nature of the AHP method based on the research background in this method (Baby,2013; Melillo and Pecchia,2016). The scattered and wide distribution of the statistical population and multi-stage cluster random sampling were used (with a sample size of 32). The VIKOR method was employed to analyze the data, which is one of the most widely used numerical analysis techniques for ranking the options. This technique was first proposed by Opricovic and Tzeng. VIKOR is a multi-criteria decision method used for solving a decision problem with inappropriate criteria and different and conflicting units of measurement. The results of this method are in the form of an agreement ranking list and one or more agreement solutions.

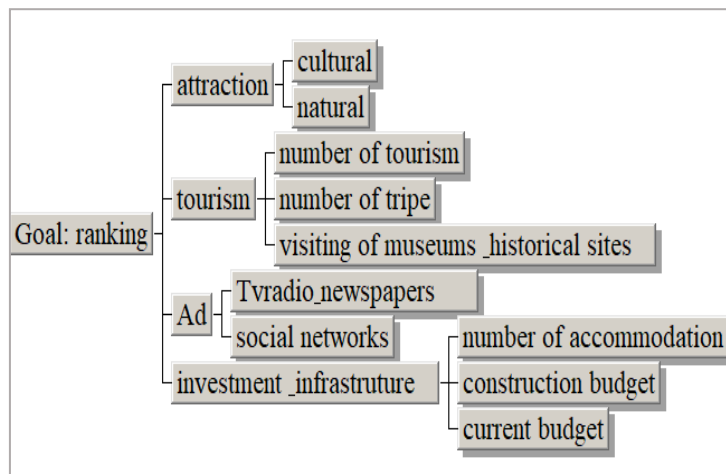


Figure 1. The conceptual model of the research and used components(developed by the author)

4. Case Study

Iran was considered as the most important tourist destination in the Middle East during the 1967-1977 and has very rich cultural and heritage resources (Baum and O’Gorman, 2010). Iran is one of the top UNESCO World Heritage Sites, consisting of 22 UNESCO World Heritage Sites (Parsapour, 2019). It has 56 other places in the UNESCO pilot list (UNESCO, 2018). Due to the fierce competition between destinations to attract tourists (Remoaldo, Vareiro, Ribeiro & Santos, 2014) this is not only essential in terms of encouraging visitors to visit the area (González, & López 2017) but also maintenance of these sites that can attract tourists (Poria, Reichel & Cohen, 2013). According to the statistics of this organization, Iran is among the top ten countries in the world in terms of ancient and historical sites (Blanke & Chiesa, 2013; Zamani-Farahani and Musa, 2012). With 1.2 million hills and 150,000 historical monuments and diverse natural resources, the country ranks 10th and 5th in terms of natural and cultural attractions, respectively. Furthermore, it is one of the top three countries in the world in terms of diversity in the handicrafts. Iran is a four-season country with northern coasts, favorable climatic conditions, and dense vegetation. It is also a very favorable destination for tourism (Parret & Alizadeh, 2018). The tourism value of the country is due to its proximity to the very arid region of the world and the desert belt. This geographical phenomenon has a huge potential in attracting the tourists from the Middle East. In the southern part of the country, Kish and Qeshm Islands as the top domestic and international tourist destinations of Iran (Khodadadi,

2018) can attract international tourists (Veisi,2017). Emergence of cruise tourism has also improved the situation (Khodadadi, 2018c). According to the Tourism Organization, the share of Iran's tourism industry in GDP is about \$ 119 million (equivalent to 2.4 %) which is expected to increase to 4% in 2023. Currently, 475,000 Iranians have been employed in the tourism industry and related industries accounting for 1.2% of the total active labor force in Iran. Based on the statistics published by the Organization of Cultural Heritage, Tourism, and Handicrafts in Iran, 7 million and 800,000 foreign tourists entered the country in 2019, and each tourist brought about 1400 dollars of foreign exchange for the country. However, according to the 20-Year Vision Document, Iran should receive 20 million tourists by 2025 (Parsapour,2019).

From an organizational point of view, the first tourism management was established in 1935 by the Ministry of Interior called Tourism. So far, many institutional and organizational changes have occurred. Planning for tourism has become purposeful and systematic. The Comprehensive Tourism Development Plan of Iran, which is based on similar studies and international experiences, has prepared a map of the country's tourism zoning. Fig. 3 shows Iran's tourism zoning. Iran's tourism hubs consisting of at least one hub have been studied and finally divided into two general types of international and national poles in terms of the type of attractions and the state of infrastructure, especially in the field of transportation. One of the top international pole centers operates in the sphere of influence. Accordingly, the country is divided into seven administrative districts.

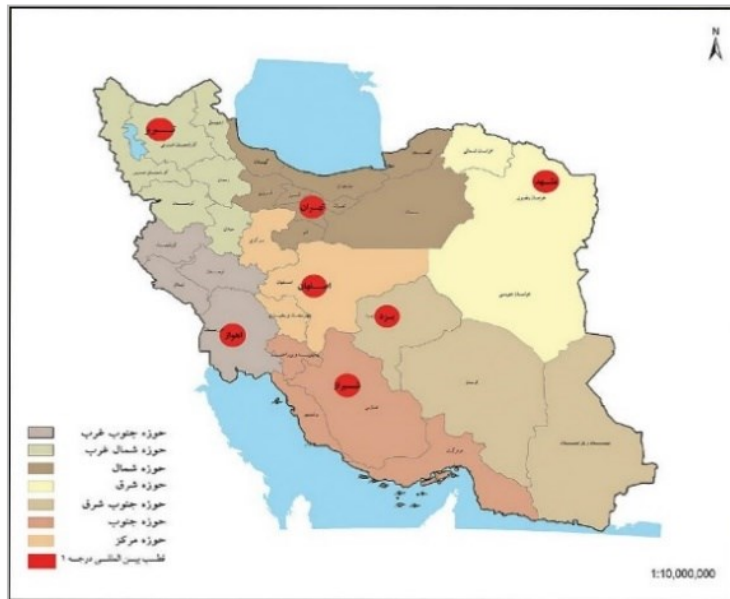


Figure 2. shows Iran's tourism zoning (developed by the author)

5. Results

5.1. Forming a Decision Matrix

According to Fig. 1, in this research, ten sub-criteria and four main criteria were used. Herein, all the sub-criteria except for social network criteria were quantitative and evaluated positively for the effectiveness of the criteria. Table 2 demonstrates the decision matrix.

Table 2. Decision matrix

	Number of trips	Radio & Tv & newspapers	Accommodations	Visiting museums and historical sites	tourists	investment	Social Networks	natural	Cultural
Southwest Zone	25877865	22683	161	1086000	1911039	15212159	4	161	228
Northwest Zone	150364772	36961	527	2519000	2004098	14651692	7	189	370
Northern Zone	33937059	46100	928	6173000	3023609	24835592	9	269	533
Eastern Zone	14993708	21447	1067	1817000	53405495	10894821	9	61	164
Southeast Zone	5973153	17440	172	1090000	507859	10347175	3	64	146
Southern Zone	28367203	20615	291	4387000	445706	13751587	5	168	293
Central Zone	23912310	16605	197	2637000	585329	7795406	8	65	284
sum	283426070	181851	3343	19709000	61883135	97488432	45	977	2018

2. De-scaling the Data and Forming a Standard Matrix

Due to the different units of measurement for quantitative values of criteria and indicators, it was necessary to convert the small values into dimensionless digits. Therefore, all the values assigned to the decision matrix verses were normalized and scaled based on the following formula. Table 3 shows the standardized matrix of criteria.

$$r_{ij} = \frac{X_{ij}}{\sqrt{\sum_{i=1}^m x_{ji}^2}}$$

Table 3. standardized matrix

	Number of trips	Radio & Tv & newspapers	Accommodations	Visiting museums and historical sites	tourists	investment	Social Networks	natural	Cultural
Southwest Zone	0.091303757	0.124733986	0.048160335	0.05510173	0.030881419	0.156040657	0.088888889	0.16479	0.112983
Northwest Zone	0.530525551	0.203248814	0.157642836	0.12780963	0.032385205	0.150291596	0.155555556	0.19345	0.18335
Northern Zone	0.119738664	0.253504242	0.277594975	0.313207164	0.048859984	0.254754246	0.2	0.27533	0.264123
Eastern Zone	0.052901654	0.117937212	0.319174394	0.092191385	0.863005648	0.111755013	0.2	0.06244	0.081269
Southeast Zone	0.021074819	0.09590269	0.051450793	0.055304683	0.008206743	0.106137465	0.066666667	0.06551	0.072349
Southern Zone	0.100086781	0.113362038	0.087047562	0.222588665	0.007202382	0.141058654	0.111111111	0.17195	0.145193
Central Zone	0.084368774	0.091311018	0.058929106	0.133796743	0.009458619	0.079962369	0.177777778	0.06653	0.140733
max	0.530525551	0.253504242	0.319174394	0.313207164	0.863005648	0.254754246	0.2	0.27533	0.264123
min	0.021074819	0.091311018	0.048160335	0.05510173	0.007202382	0.079962369	0.066666667	0.06244	0.072349

3. Weighted Matrix

The V matrix is the product of the standard values of each index multiplied by its weights. The matrix obtained from this process is the weighted matrix. This matrix was determined from the relation specifying the w_j based on $\sum_{j=1}^n w_j = 1$ (set of weights equal to 1) and the adjustment of w_j calculated through th group AHP method and Expert Choice software. The matrix results were integrated in the Expert Choice software. Finally, the weight of components and sub-criteria was obtained with an incompatibility rate (0.01). Fig. 3 illustrates the weights of the criteria and sub-criteria, respectively.

Table4. weighted matrix

	Number of trips	Radio & Tv & newspapers	Accommodations	Visiting museums and historical sites	tourists	investment	Social Networks	natural	Cultural
Southwest Zone	0.307	0.207	0.195	0.299	0.335	0.342	0.616	0.298	0.337
Northwest Zone	0.000	0.081	0.116	0.215	0.335	0.362	0.246	0.220	0.180
Northern Zone	0.287	0.000	0.030	0.000	0.328	0.000	0.000	0.000	0.000
Eastern Zone	0.334	0.218	0.000	0.256	0.000	0.496	0.000	0.573	0.407
Southeast Zone	0.356	0.254	0.193	0.299	0.345	0.515	0.739	0.565	0.427
Southern Zone	0.301	0.226	0.167	0.105	0.345	0.394	0.493	0.278	0.265
Central Zone	0.312	0.261	0.187	0.208	0.344	0.606	0.123	0.562	0.275

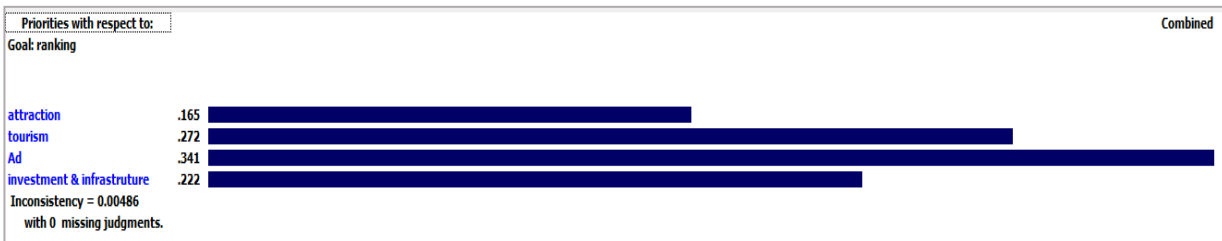


Figure 3. weights of the criteria and sub-criteria (developed by the author)

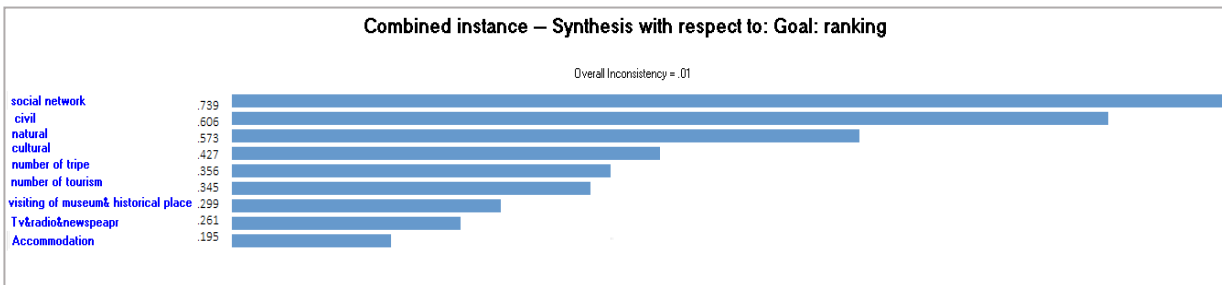


Figure 4. Determining the Highest and Lowest Values of the Normal Weighted Matrix (developed by the author)

$$f_i^* = \max_j f_{ij} ; \quad f_i^- = \min_j f_{ij}$$

5.1. Determining the Desirability Index and Dissatisfaction Index and Calculating the Value and Final Ranking of the Options

$$Q_j = v \cdot \frac{S_j - S^-}{S^+ - S^-} + (1-v) \cdot \frac{R_j - R^-}{R^+ - R^-}$$

$$S_j = \sum_{i=1}^n w_i \cdot \frac{f_i^* - f_{ij}}{f_i^* - f_i^-}; \quad R_j = \max_i \left[w_i \cdot \frac{f_i^* - f_{ij}}{f_i^* - f_i^-} \right]$$

Table 5. Desirability index (S) and dissatisfaction index (R) and calculation of Q

	Si	Ri	qi
Southwest Zone	2.936	0.616	0.726
Northwest Zone	1.755	0.362	0.224
Northern Zone	0.645	0.328	0.000
Eastern Zone	2.284	0.573	0.567
Southeast Zone	3.692	0.739	1.000
Southern Zone	2.573	0.493	0.517
Central Zone	2.878	0.606	0.705
max *	3.692	0.739	v=0.5
min-	0.645	0.328	

Fig 4 and Table 5 present the results obtained from the VIKOR technique. As can be seen from Fig 4, the northern zone with a numerical value of 0.00 has the top option followed by the northwestern zone with a value of 0.224. Due to regional conditions and the devaluation of the national currency in both countries, in recent years Turkey has been considered as a cheaper destination than other foreign tourist destinations by domestic tourists. Land traveling to the Van in Turkey and the experience of foreign travel have been the factors for the number of domestic tourists visiting this zone. On the other hand, this zone is the center of medical tourism, especially sludge therapy in Iran. With the increase in the price of foreign currencies and the devaluation of the national currency, attention to medical tourism in this region has also increased. Southeastern tourism with a numerical value of 1 has suffered the most from sanctions. This can be attributed to the macroeconomic losses of sanctions and the reduction of public, private and international investments in the tourism industry of this zone such as infrastructure, transportation, and accommodation. This tourism zone corresponds to the most deprived provinces of Iran, which suffers from economic poverty, unemployment, and weak infrastructure in the period before the embargo. This trend has been intensified with the imposition of sanctions and the deterioration of national investment and employment conditions. According to the final map of the zone with a value range of 0, corresponding to the north and south coastline, the attraction of religious tourism in the northeast and therapeutic tourism of the northwest zone have always been of interest to domestic tourists in Iran. The central zone is ranked 5th in terms of sanctions due to the decrease in the number of foreign tourists entering Iran. Also, based on the results of the study, the adaptation coefficient in this study was less than 0.1. Among the effective factors in the impact of the tourism industry from sanctions, the criterion of advertising with a weight coefficient (0.341) is the most important one and the criterion of attraction with a weight coefficient (0.165) is the least effective in Iranian tourism during the sanctions. An examination of the sub-criteria shows that the most effective factor in the impact of sanctions on Iranian tourism is cyberspace with a weight coefficient (of 0.739) and then construction investments with a weight coefficient (of 0.606). The least effective sub-criterion is accommodation with a weight coefficient (0.195). The southeastern zone with a value of 1 ranked the last requiring the attention of the planners, policy makers, and government officials during the embargo period so that the fragile tourism industry in this zone less.

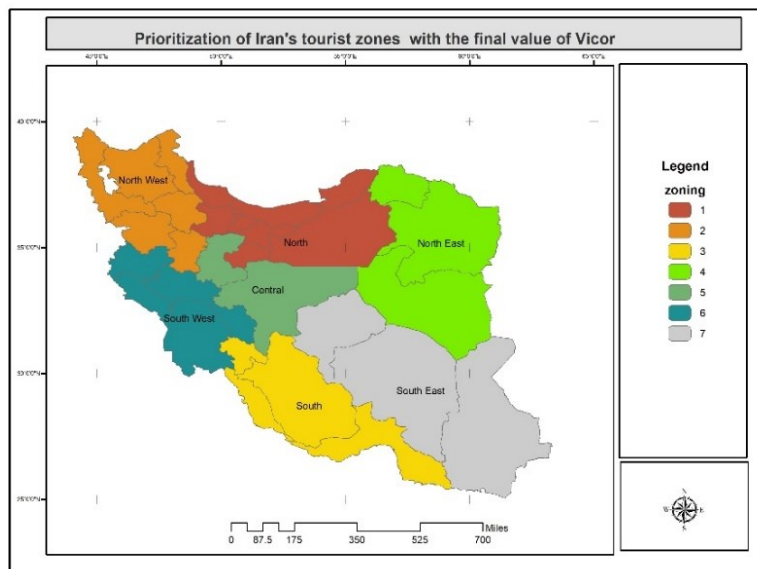


Figure 4. Influence of Iran's tourism zones on sanctions based on the Victor technique (developed by the author).

5.2. Sensitivity Analysis and Ranking of the Tourism Zones in the Expert Choice Software

Sensitivity analysis can be considered as a systematic method for determining the importance of research criteria and sub-criteria influencing the final evaluation. In this regard, a set of sensitivity analyses were conducted to investigate the effect of the changes in the weight of criteria (preference) in ranking the tourism zones in the form of functional, dynamic, and head sensitivity analyses. Studying the effect of weight changes in the four main criteria (Fig. 5) and their effect on the final results in the Expert Choice software environment indicated that in all options, the attraction criterion had the greatest impact on the Iranian tourism industry. This shows the domestic tourists' attention to the country's attractions due to the devaluation of the national currency and increase in the foreign travel costs. The northern zone corresponds to the coastal strip, the capital, and the eastern zone with the center of Mashhad is the destination of Imam Shiite pilgrims as the most important domestic religious tourism destination. Concerning the attraction criterion, the highest weight was obtained by the northern zone followed by the eastern zone. The lowest weight in this criterion was related to the southeastern zone. Due to the sanctions, long-term tourism plans and large infrastructure and physical investments in this zone have not been realized. In the incoming tourist criterion, because of the devaluation of the national currency, domestic tourists have paid more attention to religious tourism. On the other hand, foreign tourists from Shiite countries in the region such as Bahrain and Iraq prefer to travel to Mashhad because it is cheap. The city has been chosen as a destination for religious and recreational tourism. For these reasons, during the embargo, the eastern zone was in comparison with other tourist zones in Iran in terms of tourist entry and relative superiority. In terms of advertising and investment, the central sector has the highest weight. The justification for this stems from the fact that most of the sites inscribed on the UNESCO World Heritage List belong to this zone (UNESCO, 2018). For the tourism in the eastern zone, in terms of advertising and investment, the central part had the highest weight. The lowest effect weight in all the criteria was related to the southeastern zone indicating that the planners and policy makers should pay special attention to the prosperity of tourism in the southeastern zone.

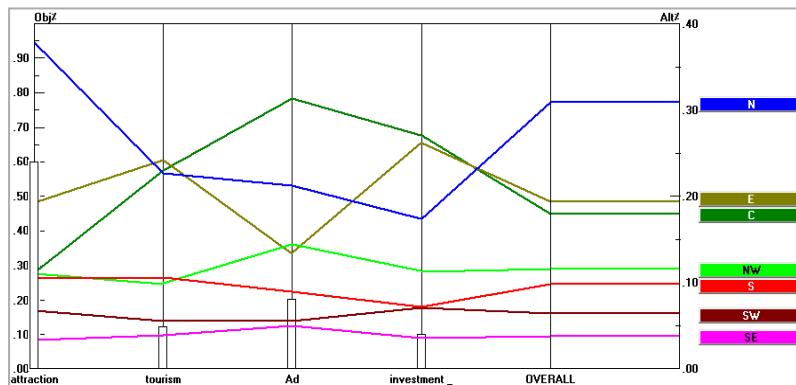


Figure 5. The results of dynamic sensitivity analysis (developed by the author).

The sensitivity gradient analysis evaluates the ranking of the options for each criterion. Fig. 6 shows the results of the gradient sensitivity analysis of the tourism zones concerning the criteria. The northern and central zones had the highest sensitivity to the attraction criterion. 25% of the changes caused the final ranking of the northern and central zones to shift. This indicates that the prosperity of tourism in the northern zone compared to the central zone during the embargo period is affected by the low inflow of foreign tourists the attention of domestic tourists to the coastline and the decrease in the outflow of domestic tourists. They had the least sensitivity to the tourist criterion. 90% change factor caused the options ranking to shift. In this case, the eastern zone moved to the first rank and the northern zone moved to the third rank. Gradient sensitivity analysis showed that according to the experts of the central zone, it has been able to have a significant advantage over the other tourist zones in the country by relying on the advertisements, the global reputation of the sites registered in UNESCO, and the diplomacy of the ruling city of Isfahan. Advertising and inappropriate media space have reduced the influx of foreign tourists and increased the vulnerability of the tourist zone during the sanctions.

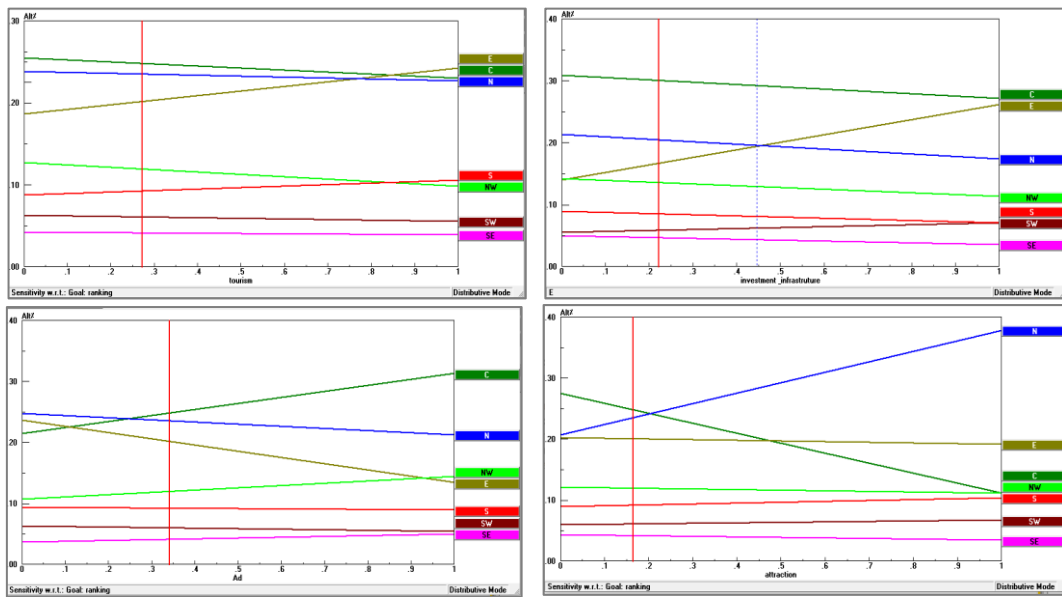


Figure 6. The results of gradient sensitivity analysis (developed by the author).

If the effect of the coefficient of variation is reduced below 10 % in the advertising criteria, the northern zone will be in the first rank, the eastern zone in the second rank, and the central zone in the third rank. The northwestern zone could be ranked third with a 91% increase in advertising. This has started with urban diplomacy and the twinning actions of the tourism hubs of this zone, Tabriz and Urmia. The findings of the gradient sensitivity analysis showed that if the investment in the eastern zone increases by 45%, it will be in second place. Because it is a cheap destination for foreign tourism and the first destination for religious tourism is domestic tourists.

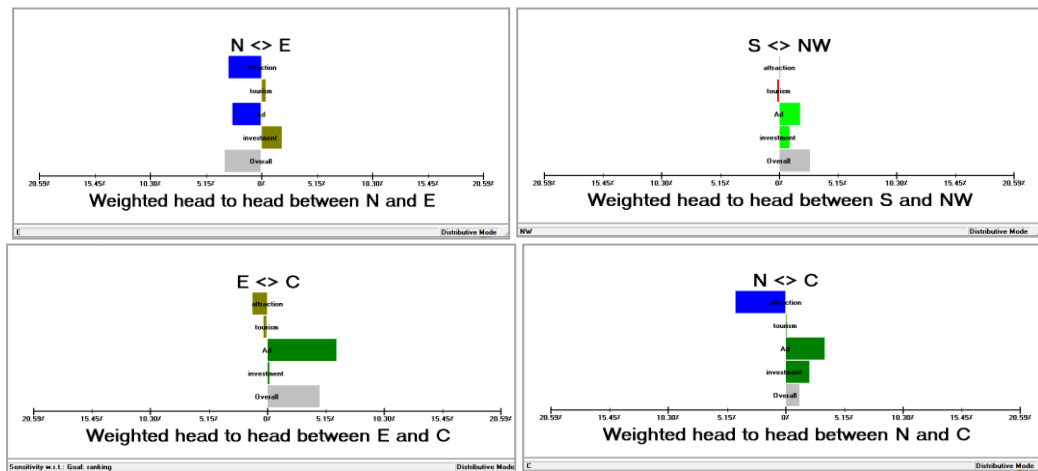


Figure 7. Head-to-head analysis diagrams of the tourism zones (developed by the author).

Fig. 7 demonstrates the head-to-head analysis diagrams of the tourism zones. The findings showed that the northern zone is preferable to the other zones in most cases. That is, it has had the least impact on sanctions in most components. Concerning some criteria, such as tourism and investment, the eastern zone is preferable to the northern zone. However, in terms of advertising and investment, the central zone is preferable to the northern zone due to active urban diplomacy and the largest number of World Heritage Sites. The northwestern zone is preferable to the southern zone in terms of investment and advertising. Because of urban diplomacy and numerous sisterhoods with the cities of Azerbaijan and Turkey, it seeks to reduce the effects of international sanctions on the economy and tourism. The central zone is preferable to the eastern zone in terms of advertising. Meanwhile, the eastern zone to the center of Mashhad has a high potential to attract Shiite tourists from the region such as Iraq and Bahrain. Therefore, macro-tourism policies and plans should be made so that the effects of sanctions do not harm the tourism industry in this zone.

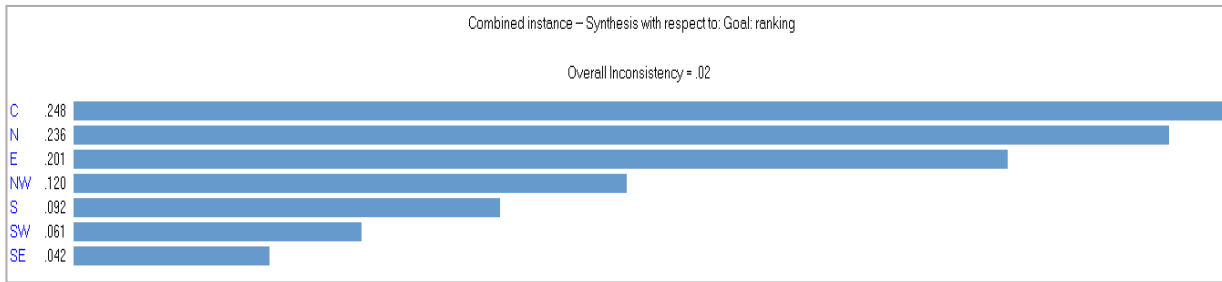


Figure 8. Influence of Iran's tourism zones on sanctions based on the Expert Choice software (developed by the author).

Based on the output of the Expert Choice software (Fig. 8), the central zone with a numerical value of 0.248 was in the first rank. The tourism hub of this zone is the historical city of Isfahan. It has attracted fewer foreign tourists because of financial constraints, exhaustion of the air transport fleet, visa restrictions, etc., which are the result of sanctions. However, on the other hand, owing to the devaluation of the national currency and the decrease in the outflow of domestic tourists, this city has been selected as the first tourist destination during Iranian New Year holidays in recent years and has filled the gap to some extent. The next zone is the northern zone with a numerical value of 0.236. The northwestern zone ranked fourth with a numerical value of 0.120. While the findings of the VIKOR technique and software output were not same in the high zones, in the lower ranks, the outputs were same and the southeastern and southwestern zones had the lowest ranks. They have both suffered most from economic sanctions in the tourism industry.

5. Conclusion

Tourism is among the most promising activities considered as a development gateway. This view has caused the different countries to rely on all their potential and actual capacities so that they have not neglected this thriving industry and have shown more efforts in shaping and structuring it. In Iran, the tourism industry, as one of the service sub-sectors in the country's economy is facing the economic crisis caused by the sanctions and its problems. Sanctions have destabilized Iran's tourism system (Nematpour et al, 2020) Iran's economic sanctions are one of the most important economic crises which have caused instability in the tourism industry. The problem of price instability, inflation and multiplicity in pricing, lack of the financial resources to develop and equip the required facilities in line with similar problems have put the diverse and lucrative tourism industry in more troubles. After imposition of the sanctions, the tourism market took the necessary precautions to deal with the crises so as to protect this emerging industry, which is sensitive to the political and economic events away from further harms. The findings of the present study showed that the effects of sanctions on the tourism industry have not been uniform and homogeneous in all areas of Iran. Moreover, the sensitivity of the zones in the criteria and sub-criteria has been very heterogeneous and variable. The least effect of the international sanctions on the tourism industry was related to the northern zone with the centrality of Tehran with a numerical value of 0.00 followed by northwestern zone with the centrality of Tabriz with a value of 0.224. The southeastern zone, centered on Yazd received the most effect of the international sanctions with a value of 1. Southeastern tourism with a numerical value of 1 has suffered the most from sanctions. This can be attributed to the macroeconomic losses of the sanctions and the reduction of public, private and international investments in the tourism industry of this zone such as infrastructure, transportation and accommodation. This tourism zone corresponds to the most deprived provinces of Iran, which suffers from economic poverty, unemployment and weak infrastructure in the pre-embargo period. This trend has intensified with the imposition of sanctions and the deterioration of national investment and job creation conditions, which consider tourism as a driver of development and economic change is compatible. According to the results of the sensitivity analysis showing the extent to which the zones are affected by the sanctions in four main criteria, if the investment in the eastern zone, centered in Mashhad, increases by 45%, the effect of sanctions in this zone will be less. In most respects, the northern zone has been most affected by the sanctions compared to the other zones. This finding is consistent with research findings (Seyfi & Hall, 2018a; 2019a, 2019b and Pratt and Alizadeh, 2017) mentioning that sanctions have an indirect effect on the tourism industry through indirect effects such as reducing the attraction of foreign investment. In some criteria, such as tourism and investment, the eastern zone has been more affected by the sanctions than the northern zone. This finding is consistent with the findings of Sheikhi 2009, Farahani and Shabani 2013. The central and northwestern zones have been affected by the international sanctions more than the eastern and southern zones in terms of investment and media propaganda, respectively. If the domestic and foreign capital is attracted and new tourist attractions are created in the central zone centered on Isfahan, the effect of sanctions in this sector can be less than the northern zone and the resilience of the central zone tourism industry can be increased against the sanctions. If the media climate is formed and advertising and urban diplomacy is increased by 91%, the northwestern zone will be able to reduce the negative effects of the sanctions on tourism in its sphere of influence.

In the end, review of the related literature show that the multi-criteria decision-making models, prioritization of the potentials, and criteria for tourism destinations have been greatly applied in the studies (Reza-Nia and Jafari, 2014;

Sahneh and Moammari, 2017; Saberi and Aflaki, 2015; Qomi et al., 2018). In this way, the difference between tourist zones becomes clear. According to the results of the study, the efficiency of this model in tourism management was confirmed. The use of multi-criteria analysis techniques in addition to increasing accuracy, increases the speed of work, diversity and quality.

Although the use of multi-criteria decision making methods facilitates decision complexity, this study inevitably has limitations. The level of knowledge of the expert group in this method is very important. The results and findings of the research depend on their experience and expertise. Estimating the exact time required to advance the research is another limitation because the research time is also directly related to the group of experts and the degree of their cooperation. Despite these limitations, the present article is still important in providing a systematic and comprehensive study of the impact of sanctions on tourism. Despite the importance of sanctions in this industry, the theoretical foundations, effects and results are still as they should be. This article is likely to pave the way for future research into the analysis of tourism issues with political considerations and international relations to help governments develop, improve tourism efficiency, and enhance the competitiveness of crisis destinations.

References

- Achour-Younsi, S., Chabchoub, A., Jouini, N. E. H., & Kharrat, F. (2022). A Proposal to Mitigate Energy Consumption through the Sustainable Design Process in Tunis. *Journal of Contemporary Urban Affairs*, 6(2), 193–205. <https://doi.org/10.25034/IJCUA.2022.V6N2-6>
- Afesorgbor, S. K., & Mahadevan, R. (2016). The impact of economic sanctions on income inequality of target states. *World Development*, 83, 1–11.
- Allen, S. H., & Lektzian, D. J. (2013). Economic sanctions: A blunt instrument? *Journal of Peace Research*, 50(1), 121–135.
- Altıparmakogullari, C. (2023). EXPLORING TOURISTS' SENSORY EXPERIENCES IN ISTANBUL'S SPICE BAZAAR ATMOSPHERE. *New Design Ideas*, 7(2). <https://doi.org/10.62476/apr72265>
- Amen, M. A., & Kuzovic, D. (2018). The effect of the binary space and social interaction in creating an actual context of understanding the traditional urban space. *Journal of Contemporary Urban Affairs*, 2(2), 71–77. <https://doi.org/10.25034/ijcua.2018.3672>
- Amen, M. A., & Nia, H. A. (2021). The Effect of Cognitive Semiotics on The Interpretation of Urban Space Configuration. <https://doi.org/doi:10.38027/iccaua2021227n9>
- Attia, H., Grauvogel, J. and Soest, C. (2020) The termination of international sanctions: explaining target compliance and sender capitulation, *European Economic Review*, Vol 129, October 2020, 103565 <https://doi.org/10.1016/j.euroecorev.2020.103565>
- Babazadeh-Asbagh, N. (2022). Comparative Analysis of Qajar Historic Houses in Tabriz, Isfahan, Yazd, and Kashan, Regarding their Architectural Forms and Elements. *International Conference of Contemporary Affairs in Architecture and Urbanism*, 5(1), 586-605. Alanya, Antalya, Türkiye. <https://doi.org/10.38027/ICCAUA2022EN0087>
- Babazadeh-Asbagh, N. (2022). Tomb of Sultan Bokht Agha and Two Minarets of Dardasht Neighbourhood in Isfahan, Iran. In Husain, H. (Ed.). *Heritage and the City: Values and Beyond*, (pp. 12-26). Cinius Yayınları. Istanbul, Türkiye. <https://doi.org/10.38027/N1ICCAUA202302>
- Baby, S. (2013), "AHP Modeling for Multi-Criteria Decision-Making and to Optimize the Strategies for Protecting Coastal Landscape Resources", *International Journal of Innovation, Management and Technology*, Vol. 4No. 2, pp. 102-110.
- Baum, T. G., & O'Gorman, K. D. (2010). Iran or Persia: What's in a name, the decline and fall of a tourism industry? In W. Suntikul, & R. Butler (Eds.), *Tourism and political change* (pp. 175–185). Oxford: Goodfellow.
- Bayati Doosti, A. (2013), "A Study of the Political-Economic Impact of US Sanctions on Iran's Aviation Industry", M.Sc. Thesis under the supervision of Ghamat Jafar, Islamic Azad University, Central Tehran Branch, Faculty of Political Science [in Persian].
- Biswas, Md. H. A., Dey, P. R., Islam, Md. S., & Mandal, S. (2021). Mathematical Model Applied to Green Building Concept for Sustainable Cities Under Climate Change. *Journal of Contemporary Urban Affairs*, 6(1), 36–50. <https://doi.org/10.25034/IJCUA.2022.V6N1-4>
- Blanke, J., & Chiesa, T. (2013). The travel & tourism competitiveness report 2013: Reducing barriers to economic growth and job creation. Retrieved April 14, 2016, from http://www3.weforum.org/docs/WEF_TT_Competitiveness_Report_2013.pdf
- De Vita, G. (2014). The long-run impact of exchange rate regimes on international tourism flows. *Tourism Management*, 45, 226–233.
- Delavari, H. (2015), "A Study of International Sanctions against Iran from the Perspective of International Development Law", M.Sc. Thesis Supervised by Zohreh Balazadeh, Islamic Azad University, Central Tehran Branch, Faculty of Political Science [in Persian].

- Deng, J., & Vongphantuset, J. (2024). DESIGN OF AUTOMATIC VIBRATING CHAIR WITH ECCENTRIC-AND-PITMAN FOR PROLONGED SEDENTARY ACTIVITIES. *New Design Ideas*, 8(1), 245–259. <https://doi.org/10.62476/ndi81245>
- Dizdaroglu, D. (2021). Developing Design Criteria for Sustainable Urban Parks. *Journal of Contemporary Urban Affairs*, 6(1), 69–81. <https://doi.org/10.25034/IJCUA.2022.V6N1-7>
- Dritsakis, N. (2012). Tourism development and economic growth in seven Mediterranean countries: A panel data approach. *Tourism Economics*, 18(4), 801–816.
- Eeckels, B., Filis, G., & Leonard, C. (2012). Tourism income and economic growth in Greece: Empirical evidence from their cyclical components. *Tourism Economics*, 18(4),
- Euromonitor International (2016, November 8). Travel in Iran (Retrieved from) <https://www.portal.euromonitor.com>.
- Euromonitor International (2017, October 17). Travel in Iran. Retrieved from <https://www.portal.euromonitor.com>.
- Farahani, B. M., and Shabani, M. (2013), “The impact of sanctions on Iran's tourism”. *The Open Access Journal of Resistive Economics (OAJRE)*, No.33, pp.1–13.
- Farahi, Sh. (2015), “The effect of sanctions on the insurance industry in Iran”, M.Sc. Thesis Supervised by Tohid Forouzan, Kharazmi University, Faculty of Management [in Persian]
- Fereidouni, H. G., & Al-mulali, U. (2014). The interaction between tourism and FDI in real estate in OECD countries. *Current Issues in Tourism*, 17(2), 105–113.
- Garcia-melon, M. Gomez, N, and Acuna-Dutra, s. (2012), “A combined ANP-delphi approach to evaluate sustainable tourism”, *Environmental Impact Assessment Review*, No. 34, pp.41-50.
- Ghaderi, Z. and Henderson, J.C. (2012), “Tourism Management Perspectives”, Vol. 2 No.3, pp: 47–54.
- Ghorbani, T. (2013), “Tourism Potentials a Way to Deal with Sanctions”, *International Conference on Economics in Sanctions*. Taroud Shomal Research Company [in Persian].
- Gnangnon, S.K. (2020), "Impact of international tourism receipts on public revenue in developed and developing countries", *Tourism Review*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/TR-07-2018-0090>.
- González Santa-Cruz, F., & López-Guzmán, T. (2017). Culture, tourism and World Heritage Sites. *Tourism Management Perspectives*, 24, 111–116. doi:10.1016/j.tmp.2017.08.004
- Holpuch, A. (2018), “Donald Trump says US will no longer abide by Iran deal – as it happened”, *The Guardian*, 8 May, available at: www.theguardian.com/world/live/2018/may/08/iran-nuclear-deal-donald-trump-latestlive-Updates
- Jandaghi, G., Fathi, M.R., Maleki, M.H., Faraji, O. and Y€uzbas,io_glu, N. (2020), “Identification of tourism scenarios in Turkey based on futures study approach”, *Almatourism – Journal of Tourism, Culture and Territorial Development*, Vol. 10 No. 20, pp. 47-68.
- Joppe, M. (2017), “Tourism Policy and Governance: Quo Vadis?” *Tourism Management Perspectives*, Available online 24 November 2017.
- Kahrami, H. (2019), “The role of institutional quality in the impact of economic sanctions on the poverty gap in Iran”, M.Sc. Thesis Supervised by Karim Islamlouian, Shiraz University, Faculty of Economics, Management and Social Sciences [in Persian].
- Kevin X.Li,MengjieJin and WenmingShi (2018) Tourism as an important impetus to promoting economic growth: A critical review, *Tourism Management Perspectives* Volume 26, April 2018, Pages 135-142. <https://doi.org/10.1016/j.tmp.2017.10.002>.
- Khodadadi, M. (2016), “Challenges and opportunities for tourism development in Iran: perspectives of Iranian tourism suppliers”, *Tourism Management Perspectives*, Vol. 19, pp. 90-92.
- Khodadadi, M. (2016a), “A new dawn? The Iran nuclear deal and the future of the Iranian tourism industry”. *Tourism Management Perspectives*, Vol. 18 ,pp. 6-9.<http://dx.doi.org/10.1016/j.tmp.2015.12.019>.
- Khodadadi, M. (2018a). The emergence of cruise tourism in Iran. *Journal of Tourism Futures*. doi:10.1108/jtf-04-2018-0012.
- Khodadadi. M. (2018b), “Donald Trump, US foreign policy and potential impacts on Iran's tourism industry: Post-nuclear deal”, *Tourism Management Perspectives*, Vol. 26, pp. 28-30.
- Laleh, N. and Farahani, B. (2013), “Improving the tourism situation in Iran, an opportunity to counter economic sanctions (modeled on Malaysia's tourism policies)”, the first national conference on tourism, geography and sustainable environment. Hegmataneh Association of Environmental Assessors [in Persian].
- Li, K. X., Jin, M., & Shi, W. (2018). Tourism as an important impetus to promoting economic growth: A critical review. *Tourism Management Perspectives*, 26, 135–142.
- Li, S. N., Blake, A., & Cooper, C. (2010). China's tourism in a global financial crisis: A computable general equilibrium approach. *Current Issues in Tourism*, 13(5), 435–453.
- Li, S., & Song, H. (2013). Economic impacts of visa restrictions on tourism: A case of two events in China. *Annals of Tourism Research*, 43(0), 251–271.
- Liu, C.H., Tzeng, G.H., Lee, M.H. and Lee, P.Y. (2013), “Improving metro-airport connection service for tourism development: Using hybrid MCDM models”, *Tourism Management perspectives*, Vol.6, pp. 95-107.

- Lopez, G.A., and Cortright, D. (2018a), "Economic sanctions in contemporary global relations", In D. Cortright, and G.A. Lopez (Eds.). *Economic sanctions: Panacea or peacebuilding in a post-cold war world?* Abingdon: Routledge 2018, pp. 3–16.
- Manzoor, F., Wei, L., Asif, M., Ul Haq, M.Z. and Rehman, H. (2019), "The contribution of sustainable tourism to economic growth and employment in Pakistan", *International Journal of Environmental Research and Public Health*, Vol. 16 No. 19, p. 3785.
- Melillo, P and Pecchia, L. (2016), " what is the appropriate sample size to run analytic hierarchy process in a survey-based research?", Conference: The International Symposium on the Analytic Hierarchy Process. August 2016 .DOI: 10.13033/isahp.y2016.130.
- Mohammadi Khabazan, M. (2015), "The effects of sanctions on Iran's economy", PhD thesis Supervised by Sadeghi Hossein; Tarbiat Modares University, Faculty of Management and Economics [in Persian].
- Nematpour, M., Khodadadi, M., Rezaei, N. and Makian, S. (2020), "Structural analysis of the development of the Iranian tourism market employing a MICMAC approach: a new long-range planning method to attract the ASEAN
- Nephew, R. (2017), "Donald Trump's Iran gamble will not pay off", *Financial Times*, 15 October, available at: www.ft.com/content/2f463eec-b025-11e7-8076-0a4bdda92ca2
- Oechslin, M. (2014). Targeting autocrats: Economic sanctions and regime change. *European Journal of Political Economy*, 36, 24–40.
- Orakhelashvili, A. (2015). The impact of unilateral EU economic sanctions on the UN collective security framework: The cases of Iran and Syria. In A. Z. Marossi & M. R. Bassett (Eds.), *Economic sanctions under international Law* (pp. 3–21). The Hague: Springer.
- Paris, M., Dubois, F., Bosc, S., & Devillers, P. (2023). Integrating Wind Flow Analysis in Early Urban Design: Guidelines for Practitioners. *Journal of Contemporary Urban Affairs*, 7(2), 194–211. <https://doi.org/10.25034/ijcua.2023.v7n2-12>
- Parsapour, R. (2019), "Tourism an Opportunity to Counter Western Sanctions", *Persian Gulf Studies Center* [in Persian].
- Pazhuhani, M. and Shiri, N. (2020), "Regional tourism axes identification using GIS and TOPSIS model (Case study: Hormozgan Province, Iran)", *Journal of Tourism Analysis: Revista de An_alisis Tur_istico*.
- Pharino, C. and Pearce, P. (2020), "Paranormal tourism planning: stakeholder views on development in South East Asia", *Tourism Planning and Development*, Vol. 17 No. 3, pp. 313-334.
- Poria, Y., Reichel, A., & Cohen, R. (2013). Tourists perceptions of world heritage site and its designation. *Tourism Management*, 35, 272–274.
- Pratt, S., & Alizadeh, V. (2017). The economic impact of the lifting of sanctions on tourism in Iran: a computable general equilibrium analysis. *Current Issues in Tourism*, 21(11), 1221–1238. doi:10.1080/13683500.2017.1307329 international tourist market", *Journal of Hospitality and Tourism Insights*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JHTI-04-2020-0053>
- Pratt, S., & Liu, A. (2016). Does tourism really lead to Peace? A global view. *International Journal of Tourism Research*, 18(1), 82–90.
- Pratt, S., and Alizadeh, V. (2018), "The economic impact of the lifting of sanctions on tourism in Iran: A computable general equilibrium analysis", *Current Issues in Tourism*, Vol 31, No 11, pp.1221–1238.
- Qomi, M., Tabrizi, N. and Zal, M.H. (2018), "Assessing the social effects of folk music tourism on local communities from the perspective of experts (Case study: Aqqala city)", *Sociology of social institutions*, Vol 12, No 5, pp.95-109[in Persian].
- Rahimpour, A. and Karbasi- Yazdi, A. (2011), "Prioritization of factors affecting the development of Iran's tourism industry using the Rembrandt method", *Journal of Tourism and Development*, Vol 1, No. 1, pp. 1-16[in Persian].
- Ranjbarian, B. and Khazaei- Poul, J. (2013), " A model for indicating the effects of marketing structures of urban management on behavioral inclinations to urban tourist destinations", *journal of urban economics and management*, Vol 1, No. 3, pp. 57-73. [in Persian].
- Ranjbarian, B., Forghani, M. H., & Ghafari, M. (2013). Personality traits and the use of word of mouth communication as a source of travel information among inbound tourists who visited Isfahan. *International Journal of Academic Research in Economics and Management Sciences*, 2(3), 20–26.
- Remoaldo, P. C., Vareiro, L., Ribeiro, J. C., & Santos, J. F. (2014). Does gender affect visiting a world heritage site? *Visitor Studies*, 17(1), 89–106.
- Reza-Nia, H. and Jafari, F. (2014), "Prioritization of the tourism destinations management strategies using qualitative and quantitative models (Case Study: city of Soltanieh)", *urban tourism quarterly*. Vol 1, No. 1, pp. 96-79[in Persian].
- Ruggieri, G. (2016), "Tourism development: concepts and issues", *Tourism Planning and Development*, Vol. 13 No. 2, pp. 250 251.

- Saberi, H. and Aflaki, M. (2015), "Prioritizing the main tourism routes of Chaharmahal and Bakhtiari province using TOPSIS and AHP models", *Geographical Research*, Vol 30, No. 3, pp. 141-170 [in Persian].
- Sadeghi-Boroujerdi, E. (2012). Sanctioning Iran: Implications and Consequences. Retrieved April 15, 2016, from http://www.oxfordresearchgroup.org.uk/publications/briefing_papers_and_reports/sanctioning_iran_implications_and_consequences
- Sahneh, B. and Moammari, E. (2017), "Prioritization of tourism development facilities and its spatial distribution (Case study: cities of Golestan province)", *Regional Planning*, Vol 7, No. 3, pp. 15-24[in Persian].
- Samitas, A., Asteriou, D., Polyzos, S., & Kenourgios, D. (2018). Terrorist incidents and tourism demand: Evidence from Greece. *Tourism Management Perspectives*, 25, 23–28. doi:10.1016/j.tmp.2017.10.005
- Seyfi, S and Hall, C. (2018a), "International sanctions, tourism destinations and resistive economy". *Journal of Policy Research in Tourism, Leisure and Events*, No. 11, pp1-11. 10.1080/19407963.2018.1482305.
- Seyfi, S., & Hall, C. M. (2019). Sanctions and tourism: Conceptualisation and implications for destination marketing and management. *Journal of Destination Marketing & Management*, 100381. doi:10.1016/j.jdmm.2019.100381.
- Seyfi, S., and Hall, C. M. (2018b), "Tourism in Iran: An introduction. In S. Seyfi, and C. M. Hall (Eds.). *Tourism in Iran: Challenges, development and issues* (pp. 3–37). Abingdon: Routledge.
- Seyfi, S., Hall, C. M., and Fagnoni, E. (2019a), "Managing world heritage site stakeholders: A grounded theory paradigm model approach". *Journal of Heritage Tourism*, Vol 14, No. 4, pp. 308–324.
- Seyfi, S., Hall, C. M., and Kuhzady, S. (2019b), "Tourism and hospitality research on Iran: Current state and perspectives". *Tourism Geographies*, Vol 21, No. 1, pp.143–162.
- Shokrollahi, N. (2018), "Guardian analysis of the impact of Trump's decision on Iranian tourism, will the US withdrawal from Borja be a problem for our country's tourism?". *World Economy Newspaper*, No. 4326[in Persian].
- Sohaimi, N. S., & Shuid, S. (2023). Do Young Professionals in Malaysian Urban Areas Prioritise Sustainability When Making Housing Decisions?. *Journal of Contemporary Urban Affairs*, 7(2), 171–186. <https://doi.org/10.25034/ijcua.2023.v7n2-11>
- Song, H., & Selim, G. (2022). Smart Heritage for Urban Sustainability: A Review of Current Definitions and Future Developments. *Journal of Contemporary Urban Affairs*, 6(2), 175–192. <https://doi.org/10.25034/IJCUA.2022.V6N2-5>
- Song, H., Gartner, W. C., & Tasci, A. D. A. (2012). Visa restrictions and their adverse economic and marketing implications – evidence from China. *Tourism Management*, 33(2), 397–412.
- Suntikul, W., & Butler, R. (2010). Introduction. In R. Butler & W. Suntikul (Eds.), *Tourism and political change* (pp. 1–7). Oxford: Goodfellows.
- Talebi, H., Modiri, M. and Tarhani, F. (2017), "Prioritization of tourism development components in Iran with a fuzzy multi-criteria decision-making approach Case Study: Iranian Cultural Heritage, Handicrafts and Tourism Organization", *Journal of Planning and Tourism Development*, Vol. 6 No. 20, pp. 94-108 [in Persian].
- The World Bank (2018), "Country at a glance: Iran", available at: www.worldbank.org/en/country/iran (accessed 3 April 2018).
- UNESCO (2018), "World heritage: Iran", available at: <http://whc.unesco.org/en/statesparties/IR> (accessed 27 March 2018).
- UNWTO, United Nations World Tourism Organization, *Tourism Highlights*. (2019), Madrid, Spain.
- Veisi, H. (2017), "Policy Review in Upstream Iranian Law", *Journal of Strategic Studies, Public Policy*, Vol 7, No. 1, pp. 112-93[in Persian].
- Zamani-Farahani, H. and Musa, G. (2012), "The relationship between Islamic religiosity and residents' perceptions of socio-cultural impacts of tourism in Iran: Case studies of Sare'in and Masooleh", *Tourism Management*, Vol. 33, No. 2, pp: 802-814.
- Zarei, M. (2019), "Travel preferences of foreign tourists in times of economic crisis with emphasis on currency fluctuations and sanctions", M.Sc. Thesis Supervised by Mehdi Kazemi, Shahid Bahonar University of Kerman, Faculty of Management and Economics. Kerman [in Persian].
- Zargham-Boroujeni, H. and Bazrafshan, M. (2015), "A Study of Factors Affecting the Implementation of Iran's Tourism Policies", *Journal of Tourism Planning and Development*, Vol.3, No. 9, pp. 51-31[in Persian].