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# ACTIONS OF COUNTRIES ACTIVELY PARTICIPATING IN THE GLOBAL CRUDE OIL MARKET IN TERMS OF THE GEOPOLITICAL CHANGES IN 2020

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## ABSTRACT

**PURPOSE:** The main purpose of this article is to present the activities of countries actively participating in the global crude oil market, which have a key impact on economic processes on a global scale. The actions of OPEC countries use crude oil as an instrument in the international economic policy to influence changes both in the global economy and the geopolitical dimension. It is important to identify and discuss the events that provided a benchmark for OPEC+ countries to take actions on the global oil market in 2020 to try to change the share of the global oil market in an geopolitical aspect.

**DESIGN/METHOD:** The research methods used in this article are the critical literature analysis and numerical data analysis. In this study, the author presents the statement that resource-rich countries increasingly treat crude oil as a tool in the economic policy to influence changes in economic processes on a global scale in order to increase their competitive position, as well as to deliberately create the negative phenomena in a form of price wars that only serve to achieve the set goals in the economic policy of these countries.

**RESULTS/FINDINGS:** The obtained research results-reveal that conscious creation of price wars, the occurrence of oil crises on the global oil market, or the possession of significant deposits of the raw material in question, are treated by the governments of countries worldwide as a tool in itself in order to conduct the economic policy of countries, taking into account the overarching aspect of the broad impact on the manner of conducting the international economic policy of countries on the global oil market. The world the oil market experienced several significant events that caused strong changes from the point of view of the development of the world economy. Decisions held within the framework of the OPEC (and OPEC+) organisation have a narrower impact on the global oil market, however, within a wider global economy they affect the global economic processes. In conjunction with the Covid-19 pandemic, the policy of OPEC+ organisation is affecting the geopolitical changes and the foreign economic policy of every country in the world.

**ORIGINALITY/VALUE:** The contribution to the development of the discipline is the presentation of the events and activities of countries actively participating in the global oil market in 2020, as an attempt to gain a competitive advantage and changes in the geopolitical aspect.

**KEYWORDS:** oil crisis, OPEC, OPEC+, foreign economic policy, demand shock, supply shock.

**JEL:** F13, F42, F6.

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## 1. INTRODUCTION

Economic benefits resulting from the possession of oil deposits and resources are indisputable for individual economies[1]. Nowadays, global oil supplies condition not so much the functioning and development of national economies as, above all, on the one hand they are the main sources of budget revenues for countries rich in oil deposits, and on the other hand they determine the opportunity of these countries in shaping the international economic policy, with particular emphasis on the geopolitical phenomena affecting the global oil market.

Considering the occurrence of the negative phenomena in the global economy, in the form of creating price wars or the occurrence of oil crises on the global oil market, it can be stated that the possession of significant deposits of this raw material is, in itself, an instrument within the economic policy of countries and has a broad impact on the way the international economic policy is conducted in relation to the global oil market. The main purpose of this article is to identify and discuss the events that constituted the point of reference for the countries under OPEC+ to take action on the global oil market in 2020 in order to try to change the share of the global oil market in an geopolitical aspect. The research methods used for this article are the critical literature analysis and numerical data analysis.

## 2. THEORETICAL FINDINGS TO DATE IN THE FIELD OF DISCUSSED ISSUES

By joining the theoretical considerations on the impact of crude oil in the global economy, it should be stated with absolute certainty, that oil is the so-called main energy-mix[2] factor in the global economy (Delgado Wise, 1999, p. 17; Oberholzer, 2017, p. 32). The role played by both the oil industry, including petroleum products, oil extraction, and global supplies of this raw material is economically invaluable. In addition, in the structure of the world economy, this raw material is a primary pro-development factor and at the same time a condition for the development of the global economy (Penrose, 2016, p. 24). The issues of the global oil market are extensive in the economic theory due to the dependence of the development of each national economy on the possession and/or use of this raw material. Whenever oil and related petroleum products are used in national economies, the scale of their importance is significant (Penrose, 2016, p. 24).

The theory of economics not only broadly presents numerous considerations in the scientific community regarding the global oil market and economic effects that this raw material produces from the point of view of the global economy, but also in relation to a specific national economy. The theoretical record to date in the aspect of the discussed issues primarily presents the subject of oil crises[3]. The vast majority of the resulting scientific papers discuss the economic effects of individual oil crises on the global economy (Coyle & Simmons, 2014, p. 27). Some of the resulting book items analyse the macroeconomic conditions at the time in relation to the specific oil crisis (Bini, Garavini, & Romero, 2016, pp. 76-77; Verleger, 1991, p. 43). The English literature on the subject is dominated by the authors who focused on analysing the causes of individual oil crises from the point of view of the global economy (Campbell, 2005). It should be noted, however, that many phenomena in the global oil market sector did not determine the reason for naming these events as the crisis categories. The correct naming of these phenomena finds its application in the area of the collapse on the oil market, demand and/or supply shocks, which, as a consequence, could (or not necessarily) lead to another crisis on the global market for this strategic raw material. Some of the short-term fluctuations on the oil market generated significant distortions on the demand and/or supply side, but their scale was not adequate to justify the location of these phenomena under the specific crisis categories. In this aspect, theoretically, there have been relatively many papers

discussing the direct effects on the global economy, referring not so much to the occurring oil crises, but taking into account each of the negative, emerging phenomena falling within the global oil market (El-Gamal & Myers Jaffe, 2010). Continuing the discussed issue, it is worth paying attention to the findings of economic theorists in the field of the demand and supply shocks. Economic theorists agree in discussing the issues of the broader framework of the short-term analysis of the causes of cyclical instability. The identification and analysis of both the pro-cyclical and counter-cyclical factors have proved that cyclical instability is the result of the shocks of combined demand, but also the shocks on the side of the combined supply, or a combination of both factors simultaneously. On the basis of the economic theory, it is important to consolidate, because possible shocks on the market result from the instability of any of the elements of the IS curve, or from the instability in the area of the monetary policy illustrated by the LM curve. Therefore, the category of the oil shocks is in the economic theory, the most common example of discussing the cyclical fluctuations in an economic activity using the AS-AD modelling method. The following should be distinguished here: a) a negative supply shock, b) a negative demand shock, c) a positive supply shock and d) positive demand shock. The discussed issues have become a theoretical way to clarify activities in the field of an economic adjustment, i.e. the cost adjustment, intervention of government authorities in the economy, and the adjustment on the long-term supply side (Szymanik & Zyguła, 2009, pp. 35-51).

Theoreticians of economics undertook extensive theoretical discussions about the phenomenon of a price war. It should be noted, however, that the nature of this phenomenon is admittedly taken into account in the economic theory. The way these events develop is of a practical nature, which means that the conceptualisation of the issues discussed in the economic theory is constantly updated (Colgan, 2013, pp. 65-66). However, referring to the subject of oil crises, oil shocks and price wars on the global oil market, one can get the impression that the analysed categories are analysed on the theoretical basis only from two points of view, namely: a) the global economy, b) the national economy of the United States of America and/or national economies of the Middle East.

As regards specifically the subject of the economic policy of countries rich in crude oil deposits, it is worth emphasising the theoretical aspects relating to the phenomenon of a diversification of the national economy. On the theoretical basis, these issues are discussed most often on the example of countries rich in the oil and gas resources (United Arab Emirates, Qatar, Kuwait), which is the result of the economic reforms implemented in those countries (Mahroum & Al-Saleh, 2016).

By virtue of the issues discussed in this paper (with the special consideration of OPEC and OPEC+ organisations), it seems reasonable to present a theoretical record of the existing information in the field of regionalism. Based on the statement that in the globalisation processes of that time it was impossible to identify a regional initiative that would have its raison d'etre without any factors, external or supranational entities, it can be assumed that the world the oil market (whose deposits are geographically diversified), which determines the functioning of the global economy, depends on regional initiatives which in turn stimulate modern globalisation processes (Klecha-Tylec, 2013, p. 34).

When making theoretical consolidations in the field of the economic policy and regionalism, it is worth paying attention to the findings on the foreign economic policy. In general, the foreign policy is part of a country's overall economic policy. Contrasting this existing and fundamental theoretical consolidation in relation to countries with the extensive oil industry and/or a strategic oil resource deposits, it should be stated that as part of the foreign economic policy, a country is taking measures to increase the maximisation of the economic benefits resulting from the development of oil extraction and export from abroad. However, attention should be paid to the emergence of a certain dependence. Well, each country, when undertaking activities under the development of the foreign economic policy, uses a certain range of instruments to this end (Zabielska, 2013). In relation to the specific oil resources and the oil market, today,

this raw material is very often treated in itself as a tool within a country's economic policy, with the help of which measures are taken to increase its economic benefits as part of the development of economic relations with foreign countries. In practice, this phenomenon does not often occur, because within the framework of the foreign economic policy, there are few economies whose power of influence enables these activities in the long run (El-Gamal & Myers Jaffe, 2010, pp. 87-88; Markus, 2014, pp. 51).

Going beyond the broader framework of the foreign economic policy, it is worth paying attention to the aspect of the international economic policy, which in a simplified sense, means the harmonisation of the foreign economic policy pursued by individual countries to create a common policy on the international arena. This harmonisation can be carried out in the economic theory in two ways: a) ex post, b) ex ante. It should be noted, however, that in relation to the global oil market, the theoretical findings of the international economic policy are more widely used than they are in the field of the foreign economic policy. Moreover, as part of the international economic policy, crude oil is a larger instrument within the framework of the economic policy of specific economies in influencing the increase of their economic benefits from the developing economic relations with foreign countries. The main reasons should be seen in regionalism and the creation of the international organisation OPEC[4], under which a group of countries has bigger opportunities to influence global economic processes in the global oil market[5] (Zabielska, 2013, p. 226).

Continuing these considerations, it is impossible to ignore the field of geopolitics in the economic theory. Economics theorists agree in their findings on the existence of interactions between geopolitics and the foreign economic policy, as well as between geopolitics and the international economic policy and vice versa (Gray & Sloan, 2014, p. 43). Starting from the commencement of the activities from the so-called The Cold War, as well as the ongoing socio-economic changes in the Middle East, geopolitics has evolved significantly as a field of study. When looking for the detailed links between the geopolitics and the economic policy, attention should be paid to the field of the geoeconomics, which is a subfield of geopolitics (Chakrabarty, 2019, pp. 98-99). Referring to the geographical structure of oil deposits and oil production on a global scale, it can be assumed that during the period of the progressive economic development of the world in the second half of the twentieth century, the field of geopolitics gained in importance, due to which its conceptualisation in the economic theory has also evolved (Essex, 2013, p. 85). In economic practice, the new economic phenomena appearing on the global oil market will certainly constitute new reference points in the creation of new scientific papers that are strictly theoretical as well as empirical. The latter will, over time, provide a point of reference for the conceptualisation of the economic policy in the economic theory.

The economic literature review provides references to many aspects of the world oil market. It is worth paying attention to the current state of knowledge of the economic theory about the important events and hypotheses relating to the oil market in the 21st century. The following should be mentioned: a) the shale revolution, b) the peak oil hypothesis and c) global energy governance. The shale revolution began in the United States at the beginning of the 21st century. In the economic literature, the shale revolution takes into account not so much the opportunity to extract oil, but also gas. As a result, the production of unconventional crude oil joined the rapidly growing unconventional way of gas production a few years later. The process is still in its infancy, and oil and gas experts point to the significant changes over the coming decades. Originally, it was envisaged to extend the shale revolution to the whole world, which was to lead to serious economic and geopolitical consequences for both energy-producing countries and its recipients.

Nowadays, however, it should be stated that the shale revolution caused, first of all, the quantitative and qualitative changes in the world crude oil market in terms of attempts to achieve a competitive advantage by individual countries. In addition, shale oil deposits were an impulse in the way many geopolitical strategies were conducted around the world (Kohl, 2010, pp. 195-214). In terms of the peak oil

phenomenon, it is a scientific fixation according to which the oil production will peak, and an irreversible decline in production will begin. It should be noted that crude oil is the most intensively used source of energy by mankind. Therefore, there is currently an active debate about when this will happen and what effects it will have on humanity (Qvennerstedt, Aleklett, & Lardelli, 2011, pp. 36-39). The historical forecasts so far turned out to be premature. However, the rise in oil prices in the world market in recent years has sparked a series of speculations about how far humanity is from reaching its peak (maximum) oil production (Hubbert, 1956, p. 84).

Reviewing the economic literature about the world oil market as it has developed over the past 10 years, it is impossible to ignore the newly developed concept of Global Energy Governance (GEG). A new field of enquiry has come to the fore in recent years. Global Energy Governance has become an area of international studies. Researchers study the ways how the energy sector is affected and governed by the global level and the effects it produces. They focus on governance, and by doing so, they go further afield, enriching the geopolitical and security views that have been the stedfast way that energy has been analysed for a long time. Researchers are already making headway in this new field, and literature on GEG is readily available and continues to draw new interest. It was around the period of the Gleneagles 2005 G8 summit that the term GEG emerged. There were two factors which affected the academics' attention shift towards energy: the energy security due to the rising oil prices and the Russian-Ukrainian gas dispute of January 2006, as well as the climate change concern (Van De Graaf & Colgan, 2016, p. 2).

Global Energy Governance in the 21st Century' was the first research project which ran from January 2008 to December 2009. This was initiated by the Berlin Global Public Policy Institute, which is an independent body studying the research. They tried to examine the criteria and rules which governed three areas of global oiland gas governance: financial markets, investment agreements and risk supply management (Goldthau & Witte, 2010, pp. 98-103).

For some time, political scientists and international relations scholars sidelined the topic of energy. The renewed interest was rekindled with the fast changing events in the global energy markets. Three discussed trends and factors affecting the changes were: the geopolitical change, climate change and rapid unpredictable changes in the oil and gas markets. Because of how these changes are evolving, scholars are re-examining the impact on the institutional architecture of GEG from the perspective of global governance once again (Van De Graaf & Colgan, 2016, p. 3).

The collapse of the Soviet Union in the early 1990s and the fact that there is a growing number of new developing countries importing energy have changed the geopolitical structure. OECD countries saw a worldwide increase in the demand for energy from around 30% in 1970 to almost 60% in 2014 (BP, 2020). There is another consideration (Hughes & Lipscy, 2013, pp. 449-450). Some of the world's most populated countries, such as India and China, do not have a large say in the institutional structure and method of governance. The consequences are vast: the way IEA's ability to manage oil supply crises and how these affect the world oil markets depend on how much of its' member states are ready to release the strategic reserves they have. Whereas formerly all major oil-importing countries were members of the OECD in the 1970s, the rise of rapidly developing countries changed the dynamics. For that reason, as well as due to the major oil customers operating outside of the IEA, the members were experiencing less control over the oil market in the event of a crisis. As a natural consequence, this led to the calls for expansion of the organisation to include both India and China, but there are significant obstacles to overcome for this to happen (Van De Graaf & Colgan, 2016, p. 4).

## 3. AN ATTEMPT TO EVALUATE THE ADJUSTMENT ACTIVITIES OF OPEC+ ON THE GLOBAL OIL MARKET AT THE BEGINNING OF 2020

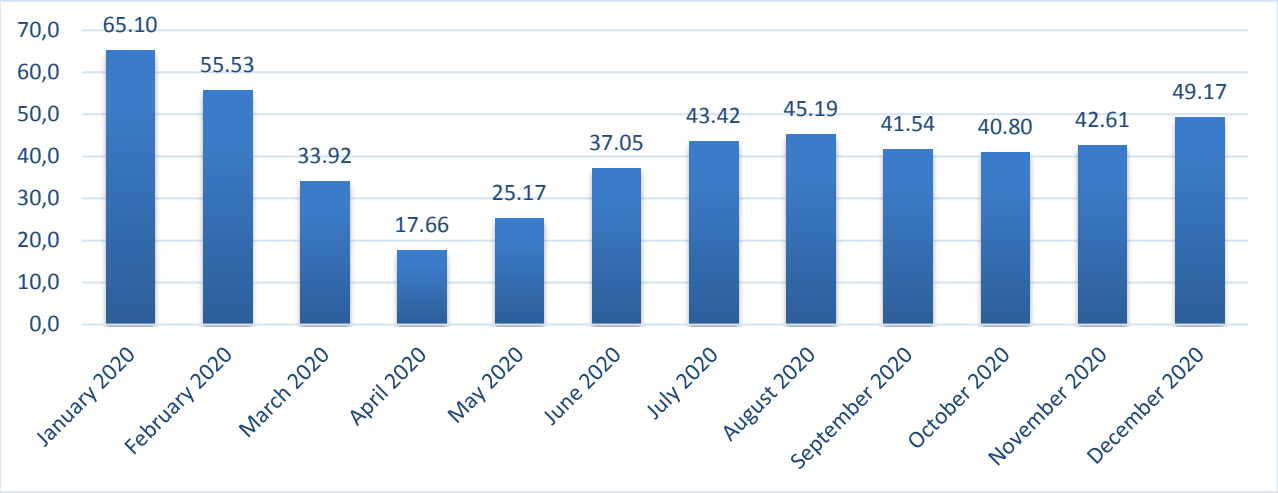
In general, in 2020 the primary effect of the impact of countries with deposits of the raw material in question was the progressive integration process of these countries within the framework of the OPEC+ organisation. It should be noted that Saudi Arabia and the Russian Federation, as the members of OPEC+, have a significant and important voice in the policy followed in OPEC+. The main reasons for this type of phenomenon should be seen, however, not only in the desire to increase their benefits under the economic policy pursued by each of OPEC member countries, but also from the need to deepen further the integration processes and adaptation changes in such a specific market segment as the global oil market is. There is no doubt, however, that the main motive for deepening cooperation under OPEC+ were the concerns of OPEC member countries (including Saudi Arabia in particular) regarding a drastic reduction in oil prices on the global markets. In addition, in the opinion of OPEC member countries the joining of the countries associated with the organisation to cooperate, allowed to avoid the marginalisation of OPEC from the point of view of the global oil market[6]. At the beginning of 2020, the world oil market experienced another collapse on a global scale and the phenomenon of the price war between Saudi Arabia and the Russian Federation (as part of OPEC+) (OPEC, 2020). Thus, the events of the time presented the treatment of oil by the OPEC members as an instrument in itself within a broader economic policy framework in order to influence the quantitative changes on the global oil market.

Bearing in mind that OPEC's activity is focused on stabilising the prices of this raw material and attempts to control the global oil market, it might seem that OPEC member countries have constantly sought to agree within the organisation on the increase or reduction of the oil production on a daily basis, preventing the falling of oil prices. Moreover, it could be assumed that OPEC member countries were concerned about the appearance of a negative phenomenon in the form of a price war, or expressed their concerns about a decline in supply or demand on a global scale. Unfortunately, such mechanical assumptions proved to be incorrect and false in practice.

In 2020, an unusual situation took place that was of fundamental importance for the entire oil industry and had a real impact on the global economy. The oil exporting organisation wanted to maintain oil prices on the global market by limiting the production (under OPEC+[7]). The Russian Federation, on the other hand, postulated actions aimed at maintaining its market share even at the cost of slightly lower prices of the raw material in the world without changes in the supply restrictions. In this way, the Russian Federation expressed its fear of the increasing competition on the market from the United States. In order to present the activities of OPEC+ countries in 2020, Figure 1 presents an average monthly oil price of the OPEC basket from January 2020 to December 2020.

OPEC organisation, proposing to reduce the oil production by 1.5 million barrels per day (which in practice meant a reduction in the total world production at the level of 1.5%) sought to maintain stable oil prices in the near future. As a result of the Russian Federation's objection to the far-reaching production restrictions, any restrictions in this area ceased to apply at the end of the first quarter of 2020. What's more, Saudi Arabia decided on a price war by increasing oil supply on the market to 12.3 million barrels a day. This meant that at the time of such economic conditions, an oversupply appeared on the global market at 0.3 million barrels per day. The main purpose of these activities was to force the Russian Federation to limit the oil production proposed by the OPEC cartel and end the price war. In addition, it is worth noting that Saudi Arabia could then have decided to introduce changes in this area, however, it seems reasonable to ask about the time-frame of these moves. It should be strongly emphasised that such manipulative interference was not able to function in the long term. Therefore, the analysed form of interference by Saudi Arabia could take place only in the short term (up to several months) (OPEC, 2020).

**Figure 1.** Average monthly OPEC basket crude oil price in 2020 (in U.S. dollar per barrel)



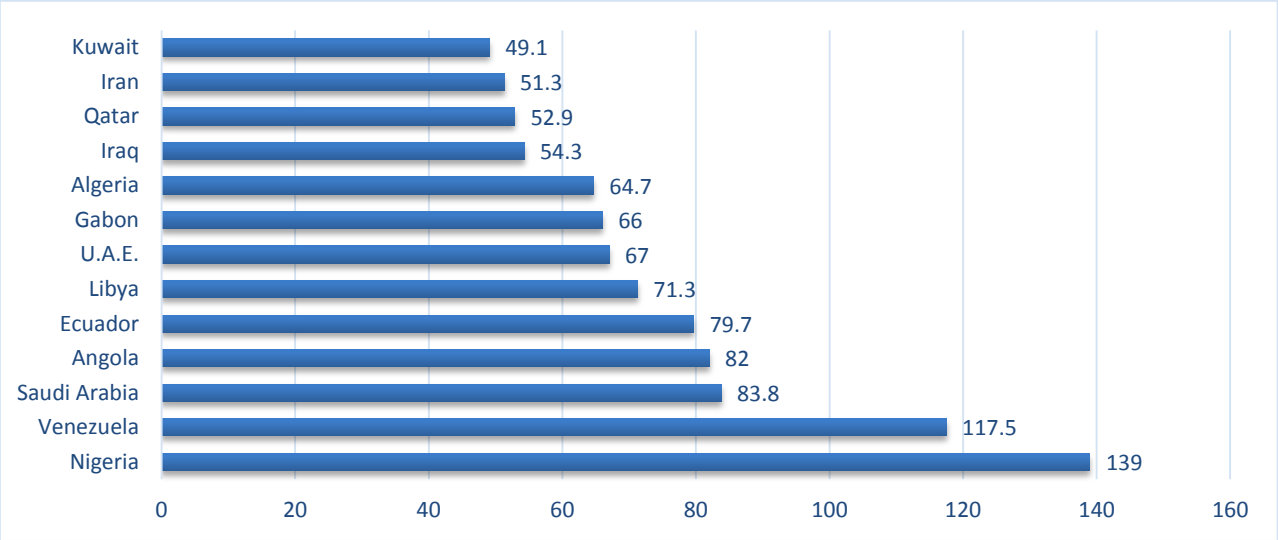

Source: OPEC (2021).

In addition, the phenomenon of the price war at the time, additionally pointed to the regularity of the geopolitical aspect in the global oil market, and also took into account not so much the geopolitical phenomena, but strictly the political ones, which served to achieve the assumed political and geopolitical goals (Falola & Genova, 2005, p. 76).

Combining the lack of agreement reached between the member countries and the Russian Federation, under OPEC+, starting a price war during the prevailing global pandemic, these events have become a catalyst for the collapse on the global oil market. Brent crude oil prices fell in March 2020 to USD 25 per barrel, which meant a monthly decline of as much as 55%, and from the beginning of 2020 by over 66%. Also similarly, US WTI crude oil amounted to USD 29.51 per barrel in March 2020 (International Energy Agency, 2020). It should be noted, however, that at that time, oil prices were falling due to the growing concerns about the economic slowdown of China and the global economy due to the pandemic. It also means that the fall in the oil demand could have caused a wave of bankruptcy of economic entities in the energy industry on the US market. An additional factor reducing the demand for crude oil was the grounding of aircraft and blocking of transport lines, which caused that the demand for solid fuels decreased steadily. According to the estimates, the decrease in the demand for oil amounted to 8 million barrels per day by the end of the first quarter of 2020, and throughout the year it was 1.1 million barrels per day. Therefore, it is worth considering the substantive arguments that clearly explained the adaptation efforts of Saudi Arabia on the global oil market at the time. The main motives for an action should be seen in the economics of the global oil market and at the budgetary policy level of each OPEC+ member country (OPEC, 2020).

From the point of view of the implementation of the budgetary policies of OPEC+ countries, the question about the adopted price level of crude oil in the budgetary forecasting relating to the assumptions for the balancing of the budget of each OPEC+ country arises. According to the aspect of the profitability, Figure 2 presents oil prices per barrel needed for OPEC countries to balance their national budgets (in U.S. dollar).

**Figure 2.** Oil prices per barrel needed for OPEC countries to balance their national budgets (in U.S. dollar)




Source: OPEC (2021).

In practice, OPEC member countries conduct the economic policy with particular emphasis on the foreign economic policy, which is largely dependent on budget revenues from the extraction and sale of crude oil and solid fuels. Possible losses due to the lowering of oil prices are, de facto, understood as the lowering of budget revenues (Ramady, 2005, pp. 88-89). It is worth emphasising that the balancing of the budget of Saudi Arabia is possible at an average price of USD 85.7 per barrel of oil (Reuters, 2020). The situation of other member countries under OPEC is slightly different. For Nigeria and Iran, the desired price level for achieving the economic policy objectives and budgetary needs is calculated at a level exceeding USD 100 (Brown, 2020, p. 101). In the case of the Russian solutions, the government authorities created a special fund that totalled up to USD 170 billion to date, accumulating the financial revenues from the sale of oil in the event of future low oil prices in order to finance the current needs arising from the budgetary policy. Continuing, Russia has used the accumulated financial reserves of USD 30 billion, which were used over a period of 7 days. Assuming an attempt to assess further actions on the part of OPEC (and OPEC+) as an additional goal, it should be stated that it is extremely difficult to make estimates or focus on the observations of further assessment of actions. The price war on the oil market and the economic effects of the pandemic forced Russia to reach for the financial reserves collected for this occasion. The implementation of Russia's budget policy goals depends on the sale of oil by state-owned companies. The Russian income side of the budget is always exposed to financial turbulence if the price per barrel of oil falls below USD 42 (Bank of Russia, 2020).

Regarding the economics of the global oil market, according to the EIA report prepared in 2017 at a price of USD 30 per barrel, only half of the wells in the Russian Federation are economically viable. The remaining 50% of the wells in Russia remain below the mining profitability limit. Therefore, it can be concluded that in the economic terms, Saudi Arabia is in a better position due to the much lower profitability threshold for the extraction of one barrel of oil at USD 10. It should be added, however, that in 2016 the net profit of the largest Saudi oil consortium amounted to USD 13 billion. This profit was generated at the then price per barrel of oil at USD 45. Besides, the Russian climate causes that many wells operate in hardly accessible, frozen regions of the country for a long period of the year (U.S. Energy Information Administration, 2020). The profitability threshold in the oil production in Saudi Arabia in 2020 was the lowest among all OPEC member countries. Depending on a country and the oil extraction technology used, this was not a comfortable situation for other countries, such as the Russian Federation or

even the United States (U.S. Energy Information Administration, 2020). The costs of the oil production in the United States of America are also high. However, it should be noted that the methods of the oil production on the American market using shale wells on land and drilling platforms in the seas are different, which means that the entire cost structure of individual shale fields is also very different than in the case of exploitation of deposits in the seas and oceans. The average cost of economic viability on the US market is the price range of USD 48-54 per barrel in 2020. In the first quarter of 2020, the total number of the drilling platforms on the US market was 653, however, in this case keeping prices below USD 40 increases the risk of wells' closure. Low oil prices are a major barrier to the development for US businesses that decide to extract oil using the horizontal drilling and hydraulic fracturing. The costs associated with the use of the technology to extract oil from shale in the US market are much higher than the methods used by Saudi Arabia, which makes it impossible to achieve financial profits due to the current level of oil prices in the world. Thus, the first quarter of 2020 raised serious concerns for US operators about the shale oil sector entering the recession. The United States Department of Energy (DOE) decided to postpone the sale of oil from the so-called strategic reserves. According to the US, the main reason for this decision was the existence of unfavorable market conditions (International Energy Agency, 2020).

Following the adverse developments at the beginning of the second quarter of 2020, Saudi Arabia decided to convene another meeting of OPEC and the associated countries. The price war caused a severe collapse on the world oil market. Therefore, the main goal of the meeting was to achieve a fair agreement on oil leading to the stabilisation of the market. The talks resulted in agreement on the reduction of supply on the oil market at 10 million barrels per day by OPEC member countries and Russia, and by 5 million barrels by other countries. However, Canada was excluded from the restrictions. Moreover, in the short term, the reduction in the oil production will be gradually reduced so that in July 2020 the reduction could reach 8 million barrels per day, while in January 2021 only 6 million barrels per day (OPEC, 2020).

Bearing in mind that 2020 marked the beginning of shocks of the combined demand and supply in the oil industry, attention should be paid to the then-fears of OPEC+. The first argument was the fear of the increasing production by North American producers and taking over the market share created by limiting the production by OPEC+ countries. It should remembered, however, that the reduction in oil prices was additionally exacerbated by the actual decline in the oil demand, which is estimated at around 35 million barrels per day, which is about 30% of the global production. It was also a direct effect of suspension of air transport and lower demand for the use of cars (OPEC, 2020). According to the forecast prepared by the Calgary ARC Energy Research Institute, in the second quarter of 2020 the decrease in the demand for aviation fuel, gasoline and diesel oil decreased by 7 million barrels per day (Calgary ARC Energy Research Institute, 2020). In the context of the events on the international crude oil market, as well as taking into account the activities of countries rich in crude oil, it is reasonable to pay attention to the aspect of the Reference Basket (ORB) and the corresponding components' spot prices in recent years. This also allows for a more complete understanding of the significance of the events that took place in 2020 by OPEC and OPEC+ (Table 1).

However, it should be remembered that the extension of the period of low oil prices in the global markets in each case leads to a long-term damage to the production capacity of many countries. Based on the statement that due to the pandemic Covid-19 there was a decrease in the demand for oil and its refined products, the situation on the market was not helped by the estimates created at the time, according to which the total global demand for oil was forecast to fall by 35%. Therefore, it was reasonable to create a forecast that as a consequence an oversupply will occur on the market, which in 2020 may range from 800 million to 1.3 billion barrels of oil. The forecasts for the oil stocks are therefore two to three times higher than it was in the period of the previous collapse of the raw material prices at the turn of 2015 and 2016, when OPEC intentionally increased the supply of raw material on the market as a counter to the developing shale industry in the United States of America (Calgary ARC Energy Research Institute, 2020).

**Table 1.** OPEC Reference Basket (ORB) and corresponding components' spot prices (in billion USD)

| Country | Representative crude stream | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|---|
| Algeria | Saharan Blend | 44.28 | 54.12 | 71.44 | 64.49 | 42.12 |
| Angola | Girassol | 43.61 | 54.47 | 71.72 | 66.11 | 42.64 |
| Congo | Djeno | 41.98 | 52.77 | 68.59 | 61.80 | 35.77 |
| Equatorial Guinea | Zafiro | 42.43 | 54.04 | 71.36 | 65.74 | 41.54 |
| Gabon | Rabi Light | 42.62 | 53.16 | 70.30 | 63.18 | 40.22 |
| IR Iran | Iran Heavy | 39.57 | 51.71 | 67.97 | 61.85 | 40.77 |
| Iraq | Basrah Light | 39.53 | 51.87 | 68.62 | 63.64 | 41.55 |
| Kuwait | Kuwait Export | 39.30 | 51.60 | 68.90 | 64.25 | 41.49 |
| Libya | Es Sider | 42.69 | 52.82 | 69.78 | 63.81 | 40.06 |
| Nigeria | Bonny Light | 44.02 | 54.55 | 72.11 | 65.63 | 41.53 |
| Saudi Arabia | Arab Light | 40.96 | 52.59 | 70.59 | 64.96 | 41.91 |
| United Arab Emirates | Murban | 44.83 | 54.82 | 72.20 | 64.72 | 42.98 |
| Venezuela | Merey | 34.02 | 47.63 | 64.47 | 54.04 | 28.12 |
| OPEC | ORB | 40.76 | 52.43 | 69.78 | 64.04 | 41.47 |
| ORB | Volatility | 7.28 | 5.00 | 6.59 | 4.11 | 12.55 |
| ORB | Coefficient of variation, % | 17.85 | 9.54 | 9.44 | 6.43 | 30.26 |

Source: OPEC (2021).

During the unfavorable conditions on the global oil market in the second quarter of 2020, investors paid special attention to the petrochemical industry in the United States of America, because this country is currently the largest producer of crude oil in the world (especially shale oil). According to the US government forecast, the US total production fluctuates around the level of 13 million barrels of oil per day in 2020. In addition, there is no doubt that US entities have benefited the most from the reductions in extraction made by OPEC+ members in 2017. Since the beginning of the introduction of the restrictions on extraction, American producers have increased their production by approx. 50%, which translated into an increase in the volume of the exported raw material, and have become a leader in production on the global market (International Energy Agency, 2020).

The progressing pandemic in 2020 increased additional fears that oil production in the United States (including mainly shale oil) may decline in the long term, as many producers were struggling with credit--related problems, in which they were participants in trying to maintain their market share. This is important because in 2020 shale oil accounted for about 62% of total US oil production. In comparison, in 2010, the total oil production from shale formations accounted for only 12% of total US production (International Energy Agency, 2020).

Noteworthy were the actions taken by the US government authorities in counteracting the then unfavorable situation for US economic entities on the global oil market. The primary form of interference was the announcement of the US government about the filling of the tanks that are part of the Strategic Petroleum Reserve RPR by taking advantage of low oil prices on the global market. The state of the US oil stocks at that time was estimated at 634 million barrels of oil. The offer was addressed to small and medium business entities employing less than 5000 employees. The analysed activities could support the oil industry, despite the fact that, according to the US government, low solid fuel prices were beneficial to the US economy. It is worth noting, however, that similar solutions in the field of the accumulating oil reserves have been implemented in the Chinese and Indian economies. On the Indian market, these decisions were initially delayed in time due to the negative effects of the ongoing pandemic. On the other hand, in relation to the Chinese market, the main purpose of these activities was to guarantee the crude oil supplies for a total period of 90 days in order to eliminate possible disruptions in future oil supplies (United States Department of Energy, 2020).

During the pandemic, additional information was revealed to the general public that the US government was considering the possibility of renting its storage space for the domestic oil producers, which was intended to help these entities wait out the period of low oil prices and guarantee time to find new solutions in the fight against the reduced demand. However, it should be noted that in addition to the state warehouses belonging to the Department of Energy, some large commercial warehouses are also located on the US market. In comparison, in Canada, Iran and Venezuela, the extension of the period of low oil prices will cause a long-term damage to the production capacity. It also means major difficulties in returning to the previous production capacity. Therefore, it is an important factor, that American economic entities operating on the shale oil extraction market have become much more flexible. It can be argued that American companies will not decide to close the oil fields even if oil prices continue to fall due to the increased production by OPEC member countries. The main reason for this situation should be seen in the high costs of the closure of the oil fields. From an economic point of view it is profitable to continue the production, even despite a small loss for a certain period of time. Moreover, due to the possible closure of the oil fields, their re-opening also involves the necessity of incurring high financial costs (United States Department of Energy, 2020).

From the point of view of the American approach to the negative situation due to the collapse of the world oil market in the first quarter of 2020, it should be stated that the US government decided to hedge 50% of its production in 2020 at an average oil price of USD 56 per barrel (United States Department of Energy, 2020).

Based on the statement that about 100 million barrels of oil are extracted daily in the world, it should be noted that, initially, in the first quarter of 2020, the OPEC cartel proposed, admittedly, to reduce the production by about 1.5 million barrels per day. However, due to the ongoing pandemic changes and the previous disagreement at the OPEC+ level, an increase in this reduction in the oil production was signaled at 1-2 million barrels per day. After reaching an agreement on limiting the supply of the raw material on the market, OPEC+ reduced its production by 9.7 million barrels per day (approx. 10% of global supply). Saudi Arabia has decided to limit the production from 11 million barrels to 8.5 million barrels per day. The United States, Canada and Brazil have declared a reduction in the oil production of 3.7 million barrels per day. By calculating the extraction limits of these countries together with OPEC countries, the total level of extraction was reduced by 13.4 million barrels per day in the second quarter of 2020. Considering the fact that as a result of the pandemic, the total demand fell to 35 million barrels per day, it should be stated that the joint reduction of supply is still smaller than the reduction of demand. This is a factor that at the beginning of the second quarter of 2020 contributed to another fall in prices (OPEC, 2020).

One can accept the thesis that in the future, as a result of successive counteracting of the pandemic, the demand for oil will increase, which will also cause the prices to rise. The drop in the oil demand has followed a whole chain of events that ultimately result in a reduced output. The volume and rate of decline in the global demand for oil due to the pandemic were unprecedented in 2020. The demand shock will result in the refineries' capacity being reduced, which will consequently lead to an increase in oil stocks due to shortages in warehouses and a new price level below the production costs (International Energy Agency, 2020).

## 4. CONCLUSIONS

The adaptation actions taken by the member states under the organisation OPEC and OPEC+ on the global oil market in the first two quarters of 2020 result in the far-reaching impacts beyond the global oil market. Both OPEC member countries and the countries associated within the OPEC+ treat oil as the main and only instrument in influencing the global oil market and indirectly affecting global economic processes

as part of the international economic policy. Moreover, oil is becoming the main subject in conducting the ”global game” on the oil market by individual OPEC member countries in achieving their intended goals close to and consistent with the policy pursued at the level of the foreign economic policy of these countries. Also, the harmonisation of these processes under the international economic policy is very often difficult due to – different goals in the foreign economic policy of individual member states.

The presence of the geopolitics in the contemporary global oil market is significant. Russia's actions perfectly present the concerns about the loss of a part of the market to economic entities from the United States of America.

As a result of the ubiquitous pandemic in 2020, OPEC+ member countries experienced two phenomena in the global oil markets simultaneously. On the one hand, there was a market collapse, on the other hand, the lack of a preliminary agreement between OPEC countries and Russia increased the expansion of this significance of the OPEC+ organisation, which clearly goes beyond the adopted goals of the organisation's activities. In the contemporary global economy, decisions taken by OPEC member countries and the associated countries have a far-reaching impact on global economic processes, which in turn also affect the foreign economic policy and the implementation of its goals of each member state.

It should be clearly stated that the negative phenomena in the form of a collapse of quotations on the world oil market, as well as the creation of the price war between Saudi Arabia and Russia will in the long term limit the activity of American economic entities who have decided to extract oil from shale. This action will bear fruit in the future in favor of OPEC member countries and Russia in the form of the increase of their share in the global market. The scale of this phenomenon will not coincide with the wave of expectations from OPEC countries due to the high level of costs of the possible closure and reopening of the oil fields on the American continent.

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[1] The main point here is about economies rich in crude oil resources, extracting and exporting this raw material, but also any economy which dependent on imports of crude oil.

[2] For more on this topic, see: (Moshrefi, 2019).

[3] Chronologically, the current oil crises are: a) the oil crisis of 1973, b) the second oil crisis of 1979-1982, c) the oil crisis of 1990, d) the oil price crisis of 1998. In the public opinion and in the scientific community, the importance of the negative phenomena on the global oil market that took place in 2008 (drop in oil demand and supply as a result of the global financial and economic crisis) and the collapse in prices on the world oil market are increasingly emphasised from 2014 (price war), another slump in prices on the world oil market in 2016, and contemporary events on the reduction of oil production under the 2020 OPEC+ organisation. Undoubtedly, on scientific grounds, the newly created and open discussion remains the discussion and an appropriate location in terms of the correct naming of these events of 2020, as a result of the new price war between Saudi Arabia and the Russian Federation. It should be noted, however, that it is too early now to classify this event as another oil crisis within the global economy.

[4] OPEC (Organization of the Petroleum Exporting Countries) is an organisation of countries exporting oil with an international character based in Vienna and consists of 14 member countries, which include: Saudi Arabia, United Arab Emirates, Algeria, Angola, Gabon, Republic Congo, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Equatorial Guinea and Venezuela (OPEC, 2020).

[5] As part of the international economic policy, the OPEC organisation has more influence on changes in the global oil market than any of the OPEC countries at the level of the foreign economic policy. From the point of view of the foreign economic policy, there are no national economies outside the United States of America whose power of influence would allow to take initiatives in the field of adaptation on the global oil market. For comparison, the oil resources of the Kingdom of Saudi Arabia could admit that it would be possible to take actions at the level of the foreign economic policy. However, in practice Saudi Arabia decides to intervene in the global oil market within the OPEC organisation, which in the economic theory puts its activities at a higher level of the international economic policy.

[6] It should be noted that in 2018 OPEC member countries together with the Russian Federation are jointly responsible for over 40% of the production of global oil resources. For more on this topic, see: (Ellwanger, 2019).

[7] Form of international organisation between OPEC member countries and 10 countries associated with OPEC, but having the form of non-members. The OPEC+ declaration was signed in 2016 and is chaired by the Russian Federation and the OPEC cartel. In addition, the discussed document on permanent cooperation has been described as historical. The primary goal of OPEC+ is the need to bring together oil market participants in a more institutionalised manner. For more on this topic, see: (OPEC, 2020).

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