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## The Impact of International Sanctions on the Development of Health Tourism in Iran

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### Abstract:

Health tourism, as a subset of Tourism, is composed of separate sections. This industry is currently one of the most leading and lucrative industries in the World. Different countries benefit from this industry according to their potential, capabilities and the amount of attention given to this issue. However, Iran due to its potentials and capabilities is not able properly to exploit from these. One of the main obstacles to the development of Health tourism is international sanctions. This study aims to answer the following Question: How do international sanctions effect on the development of Health tourism in Iran? According to the descriptive- analytical method from the statistics and data of reputable international and domestic organizations and through the following hypothesis supposes that international sanctions, directly and indirectly, hinder the development of Health tourism. The results demonstrate that international sanctions directly prevent Iran' sale of aircraft and its parts, bank transactions and so on, which indirectly, by prohibiting the export of oil, petrochemical products, minerals and crude metals, cause the government a lack of access to foreign currency, thereupon creating the budget deficit and ultimately postponing the development of infrastructure as a base for the development of health tourism, therefore, it has a negative impact and reduces the growth rate of its development.

**Keywords:** Health tourism, international sanctions, Sanctions on aircraft, Oil exports, Tourism infrastructure, Budget deficit

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### Introduction

Health Tourism is defined by UNWTO as covering those types of tourism which have a primary motivation and the contri-

bution to physical, mental and/or spiritual health through medical and wellness-based activities.

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Cambridge Dictionary defines 'Health Tourism' as travel to a foreign country for medical treatment, especially since it is less expensive than in your country. Health Tourism includes Medical, Curative and Wellness tourism. In Iran, it is more known as Medical Tourism; therefore, applicants in this field are simply called medical applicants or patients, while neglecting other sections which are more expanded and lucrative. Thus, being active in any of the above sections requires its own resources and infrastructures and attracting tourists for each of them is with different aims and sometimes with common aims. But this point must be mentioned that applicants for wellness tourism in case of number and income are more than the other two sections.

Although there are no clear statistics on the amount of income from Health tourism separately, but Iran's world ranking of medical tourism is 41, the last, among 41 ranking countries and the health tourism ranking is naturally lower than medical tourism. The World Health Organization estimates \$ 4.2 trillion as the industry's turnover in 2017. Unfortunately, our country has a small global share. There are different perspectives on the factors of failing this industry in our country and many experts in this field have mentioned different factors towards its underdevelopment, that some points are as follow:

International Journal of Medical Travel enumerates lack of technological advances, lack of an integrated system for cross-sectoral coordination, lack of credibility on a global scale and Iran's negative image in the world's mass media as the biggest challenges for Health tourism. Mohammad Panahi, the vice president of Health Tourism, believes that the lack of comprehensive health tourism portal, lack of a proper defi-

nition of health village, a regular mechanism of patient transfer, from other countries and the lack of specialized companies in Health Tourism are the most important challenges in this sector. Some other challenges towards the underdevelopment of this industry could be the lack of international insurances, infrastructure problems, the existence of brokers in the process of attracting tourists and etc.

But many experts reject international sanctions as a factor of Health Tourism underdevelopment or generally consider it ineffective. Therefore, this article aims to examine how international sanctions impact on the underdevelopment of this industry.

Economic sanctions are a way for large governments to exert their disapproval over one another. While wars are costly—both economically and politically—economic sanctions tend to be somewhat less tangible, at least for the country doing the sanctioning. But for the country being sanctioned, the results can be enormous and long-lasting (Elmeraji, 2021).

Sanctions are "actions initiated by one or more international actors (the "senders") against one or more others (the "receivers") with either or both of two purposes: to punish the receivers by depriving them of some value and/or to make the receivers comply with certain norms the senders deem important" (Galtung 1967, p. 379).

And Gatung says that the crucial concept is 'Vulnerability' which sanctions must put pressure upon a weaker element into the targeted state's organizations.

Some arrangements have been devised for those countries which violate global peace and security based on UN Security Council's point of view in in chapter 7 of UN charter. These arrangements and actions are coercive and used to change the behaviour

of violating country. This chapter covers Articles 39 to 47, of which Article 41 deals with coercive measures and the imposition of sanctions.

But Richard Nephew who is the author of 'The Art of Sanctions, A view from the field', and the special deputy of Robert Malley, American special representative for Iran case, or in other words, known as architect of sanctions against Iran, has presented a much more tangible and pragmatic definition for sanction; His emphasis is more on impact of the sanctions that deliberately chosen for pain and tolerance in a way that the targeted country changes its behaviour. He pays more attention to national priorities, factors such as national personality, history, governmental and social structure and population needs which are important in the amount of country's resilience against sanctions. His intention from pain is to ban those areas which have the maximum share in producing GDP in target country and from tolerance is to examine the maximum resilience of the target country according to the order of priority and arrangement the target country has applied to reduce the effects of sanctions.

The main question of this research is:

How can international or unilateral sanctions affect the development of Health Tourism?

To find an appropriate answer for the above-mentioned question, the following additional questions are raised:

What are the main elements to develop Health Tourism in Iran?

What are the most important parts of incomes and expenses for the annual budget in Iran?

### **Innovation of the research**

There have been many researches accomplished about Health Tourism challenges and some of them have addressed the impact

of sanctions on tourism as the basic industry, but none of them have studied the impact of sanctions on Health Tourism as a subset of the basic industry—tourism. This research aims to study how sanctions affect tourism, especially on Health tourism and its development by providing data and statistics from reputable organizations as well as comparing countries under sanctions and countries free of sanctions. The author of this research hopes to show the importance of the impact of international sanctions on the development of Health Tourism to the governors and policymakers of the Islamic Republic of Iran in order to have a more serious attempt for lifting the sanctions.

### **Literature reference**

Nasirpour and Salmani in an applied research by correlation method, the capability role of hospitals in Tehran in the development of medical tourism, have studied four sample hospitals, then came to a conclusion that these hospitals have a global standards in terms of medical equipment's and three factors such as standard medical equipment's, cheap services and transparency in medical service costs are the most effective factors in attracting foreign patients and founded that the sue of ICT is a challenge for hospitals in attracting foreign patients (Nasirpour & Salmani, 2010).

Akbari and Abo Nouri in a research, Classification of factors affecting on foreign tourism economic indicators, concluded that infrastructure facilities as well as historical, religious and natural potentials and then political and economic conditions are factors in attracting foreign medical tourists. Diversity, high quality and low price in medical services and special geographical location in the region are the other effective factors in developing medical tourism industry which

certainly affect the development of Iran (Akbari & Abo Nouri, 2014).

Khabar on line in an editorial on 20/10/2019 entitled 'Do not miss the opportunity of Health tourism' has listed several issues as challenges for this industry, which are medical staff per capita shortage and lack of infrastructure.

Iranian Surgery Journal in a note on 15/10/2020 entitled 'The main concern of patients before travelling to Iran' has listed the following factors as the challenges for Health Tourism; lack of information and a complete uncertainty in the information obtained, lack of regulation to protect Health Tourism travellers and not being covered by a medical insurance.

The weakness points of Health Tourism are counted as a specific Health Tourism strategy at national, regional and international levels, an index for medical errors, lack of communication infrastructure, infrastructure for training of Health Tourism professionals, infrastructure of installations for medical devices, comfort and accommodation services for Health Tourists and their attendants, appropriate legal rules to protect patients, a monitoring and strong regulatory system, different quality of service between public and private medical centres especially in quality of service and weakness and defects in the field of accreditation, uncertain price for medical services, medical tourism insurance, an integrated data management system, a regular registration system to monitor and record the statistics of Health Tourists, a basic information system for hospitals, a marketing system, international marketing research, an overseas advertising system, the presence of illegal brokers and intermediators (Derakhshan Nia, 2020).

The most important factors affecting the development of the medical tourism industry from the managers' points of view, respec-

tively, are human resource development strategy, information development system, marketing strategy, and product development strategy, in other words, we can say that the above-mentioned factors are the challenges facing the medical tourism industry (Sadr Momtaz & Agha Rahimi, 2010).

Sanctions have a negative effect on two sections of the tourism industry; foreign tourist arrival and the development of tourism infrastructure. Researchers in this study believe that US economic sanctions against Iran, in addition to creating barriers to purchase and import goods from abroad to Iran, have led to the entry of intermediates, increased costs and created insurance and transportation problems. Consequently, the distribution system has been disrupted, hoarding, extortion and the black market appeared ant etc. The imposition of these sanctions has caused Iran to return to the top news of the world and had a negative implication on tourism industry on the other hand. The implementation of sanctions has posed a serious problem for modernizing airline fleets (Hokmabadi & Dolatabadi, 2020).

(Nouri, Taghi Zadeh & Ziba Shiran, 2012) In a study entitled 'Iran's role in Medical Tourism of in the Islamic World emphasizing on Curative Tourism, procedures, strategies and challenges' have counted the challenges and obstacles of Medical Tourism as follow:

Lack of insurance regulations according to international standards, unwillingness of domestic investors to invest in Medical Tourism section, lack of proper and efficient studies in the field of Medical Tourism in the region, lack of a proper planning to coordinate active organizations, less attention to import foreign exchange, weakness in advertising informing Iran's medical Tourism to Islamic countries, inadequate

specialized medical and health services, lack of sufficient intercity facilities for Nature Therapy Tourists, less attention to religious and cultural commonalities, lack of modern and traditional centres in most mineral springs and other nature therapy areas, insufficient support towards private investors and encourage them to invest in Health sector, lack of hotel and accommodation centres along with medical centres, lack of modern and efficient marketing programs to attract Health Tourists, shortage of physician, nurse and expert in the field of in Nature Therapy Tourism, less attention to the existing potentials of Nature Therapy Tourism, lack of coordination between involved organizations of Medical Tourism in the country, lack of a proper planning in order to entertain patients 'attendants, not utilizing international airports for domestic flights.

Obstacles and restrictions for developing Tourism in Iran include: International law and regulations, exclusive patent license, international standards and certification/license, public and private health insurance in the origin countries, increasing consequences for transferring insurance, entry and transport regulations legal authorities and patients' protections and lack of post-treatment care (Firoozi & Goodarzi, 2006, pp. 123-145).

Medical devices import to Iran under the license no. EAR99 plus an amendment in 2017 towards the list of medical devices and also on a condition of parts replacing instead of repairing and additional parts of these devices are transferred to a third country. (Staci Yablon & Francesca Guerrero, 2018).

Economic sanctions against Iran and the country's policies resulted in a significant economic decline and deterioration of the living standards of Iranians. Sanctions de-

creased the affordability and accessibility of healthcare and medicine (International Campaign for human rights in Iran; 2013).

Iran has many capabilities in the Health Tourism industry like, proficient physicians, up-to-date technologies and natural attractions, but the inconsistency between organizations related to Medical Tourism and inadequate planning are the challenges of this field. Eventually 'Iran Prospect 1401' will be achieved by attention to the strong capabilities (Izadi M., Ayoobian A., Nasiri T, Joneidi N., Fazel M. & Mohammad Javad Hosseinpourfard, 2012).

Iran's Medical Tourism sector is in accordance with new trends in the global market, mainly with neighbouring countries and their cultural preferences and diversity in travel. Therefore, it is necessary to emphasize on the cultural commonalities of neighbouring countries as well as on activities at the governmental and minor levels and supervise comprehensively to achieve a proper progress in this field ((Ladan Rokni & San-Hun Park, 2019).

The Office of Foreign Assets Control in the United States of America has released a list of sanctioned countries and the types of sanctions imposed; Iran, Syria, Ukraine, North Korea, Russia, Venezuela, China, Cuba, Belarus and Hung Cong. Iran has suffered the largest number of sanctions for 939 different cases in which Iranian banks and their subsidiaries, Individuals, Airlines and shipping have been the most targeted (OFAC, 2021).

### **Health Tourism capacity in Iran and its current situations**

#### ***Medical Tourism***

The health Tourism industry, especially the Medical Tourism sector, is one of the world 's

growing leading industries in and estimates global revenue of about \$100 billion in 2012 and more than \$400 billion by 2017. But due to the fact that there are no separate and accurate numbers of applicants for each section entering the country, so the amount of income from this industry is not very clear. According to the officials of the Ministry of Health, the number of people applying for the Health Tourism in Iran have increased from 20,000 in 1986 to 300,000 in 1997, and the income has reached to about one billion and two hundred million dollars.

The Ministry of Health, based on certain standards and indicators, issues IDP (International Patient Department) licenses to the hospitals applying for admission of foreign patients which follow the entire patient admission process from the time they arrive until their return to their country. Currently, 154 hospitals have this license respectively in the provinces of Tehran, Qom, Mashhad, Ahvaz, Shiraz, Tabriz, Semnan and etc., are

the leaders in attracting the Health Tourism in this field and the most applicants are respectively from Afghanistan, Iraq, Azerbaijan, Pakistan, Oman, Bahrain, Kuwait, Turkmenistan, India and Qatar have referred to hospitals and limited surgery centres in Iran and the most they come for gynecology, orthopedic surgery, heart diseases, urology, eye surgery, infectious diseases, general surgery, rhinoplasty and non-surgical diseases (medical treatment) respectively.

There are about one thousand hospitals and medical centres, 140,000 hospital beds (1.8 hospital bed per capita per thousand people), 130,000 physicians (1.5 physicians per thousand people), 150,000 nurses (1.9 per thousand people) and per capita cost of health care is \$475 in our country at the present time, while the global average per capita for hospital beds is 3.1 per thousand people, 3.5 per capita for physicians, 3.8 per capita for nurses and per capita cost of health care is more than \$1000.

**Table 1: The share of health expenditure in GDP and health per capita compared to the Global average (biennial)**

	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018
Health care in Global GDP %	8.68	9.41	9.46	9.28	9.13	9.56	9.44	9.5	9.94	9.84
Health care in Iran GDP %	4.73	4.75	5.18	5.2	5.28	6.65	6.63	6.91	8.86	8.66
Global health per capita (\$ US)	480	523	647	728	864	914	999	1040	1020	1110
Iran health per capita (\$US)	81	106	142	200	302	446	525	387	458	484

Reference: Collected from World Bank Data

The above table shows that despite the fact that the share of health from Iran's GDP is close to the share of global GDP, but Iran's per capita healthcare expenditure compared to the global average is very low and even in 2018 is fewer

than half of the global per capita.

The table below examines Iran's position in the field of Tourism and Health Tourism in several components and shows Iran's ranking in these components.

**Table 2: Iran's position and ranking in Tourism & Health Tourism**

Title	Ranking
share of Tourism in GDP	86 from 174 countries
Among countries bordering Persian Gulf	3 <sup>rd</sup> (after Bahrain & Qatar)
Investing in Tourism	172 from 174 countries
Among countries in Middle East	Last rank
Tourism attractions	10 <sup>th</sup>
Weather condition	5th
Archaeology	4th
Culture	5th

**Table 3: Iran's position and ranking in Medicine & Treatment**

Title	Ranking
Medical science	17
Ophthalmology	15
Dentistry	12
Cosmetic Surgery	8
Infertility treatment	10
Urology	3
Stem cells	3
Bone Marrow Transplant	3
Nose Surgery	1
Physiotherapy in Asia	1

The table below compares the cost of treatment for several cases in Iran and a number of countries, which shows that the difference between

treatment costs in Iran and other countries is significantly high, so this is one of the most important health tourism attractions in Iran

**Table 4: The costs in US dollars**

country	Types of treatment	Bypass Heart Surgery	Dental Transplant	Fertility Treatment	Lung Transplant	Knee Replacement Surgery
USA		75000	4500 – 7000	12000-15000	577000	25000
Canada			2500 – 2700	10000-15000	121000	11000-20000
Australia		38000	3000 – 6500	10000	153000	18000-30000
Spain		14000-17500	1000 – 4000	10000	70000-90000	8000
India		4000 – 5500	300 – 550	4000 – 15000	14000-50000	6600
Turkey		13900	350 – 750	1500 – 1900	50000-75000	8000
UEA		15000	1500 – 2000	2500	55000	22000
Singapore		75000	1250	10000-15000	100000	3000
Iran <sup>1</sup>		8000 – 9000	210 – 450	500 – 700	3500	3000

1. The cost of medical treatment in Iran is based on the dollar rate - 42000 RIs in 1999

The Medical Tourism, based on general indicators such as the general situations of the country, the general situation of Health Tourism and the quality of medical services, ranks 41<sup>st</sup> in the world (Hashemzadeh, 2017).

#### **Curative Tourism (Nature Therapy Tourism)**

Nature therapy is a treatment method based on which the disease is treated by natural methods and diet, Exercise, heat, air, water, light and other physiological tools as well. It is a method of treatment in order to treat patients from the prevention stage to deterioration and the chronic stage at the end. Hence, people use Nature Therapy to treat allergies, bronchitis, colds, cancers and heart disease as well (Rahimi, 2016).

<http://khouznews.ir/fa/news/142914/>

Wellness Tourist may be interested in some natural resources such as spas, mineral/thermal springs, salt lakes, sludge, radioactive sand, herbal bathes, sunlight and climate.

There are many of the above natural resources in Iran;

Thermal/mineral springs in Ardabil, Mazandaran, Bushehr, Ilam, Lorestan, Markazi provinces and etc.

More than 300 mineral springs with therapeutic nature.

Thermal/mineral springs in Ardabil, Mazandaran, Bushehr, Ilam, Lorestan, Markazi provinces and etc.

More than 300 mineral springs with therapeutic nature.

Strong sludge treatment potentials in Urmia Lake, Qeshm Island, Dehloran in Ilam ant etc.

A four-season climate.

Despite the fact that there are no accurate statistics on the exact number of Health Tourists (arrivals) in order to measure the exact revenue from this industry and recognize the right position among the active countries in this field, but the above information and data above provide a general picture of a positive potential in natural resources for the Health Tourism.

#### **Types of sanctions imposed on Iran**

Sanctions are technically divided into four groups;

1. UN Security Council sanctions
2. EU sanctions
3. Unilateral sanctions by US, UK and Canada



4. US Congress sanctions  
(Ettelaat newspaper, March, 16, 2017).

What is sanction and where does it come from?).

Sanctions imposed on Iran by the United States and the European Union cover a wide range of areas, including financial, industrial, technological, and even individual. But what this article is going to raise is imposing sanctions against those financial and industrial institutions and organizations which have the biggest share in providing annual governmental budget. The main US and EU sanctions are against oil and Gas, petrochemical, financial and banking, automobiles, mines and metals, air and sea transportation that each has a significant share in providing the annual governmental budget.

#### ***Direct impacts of sanctions***

The development of the tourism industry, especially Health Tourism, requires attention to a circle of factors that are interconnected like a chain, and each of the links (chains) perform a specific task in developing this industry. Neglecting each of them may break up this circle of chains and ultimately disrupts the development of the industry and reduce its efficiency. The most important links in the chain are: transportation, accommodation and welfare complexes, Security, tourist attractions, human resources, bank and monetary transfers, foreign direct investment, hospitals equipment's, experienced doctors and nurses, new technologies, insurance services and ...

International sanctions, especially unilateral US sanctions, have smartly targeted each of the above factors, which have made our country unable to take full advantage of this lucrative industry despite having the existing talents and capabilities. For example, the transportation and aviation sector and the

purchase of aircraft from two manufacturers, Boeing and Airbus, as well as the supply of aircraft parts, which plays a major role in the development of Health Tourism, have been severely affected by sanctions. Sanctions on banks and financial institutions have hampered financial transfers and the use of international credit cards which are one of the most important tourism tools and reduce tourists' worries about carrying cash money to a foreign country.

The US Office of Foreign Assets has released a list of sanctioned countries and the type of sanctions imposed; Iran, Syria, Ukraine, North Korea, Russia, Venezuela, China, Cuba, Belarus and Hong Kong are the countries and Iran has been imposed for 939 cases as the highest number; 394 for individuals, 205 cases for shipping, 195 cases for aviation, 140 cases for banks and its subsidiaries as the more number cases. So, aviation, shipping and banks, which are the basis of Health Tourism, have suffered from the most severe sanctions.

According to the statistics provided by the Civil Aviation Organization in 2019, the numbers of passenger planes in Iranian airlines were 270, of which 58 were grounded and inactive and only 212 planes serve in the air fleet, and the average age of the fleet is 28 years. While, Turkish Airlines with more than 700 active aircrafts and average age of 3 years, UAE airlines with more than 800 aircrafts and an average age of fewer than 2 years, Singapore Airlines with super advanced aircrafts and an average of 9 years old, airlines operate in South Korea with more than 770 aircrafts with an average age of 2 years and India with 800 aircrafts on standby with an average age of 8 years. This statistic shows how our country's air fleet is underprivileged.

### **Indirect impacts of sanctions**

In order to attract Health tourist and benefit from the Health Tourism industry, you need to invest and provide the necessity infrastructure like transportation, hospitals and health centres, accommodation and welfare, security, piped water network, electricity network, sludge treatment, salt treatment, necessary facilities to use hot and cold water and etc., and providing these facilities is a long-term investment.

The term infrastructure in planning refers to those facilities that are located on the surface or underground and provide a basic framework for the efficiency of the development system, such as urban, industrial and tourism areas. Adequate infrastructure has a particular role in developing tourism and is a vital factor in less developed countries, which often have limited infrastructure (Inskip, 1991, p. 132).

Yahya, M. & Fahimeh, F. (2014), in a study entitled 'study of effective factors of Medical Tourism performing and its dynamics methodology in a simulation by system dynamics methodology concluded that Tourism development takes a period of 6 years in Iran. Here, in order to better understand this issue, it is necessary to answer the following questions: how much budget is allocated annually to the construction and infrastructure sector of the country? And what is the source of supply?

### **Annual budget**

The main sources of income of our country, the Islamic Republic of Iran, to provide the annual budget are the following items: taxes (direct and indirect), other incomes, sale of government services, transfer of financial assets (sale of participation bonds, obtaining foreign facilities, transfer of shares of companies, etc.), transfer of capital assets and

issuance of banknotes. The share of each item in providing the annual budget varies each financial year. The main source of income for the government is taxes and the transfer of capital assets (sale of oil resources). For example, the share of these two cases in 1993 and 1994, respectively, was 39.8%, 39.3% and 35.5% 34%.

But the government expenditures include; revenue-expenditures, construction expenditures-capital payments, and deferred debt issue costs (subsidies and loans).

The very important point is considering the revenue-expenditures in 1993 and 1994 which allocated 80.7% and 84.6% of the total budget, respectively (ISNA News Agency, April 11, 1998, news code 9801110321).

Considering that more than 30% of the country's budget is provided from the sale of oil and its products and the government revenue-expenditures are more than 80% of the total budget and most of which is spent on paying government employees, pensioners and maintaining facilities and government institutes. Therefore, by reducing the amount of sale of oil and gas condensate, which is the main source of funding, to compensate for the budget deficit, the government's revenue-expenditure sector cannot be postponed too much, and according to prioritization, the first part that suffers is the construction sector. So, the government postponed the development project and took some parts of the development fund to compensate the annual budget deficit and also has been forced to decrease some part of construction and infrastructure share to compensate the annual budget deficit each year.

The amount of the government budget in 2019 was determined for about 540,000 billion tomans, and according to

the parliament's decision, the amount of crude oil and oil products sales based on \$ 54 per barrel and 5,700 tomans for exchange rate was 158,000 billion tomans, or about 29 percent of the total budget. And according to a budget deficit for about 23 thousand billion tomans due to not selling the specified amount of oil,

about %37 of the construction budget was reduced to compensate for the budget deficit (ISNA News Agency, July 12, 2009, news code 98042110723).

According to the Parliamentary Research Center, the amount of construction credits has decreased from 45% to 14% from 1976 to 1998.

**Table 5:**

type	Capital asset credits			Expenditure credits		Construction Performance ratio to Expenditure ratio %	
	year	Current price	Substantiation %	Current price	Substantiation %		
	approved	performance		approved	performance		
1997	30321	20285	67	45768	44997	98	45
1998	24589	17655	72	57021	53818	94	33
1999	29535	27202	92	68017	68009	100	40
2000	26382	22451	85	84966	85665	101	26
2001	36620	23510	64	104538	104772	100	22
2002	72682	54028	74	156020	147572	105	26
2003	85209	57772	68	181864	178225	98	32
2004	99164	57515	58	222340	231923	104	25
2005	138409	110736	80	346186	330884	96	33
2006	176102	138128	78	407512	415793	102	33
2007	184438	141705	77	399400	421334	105	32
2008	214004	203782	95	670696	563590	84	29
2009	283953	174101	61	591346	593784	100	29
2010	316900	206405	65	732908	750388	96	29
2011	349749	249129	71	897920	824030	92	26
2012	384602	136696	36	997151	889993	89	18
2013	386477	203333	53	1205926	1197647	99	20
2014	412508	278352	67	1493325	1438316	96	19
2015	473854	259627	55	1630228	1706885	105	15
2016	574808	383528	67	2137628	2070177	96	18
2017	713677	436299	61	2538193	2434880	96	18
2018	620020	505704	82	2939947	2787512	95	18
2019	668573	430000	64	3523759	3113000	88	14
2020 Bill	703649	----	-----	3672319	-----	-----	-----
The average percentage of substantiation for 24 years			66 %		The average percentage of substantiation for 24 years	93 %	25

Resource: <https://www.tasnimnews.com/fa/news/1398/11/20/2199639/>

The table above clearly shows that the substantiation rate of capital asset credits is much less than the forecasted amount (66% in 24 years for average), while the average percentage of expenditure credits' substantiation (92% in 24 years) is approximately close to the predicted amount. Therefore, in order to compensate for non-substantiating, the whole credits of capital assets, it is necessary to reduce the construction and infrastructure budget which will have a detrimental effect on infrastructure development.

According to the Parliamentary Research Center, construction credits from general expenditures reduced from 15% in the 1399 approved law to 11% in the 1400 budget bill. <https://www.farsnews.ir/news/13991014000722/>

Another way for the government to compensate its annual budget deficit is to print banknotes, which in turn increases liquidity and ultimately rampant inflation and devaluation of the national currency. According to the results of a study entitled "Explaining the relationship between inflation and economic growth in Iran" written by Yadollah Dadgar, inflation above 26% has a negative relationship with economic growth. And also this research shows that capital naturally injected into markets that have immediate and short-term profitability in the years when inflation is high. Therefore, due to the facts that the inflation rate was over 30% in recent years and Health Tourism is a late- return investment, neither the government nor the private sector is willing to invest (Yadullah, D., Gholam R. K. & Ali TiaTorj, 2006, pp. 59-88).

<https://www.sid.ir/fa/journal/ViewPaper.aspx?id=51279>.

Therefore, in order to compensate for the budget deficit caused by international sanctions (Sales of oil and petroleum products), the government will inevitably compensate a

significant part of its budget deficit by reducing its share of development and delaying infrastructure projects. In Tourism and Health tourism industry, it has the greatest impact on infrastructure, welfare facilities, hospital infrastructure and equipping and modernizing the transport fleet, especially the supply of aircraft and its parts. Currently, the majority of health tourists are from neighbouring Muslim countries, most of whom enter the country through land borders, so to attract tourists from other parts of the world requires standard, safe and good quality airlines.

Since these sanctions have existed since the beginning of the Islamic Republic of Iran and their intensity has increased or decreased over periods of time, the impact of these sanctions on the development of the Health Tourism industry cannot properly be assessed, unless we consider simultaneously the following two factors and compare it with the rate of development and progress of this industry in the world and especially the countries in this field.

The first factor is the annual global growth rate of this industry and the second factor is its growth rate in leading countries in this industry which are not under the pressure of international sanctions. Therefore, in order to better understand the impact of these sanctions on the development of the Tourism industry and Health Tourism, it is necessary to examine the impact of sanctions on the above factors and the growth and decline of this industry in the years when sanctions are less with the years when these sanctions are intensified.

#### ***The average annual growth of Tourism and health tourism in the world***

If we consider Tourism as the key industry and Health Tourism as two main parts;

namely Wellness Tourism and Medical Tourism, then it will be easier to study the average annual global and domestic growth rate. The World Economic Forum has ranked Iran's tourism 97 among 141 countries in 2015, 93 among 136 countries in 2017, 89 out of 140 countries in 2019 and an average growth of - 7.9%. The Global Wellness Institute, in the 2013 and 2014 reports, estimated the annual tourism growth of 6.2% and annual Wellness tourism growth of 9.1% and in the 2018 report, the average annual growth of Wellness tourism was 6.4%.

Medical Tourism magazine in 2017 ranked Iran's Medical Tourism 41 based on

four indexes; country environment, tourism destinations, Medical Tourism costs and medical facilities and services. The Compound Annual Growth Rate (CAGR) forecasted 8.5% annual growth for 2021-2026.

#### ***Tourism average annual growth in the world***

Here, the point that should be noted is that there are no separate and reliable statistics related to the Health Tourism in our country, and on the other hand, this industry is a subset of the Tourism industry and is common to many components. Therefore, for such a comparison, the economic statistics of tourism are inevitably used.

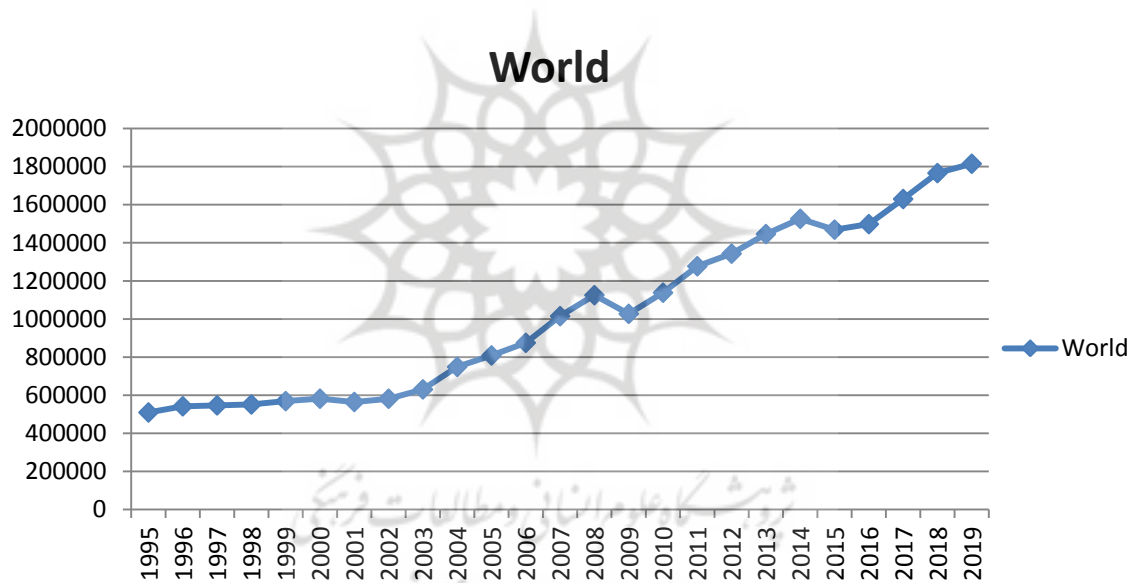


Figure 1

Reference: Collected from the World Bank (in US million dollars).

The chart above shows the world income from international tourism from 1995 to 2019. And the average annual

global growth of international tourism during these years is shown in the table below:

**Table 6:**

year	Percentage %
1996	5.6
1997	0.9
1998	0.85
1999	3.2
2000	2.2
2001	-0.3
2002	3
2003	8.45
2004	18.77
2005	10
2006	8
2007	16
2008	10.8
2009	-8.7
2010	10.8
2011	12.2
2012	5.16
2013	7.66
2014	5.53
2015	-3.73
2016	1.97
2017	8.81
2018	8.34
2019	2.77

**Tourism average annual growth in Iran** 1995 to 2017 (US millions of dollars).  
Iran's international tourism revenue from

**Figure 2**

Reference: Collected from the World Bank (in US million dollars)

A comparison of the above two graphs shows that the global revenue from international tourism has almost tripled from 2005 to 2017 and Iran's revenue has grown 22 times from 2005 to 2017, but Iran's rank was 93 out of 136 countries and despite significant growth and has just earned less than 5 billion from this huge industry in 2017. The chart above shows that the rate of in-

crease in tourism suddenly falls at once in 2003, and this trend continued with a gentle slope until 2013, but suddenly by Rouhani's government taking office and the slogan of opening relations with the West and resolving the nuclear issue in Tourism revenue accelerated in the same year. And after Trump's withdrawal from JCPO, the amount of revenue suddenly drops in 2015.

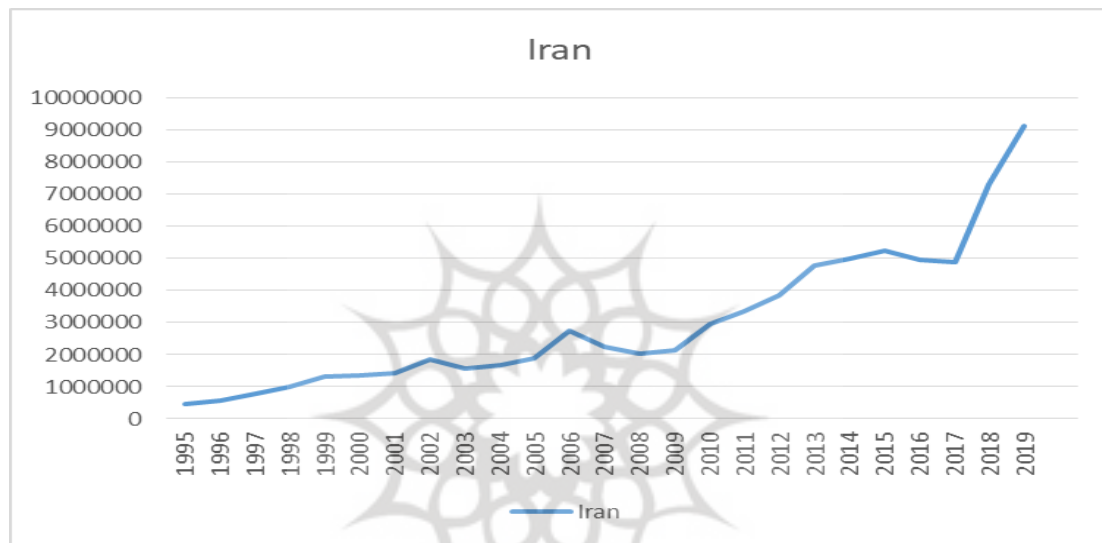


Figure 3

Reference: World Bank Data

The vertical column in the table above is related to the number of incoming tourists. The UN sanctions began in 2006 and were lifted in 2016. The above statistics clearly show that the Security Council sanctions have a significant impact on the number of foreign tourists. The sharp decline in the chart trend after 2006 and its very slow growth until 2016 is a good example of the impact of these sanctions. An immediate uptrend after 2016 and the signing of JCPOA and the lifting of these sanctions are other signs of the effectiveness of sanctions.

#### **The situation of health tourism in non-sanctioned countries**

The countries listed in the table below are active in the field of Health Tourism but were not under international sanctions. The amount of income from international tourism of these countries from 2005 to 2019 is compared with Iran on a five-year basis.

#### **Five-year growth of countries active in health tourism**

Revenue is in US million dollars:

**Table 7:**

country \ year	1995	2000	2005	2010	2015	2019
Germany	22053	24943	40518	49116	50669	58201
Spain	27369	-----	-----	-----	-----	-----
UAE	632	1063	3218	8577	17481	38413
Italy	30411	28712	38364	-----	41415	51910
Iran	205	677	1025	2631	4771	4632*
Thailand	9275	9935	12103	23796	44851	65082
Turkey	-----	-----	20760	26318	35648	42350
Switzerland	11354	9058	11914	17883	20140	21257
Singapore	7611	5142	6209	14178	16617	20416**
South Korea	6670	8527	8282	14315	18711	26217
Malaysia	5044	5873	10389	19619	19194	22199
India	-----	3598	7659	-----	21472	31661
Reference: World Bank Data				Related to year 2017*	Related to year 2018**	

The above countries, except Iran, have not faced the problem of sanctions and have been able to enjoy a significant amount of tourism benefits, strengthen their infrastructure and finally reach a significant amount in 2019, but our country, despite the fact that from 1995 to 2017 has grown 22 times, has not been able to properly exploit in this area to bring a good income from this industry. It should be noted that despite the problems that the sanctions have created for this industry in our country, but due to the effect it has had on the devaluation of the national currency in terms of cheaper tourism services, it has been able to make Iran the cheapest country and a good tourist attraction in the world.

It should be emphasized that this issue itself reduces the impact of sanctions to some extent, and its sign in recent years is the presence of tourists from Middle Eastern countries such as; Iraq, Egypt, Lebanon, Jordan, Libya, Bahrain, Kuwait, etc. The presence of Health Tourists from the above countries shows the attractiveness of cheap tourism in Iran, and this group of tourists has entered our country due to the weakness of

the health system in their countries, proximity and also the cheap Health Tourism services in Iran, especially its medical tourism. But the numbers of Health Tourists from far and rich countries have been very small.

This is also true for other sanctioned countries, and this component must be considered in analyzing the impact of sanctions. One of the features of the sanctions, in case of prolonged, it will gradually be ineffective and the country under the sanction will gradually adapt to it. The Islamic Republic of Iran, like Cuba, has been under Western sanctions for decades, and this is well illustrated in the charts and tables. Iran and Cuba have adapted somewhat to Western sanctions over the years, but Tourism industry, despite a growing trend, has not brought much to them.

Now it is necessary to examine the countries that have been involved in Western sanctions, especially the United States, in order to determine the effect of sanctions on tourism. Major sanctioned countries are Iran, North Korea, Syria, Cuba, Venezuela and Russia.



The US Office of Foreign Assets has released a list of sanctioned countries and the type of sanctions imposed; Iran: 1733, Syria: 676, Ukraine: 419, North Korea: 414, Russia: 334, Venezuela: 333, China: 246, Cuba: 82, Belarus: 38 and Hong Kong:8. Among the above countries, Islamic Republic of Iran has been imposed the most cases of sanc-

tions, of which organizations and institutions with 939, banks and its subsidiaries with 140 cases, individuals with 394 Cases, 195 cases of aviation and 205 cases of shipping were the most sanctioned cases.

The table below shows the tourism revenues of some of the sanctioned countries from 2015 to 2016.

**Table 8: In million dollar and on a five-year-basis**

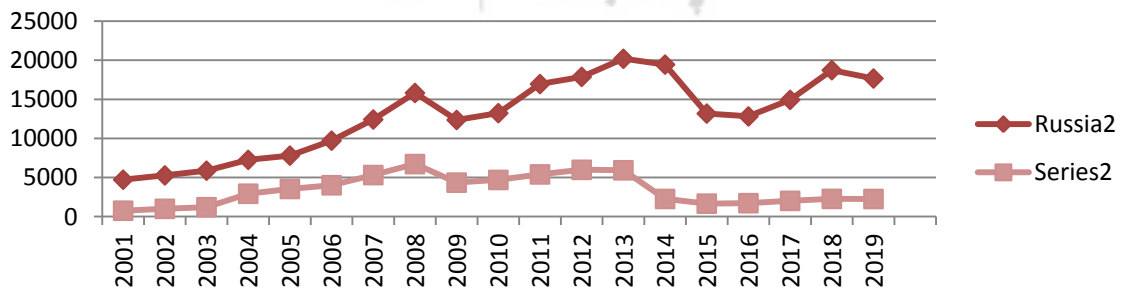
country \ year	1995	2000	2005	2010	2015	2019
Iran	205	677	1025	2631	4771	4632*
Syria	No data	No data	2035	6308	1816**	No data
Ukraine	448	543	3542	4696	1662	2592
Cuba	1100	1948	2591	2396	2819	2645
Venezuela	995	469	722	654	No data	No data
Russia	No data	4726***	7805	13239	13186	17670
Reference: World Bank		*For 2017		**For 2011		***2001

Due to the lack of statistics in the World Bank, North Korea has not been named. Syria is no longer a significant figure since 2011 due to the civil war and the start of Western sanctions. In Iran, Cuba and Venezuela cases, the effect of sanctions is so clear that it ultimately brought little revenue for these countries.

The table below shows the data for Ukraine and Russia from 2001 to 2019, and in both cases, a sharp drop indicates the severity of the sanctions imposed. A sudden drop in Ukraine's tourism revenue from \$ 6

billion in 2013 to \$ 1.7 billion in 2015 is a clear indication of sanctions 'impact.

It should be noted that the start of Western sanctions against Russia in 2011 has caused the amount of Russian tourism revenue to decline from 20,198 million dollars in 2013 to 19,451 m/d in 2014, 13,186 in 2015 and 12, 822 m/d in 2016 (35% decrease compared to 2013). Therefore, in order to understand this issue, it is necessary to mention its annual statistics in the chart so that the impact of sanctions can be tangibly observed.



**Figure 4**

Reference: Raw data from the World Bank and charting by the author

It is very important to note that despite the adverse effects of sanctions such as inflation and the devaluation of the national currency, the same devaluation will increase the purchasing power of tourists to attract them. This devaluation of the national currency and the reduction of travel costs will have a significant impact on the arrival of medical tourists from neighbouring countries such as Iraq, Afghanistan, Azerbaijan, which have fewer facilities in terms of medical facilities that make analysts confused. The devaluation of the national currency has also a negative implication which reduces the salaries of doctors, nurses and hospital specialists and ultimately encourages their desire to migrate for a better life.

### Conclusion

Health tourism, a subset of tourism, is one of the most leading and lucrative industries in the world and has more growth than other industries. The World Health Organization estimates the industry's turnover at \$ 5.2 trillion a year. In order to exploit this lucrative industry, it is necessary to provide its facilities and requirements first. Despite the fact that health tourism is a subset of tourism and you can use the same tourism facilities to exploit it. Since health tourism is a subset of tourism, almost the same tourism facilities are needed to operate this industry, but there are differences in terms of the type of tourist and the purpose of tourism. This means that the goal of the health tourist is to seek physical and mental health. Tourists in this industry leave their main residence to improve their health and return after recovering.

Health tourists may be medical, health or nature therapy, and the motivation of these tourists to choose a destination is different; factors such as knowledgeable doctors, equipped hospitals and experi-

enced treatment staff, advanced treatment technology, fast and timeless treatment, reasonable price, natural and calm space and environment, natural springs and spas, salt lakes, safe return and Comfortable and ... are significant in attracting tourists. Therefore, health tourism requires more facilities than Tourism. And providing the above factors requires appropriate investment, and countries that have benefited from this industry, have invested and paid attention to it properly. Our country is also one of the destinations of Health Tourism, but due to the inability to invest properly and provide adequate facilities has not been able to make use it properly to the extent of its talent. About 15 to 20 percent of the total budget of the country is allocated to the construction and infrastructure sector and 80 to 85 percent of it is spent on the current expenditure.

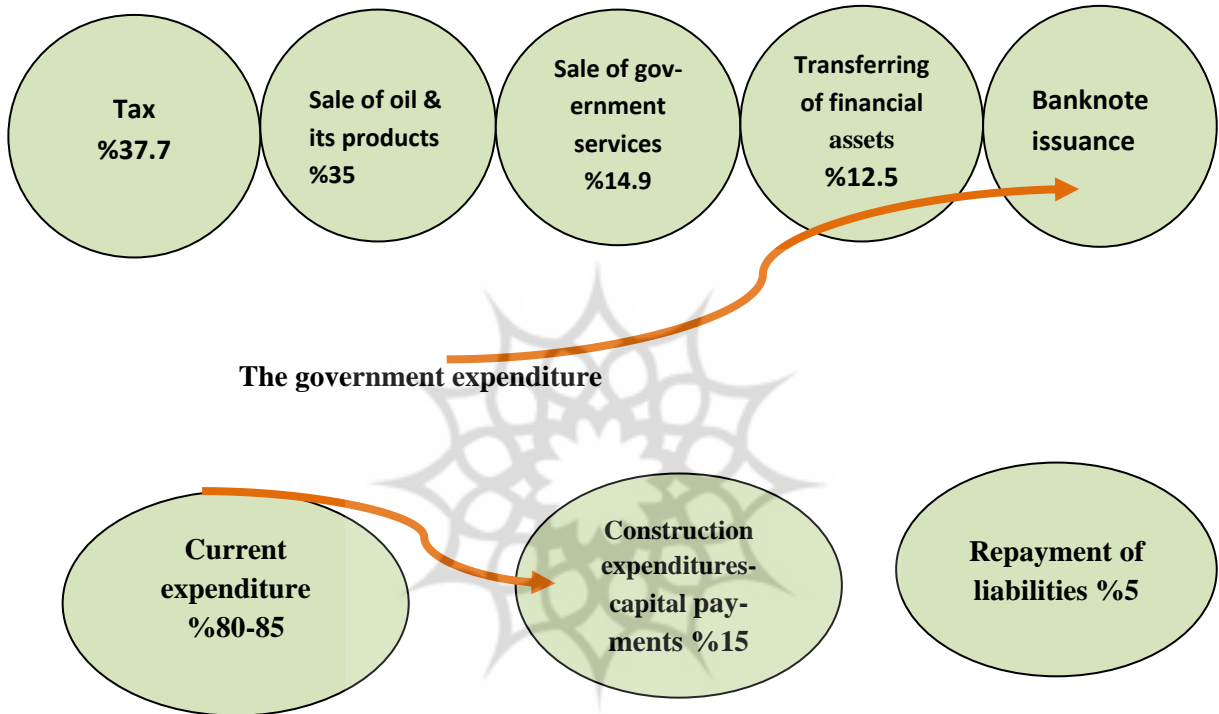
Sources of annual budget supply are; taxes (direct and indirect), other incomes, sale of government services, transfer of financial assets (sale of governmental bonds, obtaining Foreign facilities (Finance), transferring of companies 'equities, etc.), transferring of capital assets and issuance of banknotes. Taxes about %40, transfer of financial assets about %30 to %35 and %20 to %25 of the annual budget will be supplied by oil and its products.

An important factor that has, so far, slowed investment in Tourism infrastructure and Health Tourism has been international, US unilateral and EU sanctions. The Islamic Republic of Iran has not been able to modernize its aviation fleet and supply aircraft parts, which is one of the main factors in tourism development after the imposition of sanctions. By banning the sale of oil and petroleum products, the government has been deprived from the most of their sources

of funding and the program development of Iran has been disrupted.

Because oil and petroleum products provide 20 to 25 percent of the government budget, and the reduction of this resource forces governments to reduce their share of development and delay development projects to compensate their

budget deficit, and the government turns to print banknotes and finally to rampant inflation, both of which have a very detrimental effect on the development of the country's infrastructure. On the other hand, foreign direct investment is able to compensate a part of this shortcoming, which is not feasible due to sanctions.



**Figure 5: Sources of budget supply (2019)**

The World Economic Forum has set 14 indicators for ranking countries in terms of tourism exploitation. Many of these components require investment and infrastructure. The table below

clearly shows that our country has not been able to make a proper investment in this area.

Table explanation: The score is from 1 to 9.

**Table 9:**

Indicator	year	Among 136	Counties in 2017	Among 140	Countries in 2019
	Score	Rate in world	Score	Rate in world	
Business Environ- ment	4.3	79	3.9	121	
Safety & Security	5.2	87	5.4	74	
Health & Hygiene	4.7	93	5	89	
Human Resources and Labour Market	4.1	105	4.1	100	
ICT Readiness	3.8	94	4.5	79	
Prioritization of- Travel & Tourism	3.6	117	3.7	115	
International Open- ness	2.4	109	2.4	118	
Price Competitive- ness	6.7	1	6.7	1	
Environmental Sus- tainability	3.6	119	3.9	107	
Air Transport Infra- structure	2.2	89	2.5	86	
Ground and Port Infrastructure	3.1	75	3.1	79	
Tourist Service Infra- structure	2.5	116	2.8	108	
Natural Resources	2.4	100	2.4	99	
Cultural Resources and Business Travel	2.8	38	2.8	33	

Reference: World Travel & Tourism Council (WTTC).

The best indicator of the table above is "price competitiveness", which is the consequence of sanctions and printing of banknotes, inflation and subsequently the devaluation of the national currency. The "cultural resources and business travel"

indicator also has a good rank due to the rich cultural resources in our country.

Many countries, such as Russia, Cuba, Venezuela, Syria, etc., which international sanctions have been imposed on them, face such a plight.

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