

The Implications of the Ukrainian Crisis on the Energy Market in OPEC Countries

Mekhnane okba ⁽¹⁾

¹ Professor Lecturar A, University of Ghardaia, Algeria, mekhnane.okba@univ-ghardaia.dz

ARTICLE INFORMATION

Original Research Paper

Received: 08 /7/ 2024

Accepted: 10 /8/ 2024

Published: 21 /9/ 2024

Keywords:

Keyword.1: Ukrainian crisis

Keyword.2: OPEC

Keyword.3: Exports

Keyword.4: Energy

Keyword.5: Trade

JEL Classification Codes: F130, Q430, Q020.

Abstract : This study aimed to determine the impact of the ongoing Ukrainian crisis on the energy market of OPEC countries and price changes. By analyzing global energy markets and supplies, and OPEC's strategy and efforts to resolve the crisis, while identifying potential future scenarios. The study concluded that OPEC countries have shown flexibility in policymaking and are striving to leverage innovative markets and technological development in the environmental field. The crisis is expected to persist for a longer period, potentially leading to trade disruptions and energy supply issues. This scenario would require substantial international aid and support to mitigate the effects on affected regions.

Keywords : Ukrainian crisis; OPEC; Exports; Energy; Trade.

JEL Classification Codes: F130, Q430, Q020.

Mots clés:

Mot clé.1: crise ukrainienne

Mot clé.2: OPEP

Mot clé.3: exportations

Mot clé.4: énergie

Mot clé.5: commerce

Codes de classification JEL : F130, Q430, Q020.

Résumé : Cette étude visait à déterminer l'impact de la crise ukrainienne en cours sur le marché de l'énergie des pays de l'OPEP et les variations des prix. En analysant les marchés énergétiques mondiaux et les approvisionnements, ainsi que la stratégie de l'OPEP et ses efforts pour résoudre la crise, tout en identifiant les scénarios potentiels pour l'avenir. L'étude a conclu que les pays de l'OPEP ont montré une flexibilité dans l'élaboration des politiques et s'efforcent de tirer parti des marchés innovants et du développement technologique dans le domaine environnemental. La crise devrait persister pendant une période plus longue, ce qui pourrait entraîner des perturbations du commerce et des problèmes d'approvisionnement en énergie. Ce scénario nécessiterait une aide et un soutien internationaux substantiels pour atténuer les effets sur les régions touchées.

Mots-clés : crise ukrainienne; OPEP; exportations; énergie; commerce.

Codes de classification JEL : F130, Q430, Q020.

Corresponding Author: Mekhnane okba, Email: okbamekhnane@gmail.com

1. Introduction

Almost all OPEC economies are characterized by an exposure to a number of shocks and unfavorable volatility effects in the oil market. The appearance of the United States as a powerful economic rival to this organization, followed by financial short-term speculation, is the result of the low level of trust in the international political scene. Besides, trust may take a long time to increase, causing potential damage. Changes in technological markets, combined with a number of other factors and their interconnection, create uncertainty that is connected not only with economic signals, but also with financial interactions. This character of risk and uncertainty influence can result in dangerous situations which influence basic movements connected with investing and trading energy objects. It is important to ensure there are many opportunities in all areas, even those where existing investments are in power plants. OPEC countries have to undertake efforts in developing infrastructure solutions which will help to maintain the supply for more practical just in case use. This strategy will be important for replacement and reuse technologies, thus adapting to the use of new markets with technological and competitive products.

The aim of the study is to assess how the ongoing Ukrainian crisis is influencing the energy market in OPEC countries. Events develop due to correlations between economic indicators and structural trading changes (the prices) influenced by the crisis. Countries of this organization demonstrate flexibility in policy making and seek the most profitable way to apply innovative markets and technological changes in environmental concerns. So ; This leads us to pose the following problem :

To what extent did the Ukrainian crisis impact the energy market in OPEC countries?

2. Background of the Ukrainian Crisis

The conflict spread to the diplomatic sphere when, in February 2014, during the Sochi Winter Olympics, Russia occupied the Crimean peninsula on the grounds of protecting the Russian-speaking population and organized a referendum which led to the proclamation of Crimea as annexed to the Russian Federation. Statements from the European Union, NATO, and the United States criticized Russian attitudes and considered the actions taken to be imperialistic, unilateral, and unconstitutional. The European Union answered with visa sanctions and an embargo on Russia, stopping cooperation in strategic areas such as arms or energy. By 2016, both the European Union and the United States were preparing new sanctions against Russia. (Gould-Davies, 2023).

Economic Backgrounds of the Ukrainian Crisis The Ukrainian crisis, which began in 2014 and escalated in 2022, has significant economic backgrounds and wide-ranging impacts on the global economy. Key economic backgrounds of the Ukrainian crisis include: Energy and Natural Resources:

Ukraine plays a crucial role in the transit of Russian natural gas to Europe and is a major supplier of grains like wheat. Any disruption in these resources directly affects global markets. Ukrainian Economy: The Ukrainian economy was struggling with corruption, weak infrastructure, and a heavy reliance on Russia before the crisis. The conflict has led to a severe economic downturn, increased debt, and the loss of economic stability.

The growing concern about the impact of the Ukrainian crisis on international politics, alongside the changes it entails in power distribution, has had implications that transcend the purely political sphere. The Ukrainian crisis was largely born of an external political and economic game involving the prospect of Ukraine joining the European Union through an association agreement with the European Union. Facing the diversification of its geopolitical strategy towards Western Europe, in November 2013, the then President of Ukraine, Viktor Yanukovich, decided to abandon these negotiations in order to establish close ties with Moscow, which would lead to protests from the Ukrainian population, as well as an armed confrontation in the East of the country between the rebels and the governmental forces, which still have a grip on the situation in that region. (Davies, 2023)

2.1. Causes and Events

It is important to emphasize the role of the state as an economic agent, with its varying proportions of participation in the economy, not only operating in the commercial sphere, but also as a foreign policy catalyst of the reaction these algorithms impose to the problems created by their participation in the world economy. OPEC countries, despite all related to the inward-looking characteristic of their foreign policy, emphasize the need to support some important aspects of their economy to the outside. (Maohong, 2020)

The situation in which the economic and political relations between the member states and countries where these problems emerge meet is caused by the reality that the operations of the global economy go much beyond the scope of provision and demand themes and ideas about commercial set in the basis of OPEC's activities. With the growth of the member states' influence in the trade between themselves and by means of preying on financial relationships with third countries, dialogue became insufficient and confined to issues of oil provision and demand, transforming into a concern about commercial relations and dynamics of the commercial flows that involve the organizations' members and third countries. (Bagchi, 2023)

3. OPEC and Energy Market Dynamics

The five leading exporters of natural gas are Qatar, the United Arab Emirates, Nigeria, Algeria, and Iran. The petroleum sector's contribution to

the Gross Domestic Product (GDP) of OPEC members exceeded 40% in 2013, and the sector also plays a major role in their economic development. The petroleum sector's various contributions to GDP in OPEC members are considerably higher than in non-OPEC member countries, ranging from a minimum of 35% and a maximum of 99% in Kuwait, Angola, and Libya, respectively. In recent years, OPEC neoliberal reforms were adopted by most member countries, especially in the development of downstream petroleum products. These reforms have been aimed at liberalizing domestic markets from existing fuel price regulation and subsidies by adopting a regulated market mechanism. As a result, the surge in global oil prices has led to an increase in the revenues of OPEC members of more than 13% in 2013. These abundant revenues have thus enabled OPEC countries not only to increase the level of subsidies for petroleum products but have also sustained their implementation. The result has been significant government indebtedness. (Yang, 2022)

Table 01 ; OPEC Members' values of petroleum exports (m/s)

Country / years	2018	2019	2020	2021	2022
Algeria	26.082	22.674	13.188	23.356	32.513
Angola	37.801	32.230	18.782	28.837	41.241
Congo	7.468	7.072	3.689	5.785	8.297
Equatorial guinea	3.175	2.703	1.765	2.366	3.111
Gabon	4.419	4.767	2.714	4.641	6.812
IR Iran	60.519	19.402	7.914	25.526	42.619
Iraq	84.218	80.027	44.128	79.788	120.571
Kuwait	64.582	52.433	35.228	61.703	95.352
Libya	25.386	24.197	5.724	27.485	33.255
Nigeria	54.513	45.106	27.730	41.378	53.457
Saudi Arabia	231.585	200.488	119.359	202.166	326.289
United arab emirates	57.890	52.417	31.341	54.595	94.677
venzuela	29.810	18.335	5.738	8.816	15.379
Opec	687.447	561.851	317.300	566.442	873.573

th

Source : OPEC Annual Statistical Bulletin 2023 ;58 edition ; p 18.

OPEC countries are predominantly oil exporters and exporters of natural gas as well, making energy to a large extent a commodity on which their economies heavily rely. Petroleum export revenues account for a significant portion of the export earnings of OPEC countries, and government policies in the area of economic growth, social development, and infrastructure development to a large extent rely on the energy income of these countries. The annual export oil revenues from OPEC countries represent about 56% of the total export revenues of the organization's members and in 2013 amounted to approximately USD 1.2 trillion, a decrease of 3% from 2012. These revenues constituted 35% of global revenues from crude oil exports

in 2013, but this percentage is expected to drop to 29% particularly because of the significant growth in shale oil from non-OPEC countries. The production of crude oil accounts for 56% of OPEC revenues in 2013, while the production of natural gas has represented 2% of OPEC revenues since 2011. (Ghoddusi, 2022) .

3.1. Overview of OPEC

OPEC's eleven initial members were Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela. These countries had been rationalizing their oil activities since the end of World War II. Libya and Qatar had been conducting oil-related activities during the 1950s. Indonesia, from Oceania, had begun to undertake its oil activities from the 1960s. By 2008, the overall proportion of global oil production had reached 53%. This was the year when Ecuador began participating, and the proportion of global oil reserves became approximately 80%. The oil reserves from the main OPEC countries have been used to maintain high quotas and market shares in oil production. However, adjustments have been made frequently, both informally by members and formally in confidential meetings held every six months. (Norouzi, 2021).

OPEC was established in September 1960. Its membership includes fourteen of the world's major oil-exporting countries, primarily located in South America, the Middle East, and Africa. OPEC's principal objectives are to coordinate and unify the petroleum policies of its member countries and to ensure the stabilization of oil markets. This is done in order to secure an efficient, economic, and regular supply to consumers, a steady income to producers, and a fair return on capital to those investing in the industry. (Zulkifli, 2022).

4. Energy Market Interdependencies

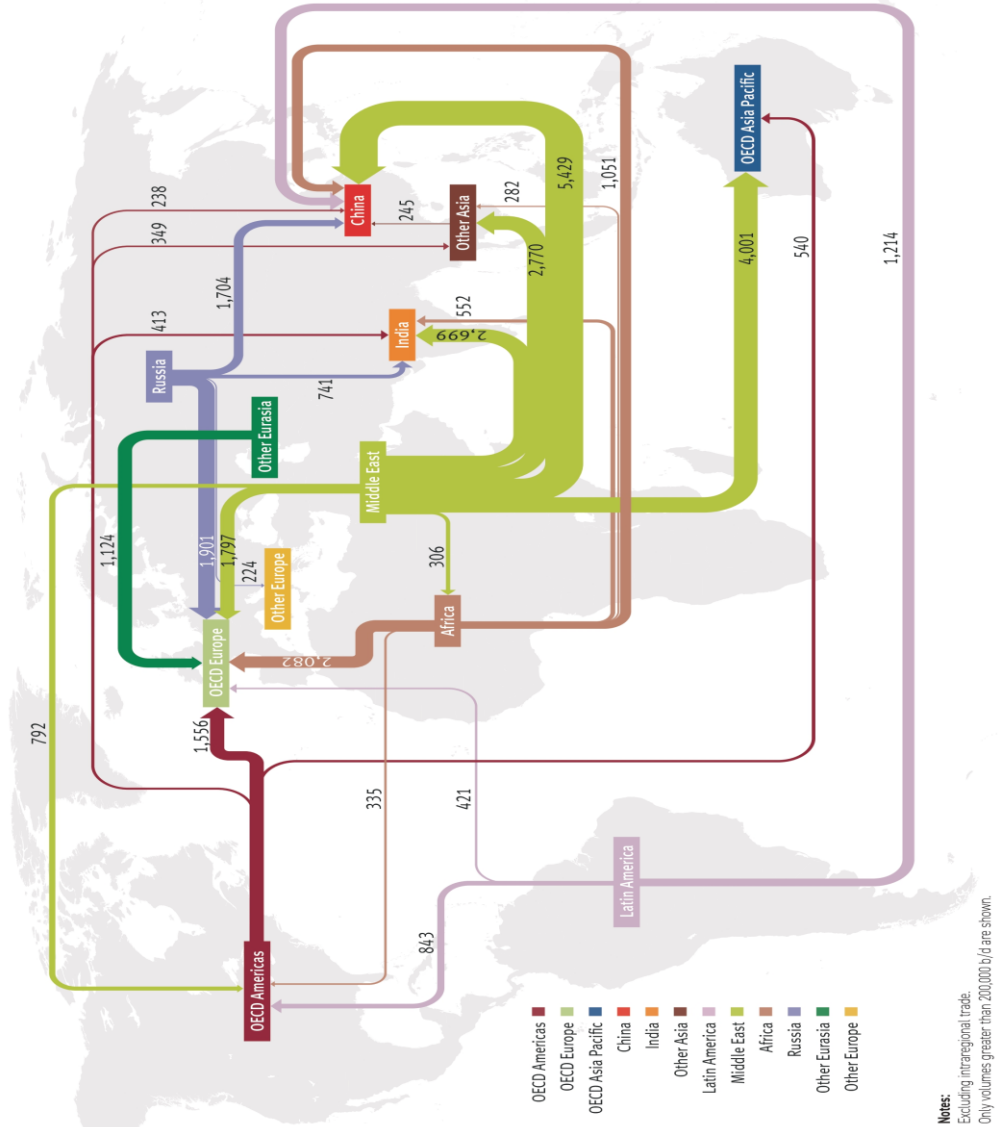
Although the global economic growth-energy demand nexus has stepped up this year, it is still very pronounced in the upcoming period, mostly because OPEC's oil wealth is a significant part of the world's energy and financial markets. Since the highly volatile spot oil and natural gas markets enable OPEC's production and price strategies to produce an instant potential impact through influencing the forward energy markets, different commercial interests across a wide spectrum of the energy market players have clear views about the strategies that may lead OPEC's actions. As the central players in the global energy and financial market, OPEC uses three main classes of confidential information to fine-tune its policy actions: one for monitoring the evolution of the global energy, economic growth, and financial market interdependencies, another for monitoring the changes in market mood and physical market fundamentals, and a final one to assess the impact of political and geopolitical events. (Economou & Fattouh, 2021)

Interdependencies between the energy markets, as well as those markets and global events, are becoming more complex. These interdependencies are pushing energy prices, increasing energy security concerns, and having a political influence across the world. This trend towards increasing global energy market and event interdependencies mostly reflects the crude oil and natural gas markets' traditional role in causing second-round effects. With natural gas being a substitute for oil in electricity, industrial feedstock, and heating, and with both fuels having close commercial, fiscal, equity, and risk premium interdependencies for OPEC countries, political crises and events have become capable of resulting in short- and long-term global economic dislocations, where excess demand has been met with supply disruptions. (Lin, 2021) .

4.1. Global Energy Supply Chains

The willingness of any country to participate in international trade is framed by two main goals that are achieved by making use of energy market access. These include economic development as well as obtaining energy security. In addition to this main target, a third of the set of benefits to be reaped from engaging in international trade is that of efficient redistribution. Nonetheless, energy field dynamics have come to embrace many other aspects as well. In autocratic countries, access to the wealth of natural resources has generated corruption and a transfer of financial rights from citizens to the state treasury. In politically unstable fields, oil revenues have, for many years, been crucial. As oil revenues improve the power of the sovereign, the lack of energy resources acts as a constraint in other countries. This can lead to an imbalance in economic development. (Gani, 2021).

Graph 01 : world inter-regional trade of crude oil 2022 (1000b/d)



th

Source : **OPEC Annual Statistical Bulletin 2023** ;58 edition ; p 52.

The global energy supply chain is designed in a way to maximize welfare, which has given room to countries that are rich in energy, becoming even richer, leveraging the abundant resources available to them. The structure of energy markets is defined by a set of technical and economic constraints that reduce and limit the opportunities for intermediation. In energy markets, resources are geographically dispersed, and the cost of space transformation or restructuring is significant. Countries that are rich in energy, particularly in the coal, gas, and uranium sectors, influence the price of energy at the

international level and also have enormous political influence. Energy businesses work best when they have access to global markets, allowing them to spread their income over a wide array of actors. As a result, firms with a truly global strategy and reach tend to have lower potential for significant conflict, as they are equipped to manage the many risks involved in doing business on a global scale. (Wang, 2020)

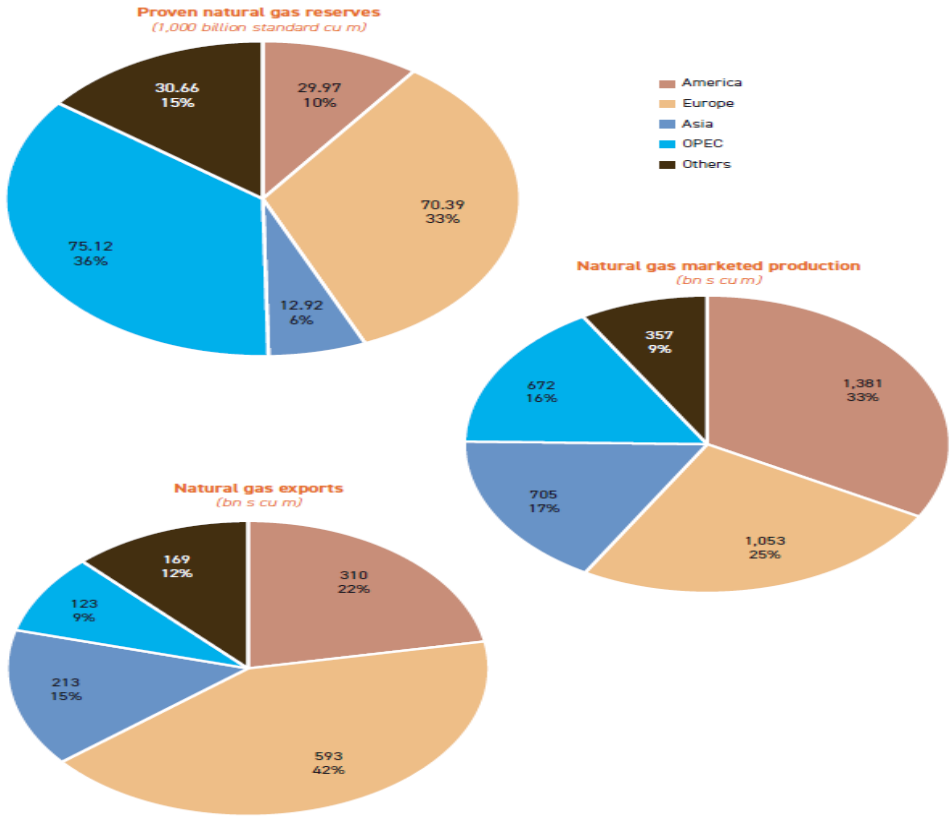
5. Impact of the Ukrainian Crisis on OPEC Countries

Thus, over a period of time, the political dynamics and oil diplomacy have played a crucial role in maintaining the status quo in the mineral-rich but volatile oil and gas-producing region. With the imposition of power politics over the issue of the historical Silk Route in this region, recently OPEC countries are also concentrating on the surplus stockpiling of the fuel resources. Consequently, a continuing spillover of the Ukrainian crisis creates suspicions among Moscow's closest strategic allies towards Europeans, which generates apprehensions that there is also an ongoing competition between OPEC and non-OPEC oil-producing nations in this region. Such confrontations would primarily aim to boost the negotiations over the commercial circulation of oil and gas in these places. (Hunter, 2023) The continuous struggle for control of the fossil fuel resources in the world has set the stage for numerous conflicts around the world, particularly in the oil and gas-rich OPEC nations. The present crisis in Ukraine and the confrontation with Russia is endorsed by the roles of both the western powers in general and the OPEC powers in particular. Traditionally, the other member countries from the developed world act as allies of the western power bloc to promote its dominance, whereas the latter in turn continuously protect and prop up the autocratic regimes of the former, particularly those where the presence of huge oil and gas resources are found. (Ateed, 2024) .

5.1. Oil and Gas Exports

With major private and public sector opportunities, petroleum, petrochemical, and the gas and hydrocarbons industries are key sectors for both Arab and other OPEC member countries. As global players, these industries offer rapid long-term growth potential, dictating the need to accelerate measures to enable local investors to allocate substantial sums and lend considerable financial support to infrastructure programs. Owing to the strengths, knowledge, and experience gained over the years, due to enhanced trade, these Arab and other OPEC member countries evolved through the years by mastering a large assortment of value-added petrochemical products, which, in turn, fostered the development of several whole new sectors, leading to further transformation of basic materials via other specialized industries. (Jalilova, 2021)

Graph 02 : Natural Gas Market and Global Exports 2022



th

Source : **OPEC Annual Statistical Bulletin 2023** ;58 edition ; p 77.

Aiming to eliminate potential risks and repercussions of the Ukrainian crisis on the world energy market, including its development for the economy of the OPEC member countries, it is important to evaluate the possible impact level on the analysis of their export energy contribution for both oil and gas. The next section focuses on the supply reaction of these countries in the respective world markets, in addition to an assessment of the shortfall that the markets could face should the direct energy Russia-Ukraine transactions be diverted, for one reason or another, to other consuming regions of the world. (Ateed, 2024)

As the second largest oil producer globally, Russia’s war with Ukraine and its chain of events have significantly impacted the world energy market. Given its importance as a pillar of the global economy, the trend of oil prices has long been a subject of inquiry for both industry and academic circles.

6. Responses and Strategies of OPEC Countries

The countries would have, as is known, the three traditional options of getting this resource to the consumer markets. They can build LNG plants and export liquefied gas in refrigerated ships. They can also build specific pipelines, which, however, present a fixed cost perceived high, to exist for each exporter to justify such investment, especially when there may be competition from other suppliers with lower transport costs. Closeness to the European market and concentration of offer in a few countries (Nigeria, Algeria, and Russia, as a matter of fact) might allow some preponderance vis-à-vis the recipient countries. That led to comments like those of US Energy Secretary Dan Brouillette, who defended the construction of pipelines for importing Algerian natural gas and Iraqi oil, letting us know that the battle for the first gas from Nigeria was won. Information which allows us to perceive that the super-gas highway would be a reality. (Luciani, 2022).

To what extent do the mentioned countries within the OPEC have a specific need and, especially, interest in developing an interconnection strategy? In this regard, several OPEC countries have already made progress or developed different strategies to this end. Saharan countries (Algeria, Libya, and Egypt) besides their physical proximity also have an interconnection with the consequences that are being suffered already. The difficulties of financing projects were even echoed in the last ministerial sees with Nigeria's special plea for its counterparts to take their request for financial support seriously. According to Acácio Fernandes, many meetings have been promoted since 2009, institutional contacts materializing progressively to the extent that the first gas from Nigeria began to move from the government's wish to buy. This first result was considered extremely important by the Minister of Mines and Energy, who thus saw that the project was moving from an almost surreal discussion to a concrete reality. (Salman, 2024)

6.1. Diversification of Energy Portfolios

The fight against the COVID-19 pandemic became crucial for the reorientation of these countries. The oil and gas sector suffered, decreasing investment volumes. The main tasks of oil and gas-rich countries are the digital transformation of business and the development of green energy. In this connection, investment has increased in the following areas: cloud services; platforms for organizing remote work; the implementation of solutions smart field; online trading in energy products; renewable energy; rapid charging stations for electric cars; hydrogen-based energy projects; ecological monitoring solutions; and sustainable home services. Due to these activities, the state increases the capitalization of sovereign wealth funds. As investment funds accumulate, they will have a growing influence

on the capital of companies. The publication emphasizes the importance of the countries of transformation: they are able to turn the transition to green energy to their advantage by becoming major market players. (Norouzi, 2021). D.M. Dearley conducted a study of sovereign wealth funds of oil-producing countries and concluded that the financing of energy-related investment projects is decreasing. The researcher identifies three main reasons for the attraction in the relevant sector: diversification of energy portfolios; the need of countries to attract funds for the development and modernization of regional energy infrastructure; and the development of renewable energy sources. The risk for countries that are actively building hydrocarbon infrastructure is the possible implications of stranded assets. A case in point is a significant decrease in the cost of green energy which makes traditional pipelines and oil refineries contextual and privy pension. (Matori, 2024)

7. Geopolitical Considerations and Energy Security

When discussing the impact of the geopolitical crises, such as Ukraine, we need to assess their impact on the areas of national interest, and how the national interests are interrelated. Mitigating the impact of such crises is always a complex and intricate process, and while the majority of countries are aware of the potential for such dilemmas, the economic interests and contracts of a number of countries are predicated on partnerships that are exposed to potential underperformance, slow delivery, or political motives of the collaborating parties. One of the considerations when engaging in the analysis of the incidence of such crises is the critical features, which for the most part have economic ramifications. (Bagchi, 2023)

. In light of the current turbulence in the global energy market, it is important to assess the implications of the Ukrainian crisis on the energy market and gas exports of OPEC countries, given their significant dependence on the European market. As the world's biggest energy consumer, the European Union fulfills the major part of its gas demand through imports. In 2013, the EU gas imports reached 309.2 bcm, and more than 40% thereof were supplied by Russia. The implications of and responses to the Ukrainian crisis, diverging geopolitical interests, and the corridors for gas supply and demand associated therewith are the core issues of this paper. (Tsekos, 2024)

7.1. Strategic Partnerships

Despite the set of external dialogue institutions and bilateral cooperation mechanisms in OPEC, the current interaction with consumers is largely reduced to periodic meetings. An example of a profound level of organization and accountability in the framework of the OPEC dialogue with consumer countries is the Institute for Oil Research and Development

(IORA) in Riyadh, which has offices of four other consumer countries, emergency services, and dispatch units. The IORA carries out various types of research, organizes international conferences of experts, and the annual consultation with European countries. The Consortium, which opened in 2002 at the initiative of the International Energy Agency and has 13 branches in member countries, Russian and CIS representatives, is tasked with implementing IORA energy programs to strengthen cooperation between oil producers and consumers in this area. Guidance and coordination of the work of the Consultants of Governments is carried out directly by OPEC. These mechanisms use OPEC countries as an effective platform for reliable dialogue and a constructive solution to certain issues of cooperation. (Kumaraswamy, 2020)

According to OPEC's long-term strategy, strengthening dialogue and cooperation with consumers is one of the main directions of the organization's activities. This is due not only to the existing imbalance in the activities of suppliers and demand, but also to the mutual interest of exporters and importers in the establishment of normal economic relations for the purpose of regulating the energy market, ensuring investments, and creating favorable conditions for the development of the world economy. With the simultaneous receipt of funds from energy exports, which strongly influences the formation of world economic growth, economies of industrially well-developed consumer countries may suffer. Studies have shown that adverse economic consequences for the economies of the leading states of the world economy occur with a sharp rise in the price of oil. In addition, in recent decades, one of the priorities of energy policy has been the diversification of sources and routes of energy resources supply and the development of transition from oil dependence to the use of alternative types of fuel. For the OPEC countries, demand for their mineral resources is also an important condition for the development of their economies. (Dag Harald C et al, 2020).

8. Future Scenarios and Recommendations

As this research work has shown, the developments of the crisis may result in a significant decline in the transport of fossil energy sources to Europe, leading to a considerable increase in prices. Consequently, the implementation of the diversification policies of the EU Member States in the energy mix of the EU economies, i.e., in the energy supply sources and routes, avoiding the highest possible responsibilities in the transport of gas and oil through Ukraine to another country, avoids transportation responsibilities, obtaining more natural gas, oil, and crude oil from non-European countries, are necessary as they will protect the economies of Europe from the negative consequences of a potential decline in the supply of the OPEC Member Rentiers and especially the Hold-Up Power of Russia. This diversification is far more than geography, avoiding the restrictions

inserted within the energy dependency approach, focusing on the countries from which the EU imports most or on the type of energy source. It should be noted that this change in the energy supply must result from the penetration of various energy transmission forms, of which the most important are the RES and the LNG. (Osička, 2022)

The resurgence in hostilities and the outbreak of military conflicts between Ukraine, geographically located between Europe and Russia, have caused tensions and have raised serious questions about Europe's energy security, which sources 13% and 38% of its oil and gas, respectively, from OPEC countries. The political crisis in Ukraine has opened the question of the transfer routes of gas from the OPEC countries as it is part of the Russian policy to avoid the transit of gas through one of the neighboring countries. Possible developments in the crises have been examined, leading to several scenarios, but they do not seem to be acceptable due to the serious consequences. (Onifade, 2021)

Conclusion: Based on the study, the main research results include:

9.1. Impact of the Ukrainian Crisis on OPEC Energy Markets: The

Ukrainian crisis has had significant impacts on OPEC countries, influencing various aspects of their economies and energy policies. Key impacts include:

- **Energy Market Volatility:** The crisis has led to increased volatility in global energy markets, affecting oil prices and supply chains. OPEC countries, as major oil producers, have had to navigate these fluctuations, adjusting their production levels and strategies accordingly.
- **Supply Chain Disruptions:** Disruptions in the supply of Russian energy due to sanctions and geopolitical tensions have created opportunities and challenges for OPEC countries. They have had to fill the gap left by reduced Russian exports while managing their own supply commitments.
- **Economic Strain:** The increased energy prices resulting from the crisis have had mixed effects on OPEC economies. While some countries have benefited from higher revenues, others have faced economic strain due to inflation and increased costs of imports.
- **Policy Adjustments:** OPEC countries have had to make significant policy adjustments in response to the crisis. This includes revising their production quotas, exploring alternative markets, and enhancing cooperation within the organization to stabilize the market.
- **Geopolitical Shifts:** The crisis has shifted geopolitical alliances and partnerships. OPEC countries have had to reassess their diplomatic

relations and trade agreements, balancing their interests between Western countries and Russia.

- **Investment in Energy Infrastructure:** In response to the uncertainties brought by the crisis, OPEC countries have increased their investments in energy infrastructure and diversification of energy sources, including renewable energy projects, to ensure long-term stability.

Overall, the Ukrainian crisis has compelled OPEC countries to adapt to a rapidly changing global energy landscape, influencing their economic policies, strategic planning, and international relations.

9.2. Global Energy Market Analysis: The research analyzed global energy markets and supplies, highlighting how disruptions from the Ukrainian crisis have affected global energy dynamics.

9.3. OPEC's Strategic Response: The study explored OPEC's strategies in addressing the crisis. It noted that OPEC countries have shown flexibility in policymaking to adapt to market changes and optimize their energy strategies.

9.4. Future Scenarios: Potential future scenarios were considered based on current trends and geopolitical developments surrounding the Ukrainian crisis, providing insights into possible outcomes for OPEC and global energy markets.

9.5. General Recommendations:

- **Enhanced Monitoring and Adaptation:** OPEC countries should continue to monitor economic indicators and energy market dynamics closely. This includes adapting policies swiftly to mitigate risks and capitalize on opportunities arising from market changes.
- **Investment in Innovation:** Emphasize investment in innovative energy markets and technologies. This could help OPEC countries not only navigate current challenges but also lead in sustainable energy practices and environmental stewardship.
- **Collaborative Diplomacy:** Strengthen diplomatic efforts to navigate geopolitical tensions associated with the Ukrainian crisis. Collaborative approaches could stabilize energy markets and foster international cooperation on energy security.
- **Perspectives:** The author suggests that ongoing research and monitoring are crucial to understanding evolving energy market dynamics amidst geopolitical uncertainties. Furthermore, international collaboration and strategic partnerships could play a pivotal role in ensuring stability and sustainability in global energy markets.

References:

1. Ateed, E. H. (2024). *The Impact of Russia-Ukraine War on the Global Energy Crisis. In Analyzing Energy Crises and the Impact of Country Policies on the World.* [HTML]: IGI Global.
2. Bagchi, B. &. (2023). Effects of crude oil price shocks on stock markets and currency exchange rates in the context of Russia-Ukraine conflict: Evidence from G7 countries. . *Journal of Risk and Financial Management* .
3. Davies, S. P. (2023). Organized violence 1989–2022, and the return of conflict between states. *Journal of peace research* , 60 (4), 691-708.
4. Gani, A. (2021). *Sustainability of energy assets and corruption in the developing countries. Sustainable Production and Consumption.* [HTML].
5. Ghoddusi, H. M. (2022). . *Going downstream—an economical option for oil and gas exporting countries?. Energy Policy.* iaee2021online.org.
6. Gould-Davies, N. (2023). *Russia, the West and sanctions. In Survival: Global Politics and Strategy (February-March 2020): Deterring North Korea (pp. 7-28).* Routledge. [HTML].
7. Jalilova, E. (2021). *Assessment of the impact of petroleum production on economic growth in Opec countries.* . vdu.lt.
8. Kumaraswamy, M. (2020). *Persian Gulf 2020: India's Relations with the Region,* . UAE: [HTML].
9. Lin, B. &. (2021). Does COVID-19 open a Pandora's box of changing the connectedness in energy commodities?. *Research in International Business and Finance.*
10. Luciani, G. (2022). *The Mediterranean and the energy picture. The Mediterranean Region.* . [HTML].
11. Maohong, B. (2020). *China and OPEC: From ideological support to economic cooperation.* . Handbook of OPEC and the Global Energy Order. [HTML].
12. Matori, S. S. (2024). *Energy transition and climate-related policies: A changing environment and its implications for OPEC countries.* tuwien.at.
13. Norouzi, N. (2021). Post- COVID- 19 and globalization of oil and natural gas trade: Challenges, opportunities, lessons, regulations, and strategies. *International journal of energy research* .

14. Onifade, S. T. (2021). Environmental aspect of energy transition and urbanization in the OPEC member states. . *Environmental Science and Pollution Research* , 28, 17158-17169.
15. Osička, J. &. (2022). *European energy politics after Ukraine: The road ahead*. *Energy Research & Social Science*. [HTML].
16. Salman, H. M. (2024). *A Common Strategy of International Communication Between the Countries for the Crude Oil Trading in Global Market; A Case Study of Crude Oil Production. A Case Study of Crude Oil Production (March 3, 2024)*. . [HTML].
17. Tsekos, C. (2024). *Development of experimental and analytical/modelling methods for the investigation of biomass pyrolysis and gasification in a novel indirect fluidized bed reactor*. tudelft.nl.
18. Dag Harald Claes, Giuliano Garavini (2020). *Talking about OPEC without talking to OPEC?. Handbook of OPEC and the Global Energy Order: Past, Present and Future Challenges*. . [HTML].
19. Wang, Q. L. (2020). *Heterogeneous effects of energy efficiency, oil price, environmental pressure, R&D investment, and policy on renewable energy--evidence from the G20 countries*. *Energy*. . [HTML].
20. Yang, Y. L. (2022). *Economic impact of crude oil supply disruption on social welfare losses and strategic petroleum reserves*. *Resources Policy*. [HTML].
21. Zulkifli, N. &. (2022). The opec oil shock crisis (1973): an analysis. . (mohe.gov.my, Éd.) *Asian Journal of Research in Business and Management* , 4 (1), 136-148.