Abstract. Oil extraction and export is the most crucial sector of the Islamic Republic of Iran's economy. Iran is one of the countries with the largest oil reserves, and revenues from its sale are the most important source of funding. However, this sector is sensitive to external factors and reacts sharply to developments in foreign markets. The change in the value orientation of Iran's foreign policy after the evolution in 1979 has resulted in a period of instability that has had a significant impact on Iran's oil industry. In this paper, we will try to describe the most significant factors that affect the oil industry in Iran. This paper considers mainly external determinants such as sanctions and its effectiveness, oil price volatility and political and economic relations between Iran and international community. At the end of this paper author examines the perspectives in the Iranian economy in the following decades. The work also deals with the main economic issues that the administration of the newly elected president Ebrahim Raisi will face.

Keywords: Oil Industry, Islamic Republic of Iran, Sanctions, Oil Exports

JEL classification: F51, N45, N55

1 Introduction

In terms of the commodity composition of Iran's GDP, oil production is currently one of the key sectors of the Iranian economy. Iran has one of the most diverse economies in the Middle East region. However, the oil revenue still generate 30% of the government revenues (Azadi – Dehghanpour – Sohrabi – Madani, 2016). The beginnings of the Iranian oil industry date back to the beginning of the 20th century, when the country's first oil reserves were discovered (Howard, 2007). Thus, a number of world powers turned their attention to the former Persian Empire. During the Pahlavi dynasty era between 1925 and 1979, the Iranian economy relied heavily on western countries, especially the United States. This has also greatly affected the Iranian oil industry. However, the Iranian Islamic Revolution of 1979 represented a significant
change in Iran's oil trade and export orientation of this country. The application of elements of Shiite Islam has manifested itself not only in the domestic sphere but also in the relations between Iran and other members of the international community. The clergy, led by Ayatollah Ruoallh Khomeini, sturdily criticized the monarchy's excessive attachment to western powers, especially seen in the oil industry. The change in the value orientation of Iran's foreign policy has resulted in a period of instability that has had a significant impact on Iran's oil industry. In the following section, we intend to explain the specific factors that have posed a major impact on the development of Iran's position in world oil trade. In the final part of this paper, we also analyze the perspective of further development of this crucial sector of the Iranian economy and we and offer our own views on the future of the Iranian economy.

2 Research goals and methodology

The primary aim of this paper is to evaluate the analysis of the key determinants influencing Iranian petroleum industry since the Iranian Islamic Revolution of 1979. The government of the clergy has brought several changes to Iranian society, especially in the socioeconomic field. This paper also presents short prediction of the possible developments in the Iranian economy and related challenges.

To examine such a complex issue, relevant references are needed. As for bibliography, we found inspiration in the papers written mainly by foreign authors. Important information could be found in the Kevjn Lim’s paper. Kevjn Lim is a senior risk advisor for the Middle East and North Africa at IHS Markit Country Risk, where he also runs the lead for Iran.

This paper was also inspired by publications by professors Murat Aslan, H. Kürşad Aslan and Yasir Rashid. They have extensive experience in the field of international political relations and the economy of Asian countries. Information related to the impact of oil price volatility on Iranian economy was found in the publications written by Amir Mansour Tehranchian and Mohammad Abdi Seyyedkolaee from the Department of Economics of University of Mazandaran in Iran.

Most of sources are publications written by western authors such as Roger Howard and Benjamin Smith. Their research is focused on Iranian oil industry and Iranian economy. Furthermore, there was found useful information in the works written by Pooya Azadi, Hassan Deghanpour, Mehran Sohrabi and Kaveh Madani.

The work by domestic authors Stanislav Mráz, Ľudmila Lipková and Katarina Brocková regarding the effectiveness of sanctions on Iranian economy was also very useful and beneficial. The issues regarding specific implication of sanctions on the oil market are also mentioned in the paper by authors from the King Abdullah Petroleum Studies and Research Center – Fakhri Hasanov, Emre Hatipoglu, Carlo Andrea Bollino and Brian Efird.

Report of research economists Mahdi Ghodsi, Vasily Astrov and Richard Grieveson and scientific director of the Vienna Institute for International Economic Studies - Robert Stehrer was also used during the resarch. The work is inspired by
online publications written by authors such as Samantha Gross, Brett Sudetic, Omid Shokri and Maziar Motamedi.

Based on the defined goal, the work can be described as qualitative research from the methodological point of view. Several methodological procedures and methods such as analysis method or synthesis method are used in the processing of the issue, so that the main goal is met and the interpretation of the conclusions of this work is as credible as possible and reflects the real state of the researched issues. The contribution of this paper lies in obtaining information from complex issues and their accumulation in a comprehensive document, applicable for further research.

3  The main factors influencing Iran’s position in the world oil trade

The Iranian revolution has caused several changes in the Iranian economy. The rule of cleric-dominated state caused the massive capital fled the country. Public enterprises came to the fore and the private sector was pushed out. Some educated people and experts resolved to leave the country and many non-experts came to the management of the Iranian enterprises. The changes in the country's governance also affected the oil industry (Karbassian, 2000). Subsequently, the article will define the basic factors that have influenced and continue to influence Iran's oil trade. From our point of view, these aspects are key, which is why we have turned our attention to them.

3.1  Sanctions imposed by western countries

According to the findings, one of the most significant factors affecting the Iran's economy since the Revolution of 1979, has been the relationship between Iran and the western countries. From this point of view, sanctions from advanced economies are often inflected. This legitimate means of public international law has been for the most part the result of a significant contradiction between the policy of the Islamic clergy and the perception of the world by the liberal democracy of western countries. In the case of Iran, sanctions of a collective and individual nature can be defined. Ali Feghe Majidi and Zahra Zarouni point out, that the human rights violation, the nuclear program and supporting terrorism can be identified as the main motives for the introduction of economic sanctions against Iran (Majidi – Zarouni, 2020). The United Nations and the European Union have resorted to this remedy for a number of reasons. The most significant individual sanctions were imposed on Iran mainly by the United States (Mráz – Lipková – Brocková, 2016). From our perspective, sanctions imposed on the whole industry, or just a specific sector, are not an effective enforcement tool. They often harm the domestic population and, instead of changing the attitude of the government and its representatives, they only cause a decline in the living standards of the domestic population. From this point of view, dialogue must be pursued first and foremost. In some cases, however, such negotiations are unsuccessful, and it is
necessary to look for other ways to force the state to respect the fundamental principles of the international community - one such solution is offered in the form of sanctions.

The sanctions system has long had a major impact on all spheres of Iranian economy. However, oil industry is specific in this respect. Its peculiarity lies primarily in its dependence on foreign capital and investment. Restrictions on oil extraction and exports have an enormous impact on several other macroeconomic indicators in the country. This is visible especially in influencing the national income or in the complex problem of inflation. Decreased oil revenues may also affect other sectors of the economy and their production (Aslan – Aslan – Rashid, 2020).

![Fig. 1. Iranian oil exports in millions of barrels per day.](image)

The graph above shows Iranian oil exports in millions of barrels per day in past 10 years. Following the imposition of US sanctions on the Iranian oil industry in 2011, a significant drop in Iranian oil exports can be seen. The recovery can be seen after 2015, when the sanctions following the nuclear deal were lifted. A further decline in exports is recorded after 2018, when the United States withdrew from The Joint Comprehensive Plan of Action (JCPOA). It’s frankly important to take into the considerations also price volatility and impact of changes in global oil prices on Iranian oil exports. However according to data, it is clear to what extent sanctions have affected Iranian exports in the previous decade (Federal Reserve Economic Data, 2021). To support this thesis, it’s important take into the consideration data from U.S. Energy Information Administration. According to this data, Iran crude oil exports declined by more than 1,2 thousand barrels per day between 2011 and 2014. The main cause of this decline can be considered the replacement of Iranian oil imports. The countries of the European Union, South Africa, China and other Asian countries decided to replace Iranian imports with imports from other countries such as Saudi Arabia, Nigeria and
Angola, which obviously resulted in a reduction in Iran's oil trade (U.S. Energy Information Administration, 2015).

3.2 Price volatility and relations with non-western countries

However, we would like to mention the fact that the sanctions imposed by the western countries, are most significant factor influencing Iran's position in world oil trade, but not the only one. The oil revenues play a significant role in the economic terms of the oil exporting countries. The volatility of raw materials prices and its impact on the economic growth is an important issue confronting several world economies, including Iran (Tehranchian – Seyyedkolaei, 2017). An example is the situation from the 80s. Advanced economies responded to oil crises in 70s by discovering new sources of oil, such as resources in North Sea, Alaska, or Gulf of Mexico. Oil exported by non-OPEC countries entered the market. As a result of growing supply and shrinking demand, oil prices declined 40 percent between 1981 and 1985. This situation has had a significant negative impact on oil revenue resources for the entire Middle East (Gross, 2019). Specific numbers can also be given as evidence. In 1983, the price of oil on world markets remained at $ 30 per barrel, and by 1986 it fell to about $ 10 per barrel (Trading Economics, 2021). Over the same period, Iran's oil exports fell from 1,750 barrels per day in 1983 to below 1,500 barrels per day (CEIC Data, 2021).

One of the key determinants affecting Iran's oil industry can be found in strengthening trade relations with non-western countries. The attitude of western countries toward Iran can be used by key partners in the Iranian economy, Russia and especially China. China is Iran's largest trading partner. More than half of Iran's exports to the country is crude oil. Although China backed sanctions, it remains a major Iranian partner and a major source of investment and capital. Moreover, friendly relations between those two countries are likely to develop even more, thanks to The New Silk Road Project (Lim, 2021). As Brett Sudetic and Omid Shokri examine in their article, China attempts to find the sharpest ways to reach Iranian oil, despite the sanctions imposed on the Iranian oil industry by the United States. The main goal is to strengthen China's regional and geopolitical position, but also to undermine the US position in the Middle East (Sudetic – Shokri, 2021).
Fig. 2 Territorial structure of Iranian oil exports in 2020.

The graph deals with the territorial structure of Iranian oil exports in 2020. In this case, China has an important position, to which up to 51% of Iranian oil is exported (U.S. Energy Information Administration, 2021). The largest volume of Iranian crude-oil since 2008 is exported to the Asian countries such as China, South Korea, UAE act. and Pacific region. More than 590 thousand barrels per day were exported from Iran to this region in 2019. European union and other European countries have been the second largest importer of Iranian crude-oil, with the volume more than 59 thousand barrels/day in 2019 (Statista, 2021). We are of the opinion, that China's attention to the Middle East region will grow stronger in the coming decades. In our opinion, the American withdrawal from its positions in this region, which is visible in Afghanistan, for instance, will lead to a deepening of relations between China and the countries of the Middle East mainly in economic field.

4 Future perspectives

The victory of Ebrahim Raisi in the Iranian presidential election in 2021 launched a public debate on the future direction of the Islamic Republic of Iran. The main task for this ultra-conservative successor of former president Rouhani will be, in addition to the fight against the coronavirus pandemic, also the stabilization of the Iranian economy. To ensure economic stability, better and more effective diplomatic and foreign policy to a removal of the sanctions will be needed. Furthermore, there are also another crucial issues such as high inflation rate, lack of financial stability, transparency of domestic policies or unemployment and devaluation of Iranian currency (Motamedi, 2021). Strikes and mass dissatisfaction of workers with working conditions were one of the main triggers of the Iranian Revolution in 1979. A healthy economy and working-class satisfaction are therefore extremely important for the proper functioning of the state (Smith, 2007). An important task for Ebrahim Raisi will not only be the continuation of favorable trade and political relations with China and the other Asian region, but especially the improvement of communication with Western countries. Investment from the European Union and the United States could be a major source of foreign investment that Iran needs. A new nuclear program agreement could eliminate sanctions and help revive Iran's oil industry as well as other sectors of the economy. However, the ever-present skepticism and antagonism of the West among the Iranian public still undermines this notion. Unlike the reformists and moderates, president Ebrahim Raisi has no specific plan how to to attract FDI from the Western countries. As a result of this policy, country will presumably become economically more dependent on Russian federation and China.

However, there are several longer-term issues that the new Iranian leadership will have to take into account. Nevertheless, there is also environmental factor. Many countries have committed to carbon neutrality. Reducing the carbon dioxide content in the air can thus, have a significant impact on the entire oil industry. Studies show that the legislation acceptable for environmental protection will result in limitation of
maximum annual growth rate of global oil demand to 0.6% through 2030 (Azadi – Dehghanpour – Sohrabi – Madani, 2016). From our point of view, therefore, the transformation and diversification of Iranian economy is essential in the long term. The perspective lies primarily in strengthening the services sector and Iranian tourism. Moreover, there are also other (non-oil) sectors, that have not yet received enough investment, in particular the construction sector. Therefore, in the coming decades it will be necessary to concentrate not only on the new search for new crude oil resources, but especially on the upliftment of non-oil sectors. This is the only way how to ensure the sustainable economic growth in Iran.

5 Conclusion

To conclusion, the political change that hit Iran between 1978 and 1979 was also reflected in the Iranian economy. The Islamic Republic of Iran faces several challenges, most of which linked to international isolation, caused by economic sanctions imposed by western countries. The key for the Iranian economy is the oil sector, which plays an important role in Iran's GDP. The paper defines 3 determinants influencing the Iranian oil industry. Firstly, it is the sanctions imposed by the United States, but also by other European countries, that can be the most important factor influencing the Iranian oil industry. The results show that the sanctions imposed for alleged support for terrorism or for the continuation of the nuclear program have had a major impact on reducing Iranian oil production and exports. During the period of sanctions, many countries tried to find alternatives to meet their demand for oil, which had an impact on the Iranian oil industry.

The second factor affecting Iran's oil exports is the volatility of prices on the world oil market. Potential new oil deposits and expanding oil supply on the world market could weaken Iran's position. According to the data, there was such a decline in Iranian oil exports during the 1980s, and this situation may be repeated in the future.

To ensure the improvement of standard of living, constructive relationship with China, Russia and West will be needed. It is the rhetoric of the ruling clergy in relation to foreign countries that will be a most crucial factor in this regard. Lots of data suggest that much of Iran's oil flows to Asia and the Pacific. It is the consolidation of its trade relations with China and other countries in the region that will be a key task for the Iranian government in the coming decades.

The current President of Iran, Ebrahim Raisi, faces a difficult task - to ensure a stable economic situation in the country. The biggest problems for it in the short term are inflation, unemployment, and the devaluation of the national currency. However, reforms with a longer-term effect will be more important. Iran's economy and oil industry are facing significant changes in the coming decades. The Iranian government is expected to respond to current, especially environmental issues by diversifying its economy. The ability to adapt to climate change and new trends in world trade will be a crucial factor for the Iranian economy.
References


