Journal of Humanities and Social Sciences Researches (JHSSR)

ISSN: 2958-3160 (Online)

A critical analysis of the global oil fluctuation rate and its impact on opec countries from 2010 to 2021

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Received: 22/05/2023 Accepted:11/07/2023

Abstract

This study suggests a critical study on the fluctuations rate of "global oil" and its influence on OPEC countries from 2010 to 2021. The cost of oil has been a critical factor in the global economy since its founding in the mid-19th century. In the past decade, the costs have fluctuated enormously, with a peak in 2008 followed by a decrease in 2009. Following this costs increased again in 2010 but have stayed explosive until now. This paper will discuss the aspect behind these fluctuations and their effect on OPEC countries. It will also consider the strategies utilized by OPEC countries to handle the fluctuations and their usefulness. Finally, the paper will deliver a prognosis of oil costs for the next decade and its significance for OPEC countries. By studying the global oil fluctuations and their effects on OPEC, this paper delivers a better knowledge of the recent dynamics of the "global oil" market and the options for OPEC countries. Finally, the study evaluates the impact of global oil price fluctuations on OPEC countries, including the impact on their respective economies, budgets, and trade balances. The study concludes that while the global oil price fluctuations have had both positive and negative effects on OPEC countries, the overall impact has been positive, as most OPEC countries have benefited from higher oil prices. The study also provides policy recommendations to help OPEC countries manage the risks associated with global oil price fluctuations.

Keywords: Possession, Syntax, Pragmatics, Educational Process.

1. Introduction

This study is based on the "critical analysis of the global oil fluctuation rate and its impact on OPEC countries from 2010 to 2021". In the study literature review analysis will be performed based on the point. A system model will be provided based on this topic. Within the study, a brief discussion will be provided based on whatever is found within the study. From the study [9], it has been found that Oil cost fluctuations have a considerable effect on the economy of oil shipping and importing countryside. Moreover, oil is a primary source of revenue in oil-shipping countries and a significant input to the presentation in oil-importing countries. This study has numerous benefits over the evaluation of several factors which was responsible for the fluctuations of the global oil rate. This study will be effective to know about the OPEC agreement which was established regarding the control of the rate of oil. This agreement was updated so many times and it was updated last time, in the year 2016. This agreement

DOI: 10.33687/jhssr.002.03.000223

set a limit on using oil per day for OPEC countries. This agreement plays a valuable role for the OPEC countries to keep the rate of oil stable and this is responsible for increasing the revenues.

The impact of the global oil rate fluctuations on OPEC countries

According to the study [15], the international oil market has seen several fluctuations over the past few decades due to geopolitical tensions. This is because the majority of oil resources are located in politically unsteady areas such as the "Middle East and North Africa". The instability of these areas has generated a great deal of indecision in the oil market, conducting to extreme price fluctuations. Within the study, it has been found that fluctuations in the oil rate have a significant influence on the global economy. Fluctuations in oil costs can induce instability in the global marketplace, leading to more elevated prices for businesses, consumers, and governments. More increased oil prices can donate to inflation. Conversely, lower oil prices can help to promote economic development.

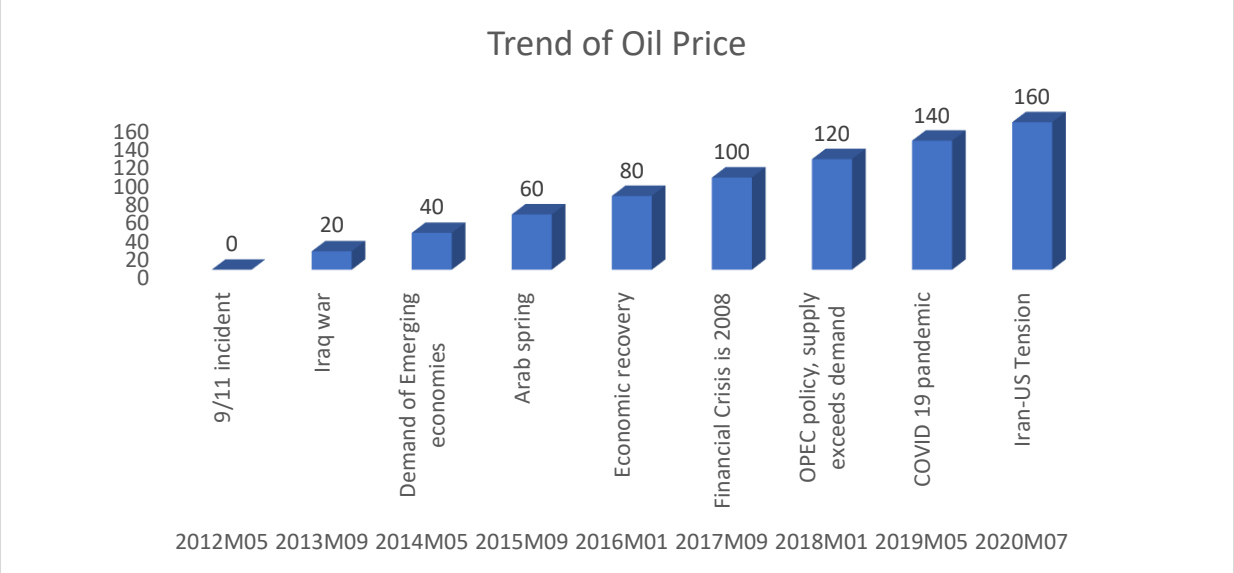

Figure 1: Trend of Oil Price

The global oil markets have been severely disrupted by a variety of financial crises, political events, and speculation. This disorder has been felt across the world, with some of the most significant impacts being felt in the United States, where oil costs have fallen dramatically. The most current financial trouble, the Great Recession, had a massive consequence on oil costs. This crisis caused a decrease in demand for oil, leading to lower oil prices. When the price of oil fell, it caused a ripple effect throughout the entire global economy. This included a reduction in the value of oil-producing nations' currencies, a decrease in the demand for oil-related products, and a decrease in investment in oil-producing countries. Political events have also impacted global oil markets. Respective, the "Arab Spring of 2011" saw an unexpected deduction in the reserve of oil from the Middle East, due to political fluctuation in

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the region. This caused a sharp advancement in oil costs, as the deficiency of oil caused a reduction in supply. This economic crisis occurred during the year 2004 to 2005. At this time, supply of the oil declines due to speculation and the process of oil resources drying up. This process of the new oil inquisition is very problematic. The mismatch between demand and supply is responsible for high volatility and sets pressure on the costs of oil. **[*Referred to Appendix 1*]**

The author of this study aimed to comprehend the qualities of crude oil bubbles, their determinants, and the relationship between bubbles and situations. To do this, the author used a panel data set of daily "crude oil spot" prices from the year 2005 to 2017. The author examined at the effects of speculative and geopolitical events on crude oil costs, in addition to volatility and trading volume. The outcomes of the study revealed that speculative and geopolitical circumstances have an influential impact on crude oil costs and can lead to crude oil bubbles. However, the bubbles produced by these circumstances do not always lead to situations. The author supposed that the relationship between bubbles and problems is more complicated and is likely to rely on further factors such as the length and period of the bubble, the rate of its collapse, and the reaction of the market to the bubble's destruction. Furthermore, the author recommended that further study should be executed on the results of other factors such as macroeconomic variables, financial market circumstances, and procedure decisions.

As per the opinion of the author, Li, 2021, Global oil prices have dropped drastically in the past few years due to several reasons. The preliminary reason for this reduction is the global economic deceleration. The oil demand has fallen in many countries due to hindering economic development and the resulting decline in production and transportation activities. Besides, the pandemic has generated many countries to lower their energy consumption due to worry of contagion. Another aspect that has contributed to the decline in oil costs is the expanded production of oil. Many oil-manufacturing countries, including the "United States and Saudi Arabia", have expanded their production to support their market share in the global oil market. This has resulted in an excess of oil, which has caused costs to drop.

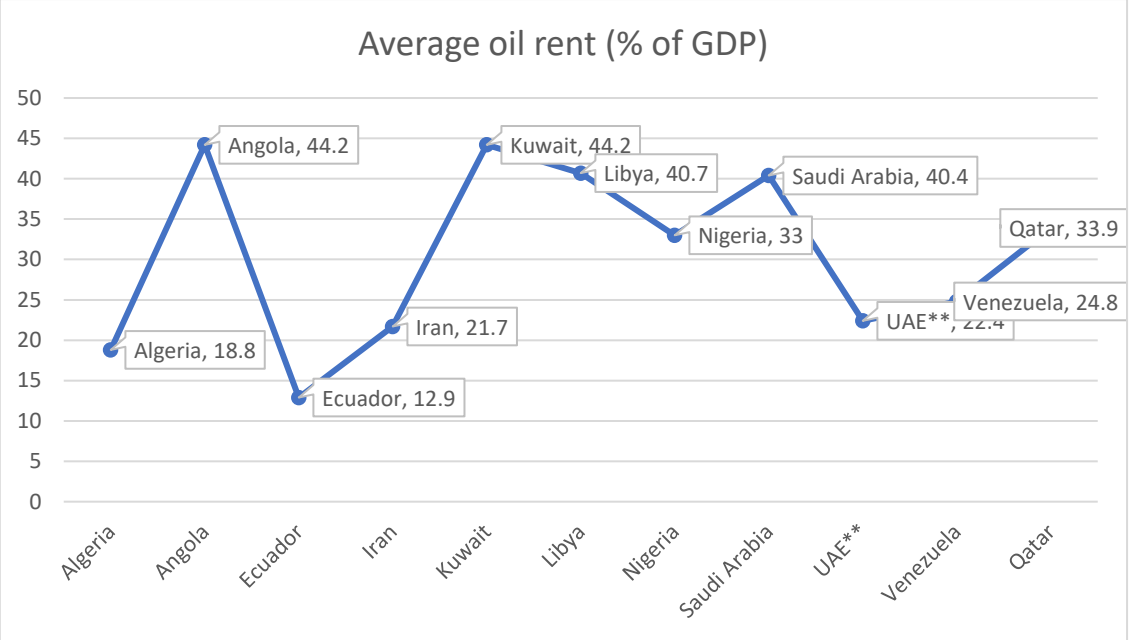

Figure 2: Average oil rent

Similarly, the decline of the US dollar has also contributed to the decline in oil prices. The "US dollar" is the global currency and most oil dealings are done in US dollars. A weaker dollar creates oil more costly for consumers in other countries, decreasing demand and inducing costs to drop. The "OPEC+ agreement" is also a significant factor in the current decrease in oil costs. It is an agreement between OPEC nations and other major oil producers to limit production and maintain a certain level of supply. This contract has led to an oversupply of oil, which has generated prices to fall. The increasing usage of renewable energy sources has also contributed to the decline in oil costs. Renewable energy sources, such as "wind and solar", are becoming increasingly popular and are slowly substituting oil as the primary source of energy. This has caused a lowering in the need for oil, leading to lower costs. **[*Referred to Appendix 2*]**

Proposed System Model

The proposed system model will interpret the global oil fluctuations rate and its effect on OPEC countries from 2010 to 2021. This system model will contain data collection from numerous sources, data mining and estimation, and visualization of the results. The analysis will contain an evaluation of the impacts of global oil costs on OPEC countries, and will also contain an inspection of the potential risks and possibilities correlated with the differences in oil prices. The model will be used to generate insights on potential strategies and actions to mitigate risks and capitalize on opportunities. Additionally, the system model will help policymakers to produce better-informed decisions concerning the effect of oil costs on their countries.

DOI: 10.33687/jhssr.002.03.000223

The global oil fluctuations rate and its impact on OPEC countries from 2010 to 2021 can be studied through a system model that incorporates elements of economics, geography, and politics [24]. This model can be applied to evaluate the effect of the global oil market on OPEC countries, including the effects of supply and demand dynamics, government policies, and geopolitical events.

The system model begins with the global oil market and its supply and demand fundamentals. Oil demand is forced by global economic growth, modifications in energy efficiency, and population growth, while supply is defined by production levels, availability of oil reserves, and technological advancements. This supply and demand ratio specifies the global cost of oil, and this price can be expected to vary over time. The next layer of the system model analyzes the geopolitical context of the global oil market. This includes the activities and policies of OPEC countries, main non-OPEC producers, and other actors. OPEC countries can influence global oil prices by setting production quotas and by forming strategic alliances with other producers. Major non-OPEC producers, such as Russia and the United States, can also impact the global oil market by establishing production levels and by forming strategic alliances. Other actors, such as insurgent groups and governments, can also affect the global oil market by disrupting production.

The final layer of the system model looks at the impact of the global oil market on OPEC countries. OPEC countries are highly dependent on oil revenues, and changes in the global oil market can have considerable influences on their economies [25]. OPEC countries can be expected to react to changes in the global oil market by modifying their production levels, creating strategic alliances, and enforcing policies prepared to protect their economies.

This system model delivers a framework for studying the global oil fluctuations rate and its effect on OPEC countries from 2010 to 2021. It inspects the global oil market, the geopolitical context, and the effect on OPEC countries, and can be utilized to determine trends and ways in the global oil market and their impacts on OPEC countries.

Oil exporter and importer model

The oil exporter and importer model is a model that aims to launch a pricing framework for oil trading between countries. The model involves two countries, one an exporter of oil and the other an importer of oil. The exporter is generally a country that delivers oil and has a competitive benefit in the market due to its capability to create and export oil at a more inferior price than other countries. The importer

is generally a country that is unable to deliver oil and must depend on imports to meet its oil requirements. With the help of this model, a "multi-input" production function over an oil-importing country can be assumed.

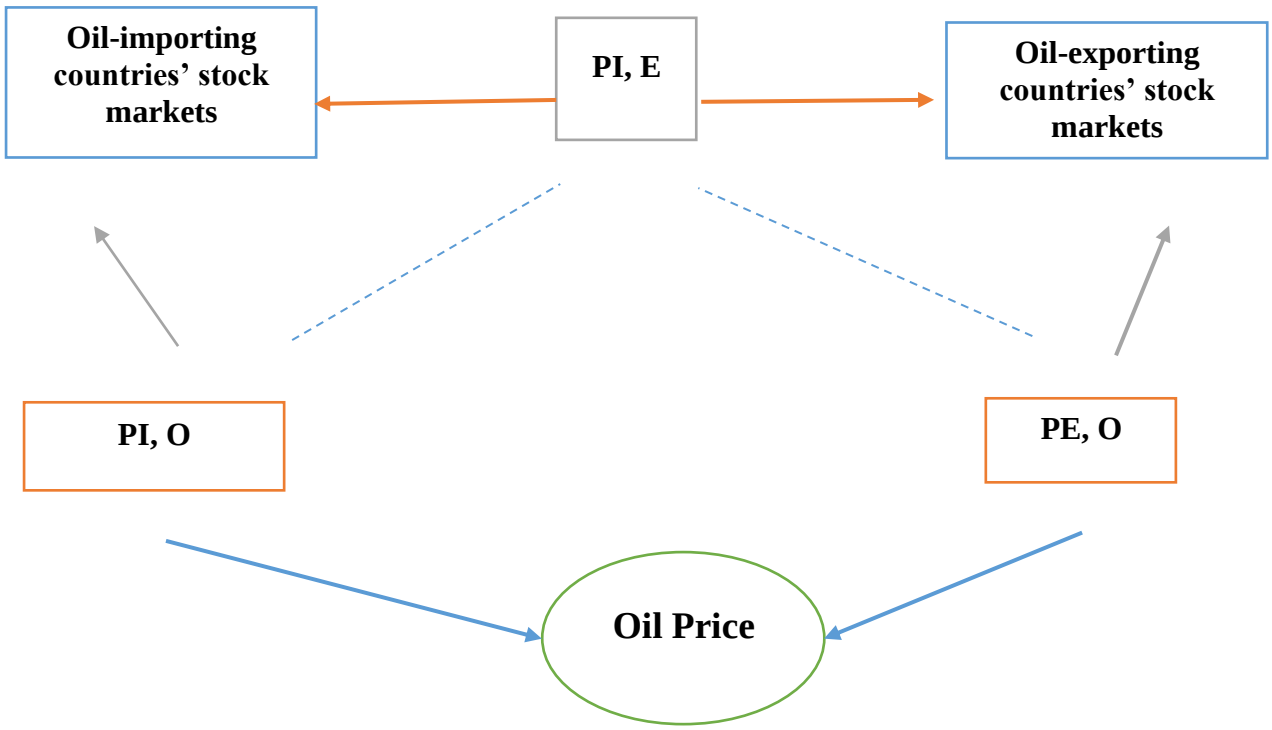

Figure 3: Oil exporter and importer model

The above image represents the oil-importing and exporting methods where PE, O is oil-exporting countries, P I, O is oil-importing countries, and P I, E is both oil-importing and exporting. The exporter and importer model desires to appoint a pricing framework that is appropriate and unbiased to both exporter and importer countries [2]. The model contains several elements such as the price of production, transport, and transaction, as well as the cost of oil within the global market. This model also accounts for the order for oil in the importing country, as well as the price of oil production and conveyance.

The exporter and importer model desires to construct a pricing format that is advantageous to both exporter and importer countries. The model is profitable to exporter countries. After all, it allows them to handle the cost of their oil exports while satisfying the importer countries because it allows them to permit a stable and trustworthy source of oil. The model also allows for promoting strength in the global

DOI: 10.33687/jhssr.002.03.000223

oil market, as it assists to confirm that the cost of oil is compatible and appropriate, while also providing exporter and importer countries with a level playing field.

Results

The historic "Algiers Agreement" most definitely represented a consensus among Member Countries and signaled a significant change in perspectives. It was the foremost such "OPEC agreement" since the decision of Oran, and Algeria, in 2008 and represented a broad distinction of the facts of the market of the current time [12]. The agreement was roundly accepted by numerous stakeholders. The "Vienna Agreement" also was marked within the conference of OPEC and it has been recognized as a precious moment for the oil industry. Based on the agreement, the production rate was set by 1.2 mb/d from the year 2017.

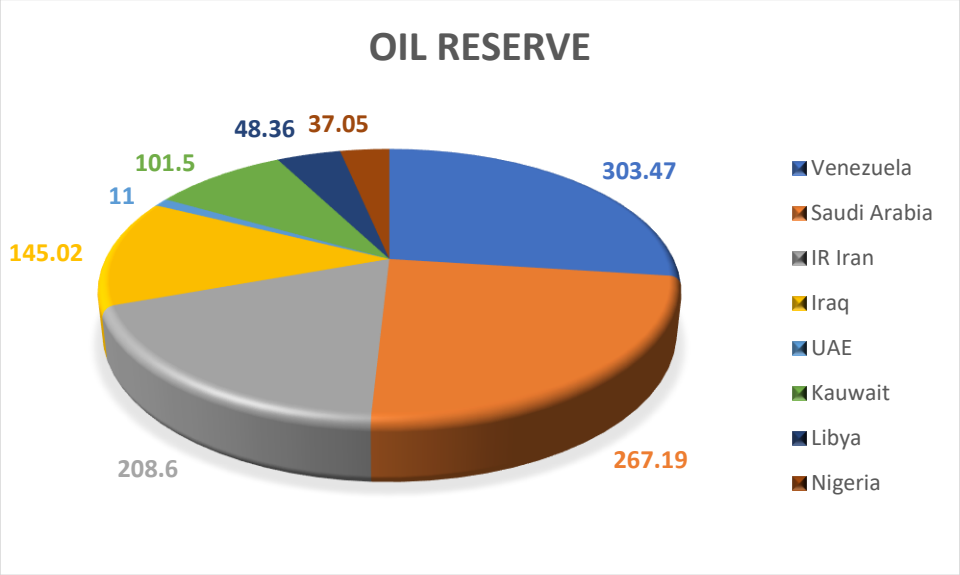

Figure 4: Oil reserve: 2017-2021

The above image describes the percentage change in OPEC production based on the year 2017 to 2021. The rate is high in the year 2020 and the lowest rate has been found in the years 2017 and 2018.

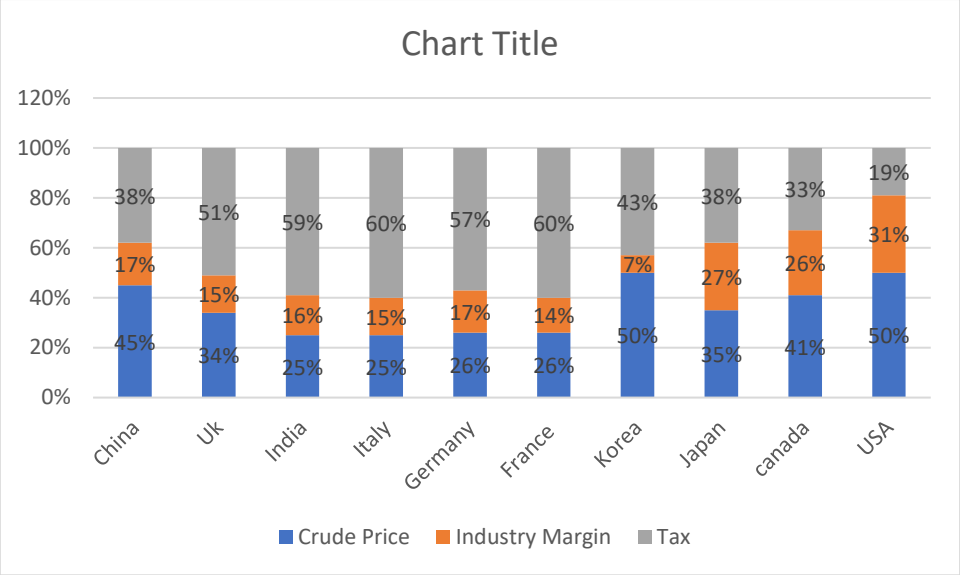

Figure 5: Bar chart on the variations of the demands for global oil price

The image describes the demand for global oil based on regions in the years 2020 and 2021. The cost of crude oil increases in 2021 and the demand for global oil rise significantly. Since the year 2018, the US dollar stays lower. The "covid-19" has had a negative effect on the demand for "global oil" and it outpaced in the year 2020.

These results represent the OPEC crude oil production from the year 2017 to 2021. Through the survey of the OPEC countries, it has been noticed that the crude oil production rate declined profoundly within the year 2020 to 2021. **[*Referred to Appendix 3*]**

The Balance of supply and demand

The demand of global oil represented a substantial recovery, extending by 5.7 mb/d to the average value of 96.6 mb/d. Both grow visible within OECD and Non-OECD and the value of the growth ranged from 2.6 to 3.1 b/d. In the year 2016, the commercial oil stock level declined

In comparison with the last five years' average. These results represented the dramatic rise among the non-OECD checklists and this industry worked under heavy pressure. Most of the oil-exporting countries have noticed that their revenues cut in almost half or more. This is the reason behind the hindrance of economic development [5]. This has also a strong effect on global economic growth. The fluctuations of the price rate of the "global oil" leads to the unemployment of oil workers and the process of investment also ceased. This lead to a threatening future for the balance of the supply chain. In the years 2015 and 2016, both have shown dramatic compaction within the investment process of the oil industry. This opened the way to the exploration of gas and oil. This incident was responsible for the

DOI: 10.33687/jhssr.002.03.000223

fall in production by moreover 300 million within the last two years. The percent of decline rate was 26 percent respectively. **[*Referred to Appendix 4*]**

Table 1: Comparison of OPEC countries

Country	Oil Reserve	Percentage
Venezuela	303.47	24.40%
Saudi Arabia	267.19	21.50%
IR Iran	208.6	16.80%
Iraq	145.02	11.70%
UAE	11	8.90%
Kauwait	101.5	8.20%
Libya	48.36	3.90%
Nigeria	37.05	3.00%

Discussion

Analysis of Impacting Aspects behind the Instability of Global Oil Rate

The global crude oil rate is an essential indicator of the world economy and is one of the widely utilized things for trading. The fluctuating rate of crude oil concerns the global economy in terms of both reserve and demand. This study will present the various factors that have influenced the global oil rate from 2010 to 2021. The global oil rate has been affected by several economic, political, and environmental factors since 2010. A significant factor that has affected the rate is the "economic recession" which commenced in the year 2008. During this era, the oil demand declined seriously as businesses and industries delayed their production [4]. This led to a decline in the global oil rate. Another aspect influencing the global oil rate is the "US-China trade war" which was initiated in 2018. The trade war has decreased the need for oil in both countries, directing to a reduction in the global rate.

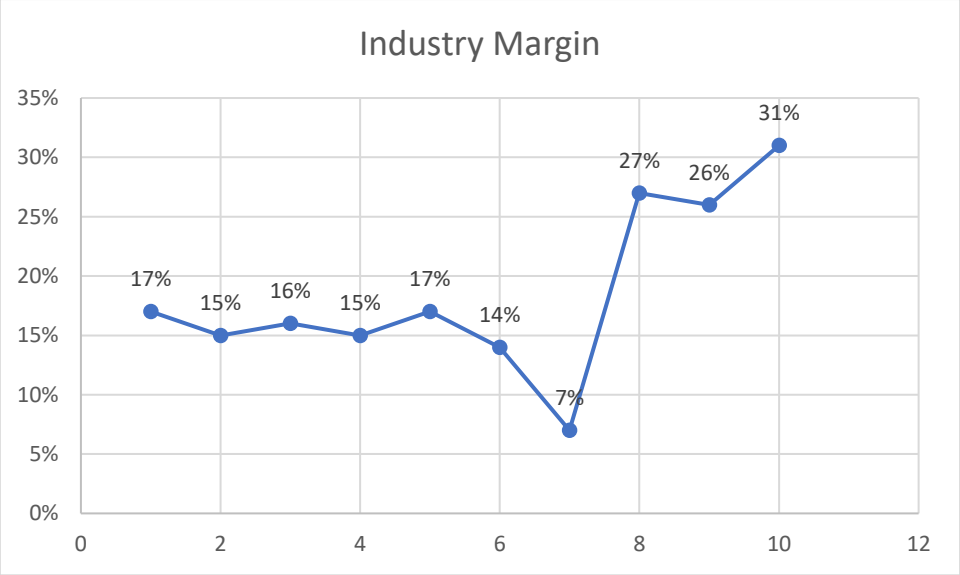

Figure 6: Industry Margin

The global oil rate has also been simulated by the "shale oil boom" in the US. This has advanced the supply of oil, which has resulted in an overabundance in the market. This has led to a reduction in the global oil rate. The global oil rate has also been simulated by the increasing need for renewable energy sources. This has decreased the oil demand, directing to a reduction in the global rate. Furthermore, the global oil rate has been influenced by the global pandemic of 2020. The pandemic has decreased the need for oil as businesses and industries have locked or diminished their functions. This has directed a reduction in the global oil rate. Lastly, the global oil rate has been influenced by geopolitical tensions in the Middle East. Tensions in the region have led to supply disturbances, which has expanded the global oil rate [14]. The global oil rate has been affected by several economic, environmental, and political factors since 2010. The economic recession, the US-China trade war, the shale oil boom, the increasing demand for renewable energy sources, the global pandemic of 2020, and geopolitical tensions in the Middle East have all contributed to the fluctuations in the global oil rate.

The imbalance between the Supply and Demand of the Market Affects the International Oil Price

The international oil price is defined by the ratio between supply and demand in the global market. The past decade has seen several significant changes in this balance, resulting in a wide range of price fluctuations. From 2010 to 2021, the international oil price experienced both rapid increases and steep declines. Beginning in 2010, the global economy was slowly recovering from the Great Recession, leading to an increase in demand for oil. This rise in demand was met with a supply shortage, resulting in a surge in international oil prices. By 2012, the cost of "Brent crude" had reached a peak of $125/barrel, due to a combination of economic recovery, supply disruption in the Middle East, and a weakening US dollar.

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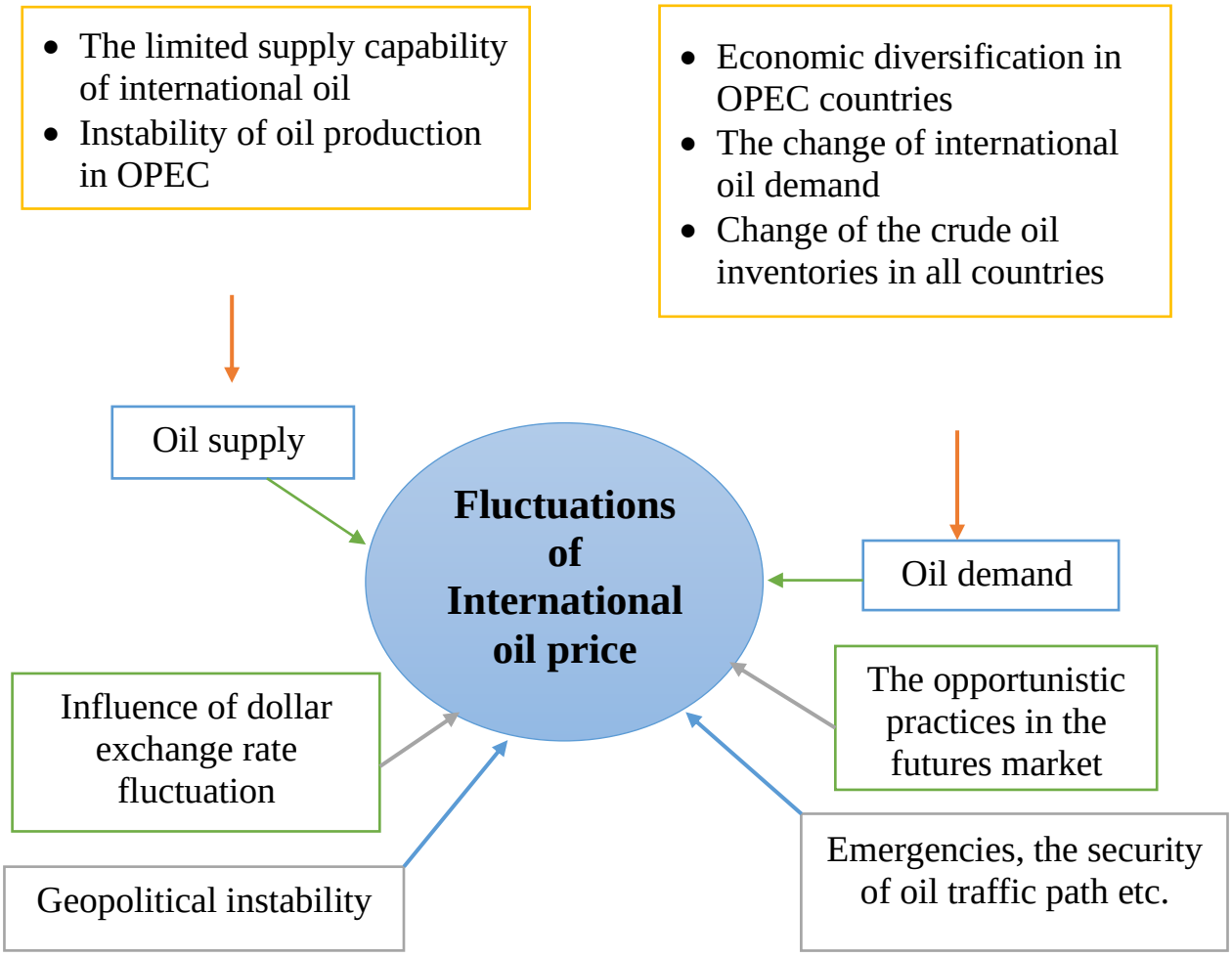
The limited supply capability of international oil
Instability of oil production in OPEC
Economic diversification in OPEC countries
The change of international oil demand
Change of the crude oil inventories in all countries
Oil supply
Fluctuations of International oil price
Oil demand
Influence of dollar exchange rate fluctuation
The opportunistic practices in the futures market
Geopolitical instability
Emergencies, the security of oil traffic path etc.

Figure 7: The impacting factors which are responsible for the fluctuations of the global oil rate

However, as the global economy began to improve, oil supply increased and demand softened. This resulted in a sharp drop in prices beginning in 2014, as the Organization of the Petroleum Exporting Countries (OPEC) decided to maintain high levels of output to prevent market share losses [19]. By 2016, Brent crude had dropped to a low of $27 per barrel, as OPEC's efforts to keep prices low resulted in a large supply glut. In 2017, the global economy continued to strengthen, leading to an increase in oil demand. OPEC and other oil-producing nations responded by implementing production cuts to stabilize prices. This helped to push the price of Brent crude up to $70 per barrel in 2018.

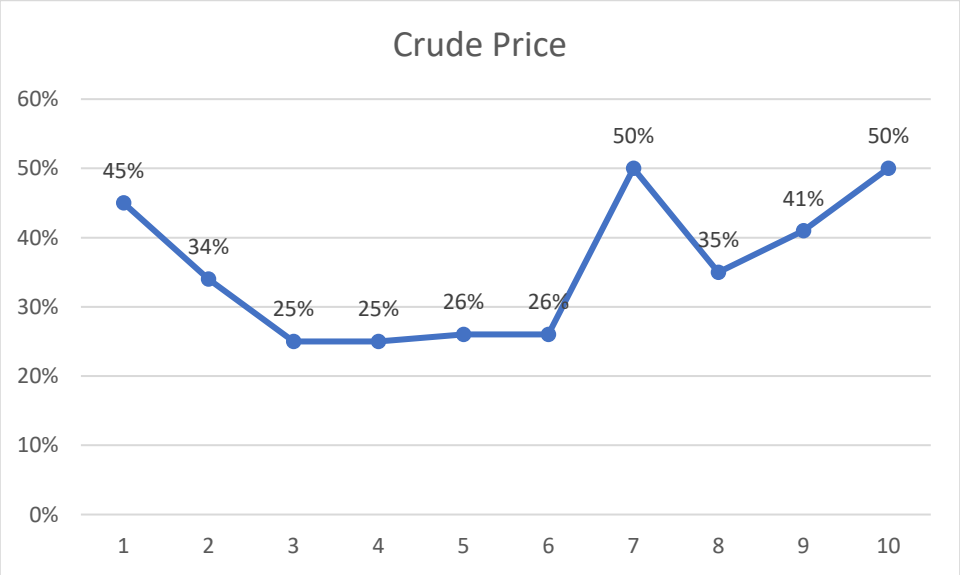

Figure 8: Fluctuations of the price of crude oil

From 2019 to 2021, the international oil price has continued to fluctuate, as OPEC and other oil-producing nations have been forced to contend with a variety of factors including geopolitical tensions, the coronavirus pandemic, and the increasing popularity of renewable energy sources. As of 2021, the price of Brent crude has remained relatively stable, hovering around $60 per barrel. Overall, the international oil price has been heavily influenced by the balance between demand and supply in the global market. The past decade has seen a wide range of price fluctuations, as the global economy, geopolitical tensions, and other factors have all impacted the supply and demand of oil. Despite the volatility, the price of Brent crude has remained relatively stable in recent years, indicating a gradual return to balance in the oil markets.

Influence of Dollar Exchange Rate over the Global Oil Rate fluctuation

The exchange rate of the US Dollar is one of the essential factors that influence global rate fluctuations. It occurs due to most international transactions are assumed out in US Dollars. When the US Dollar

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values, it has a consequence on the global rate fluctuations as it amplifies the US Dollar against different currencies [21]. This means that interests and services are additionally costly in other currencies, directing to an expansion in global rate fluctuations. The exchange rate of the US Dollar acts global rate fluctuations in two ways. First, it affects the demand for the US Dollar. When the US Dollar strengthens, it means that it becomes more attractive to international investors, leading to an increase in demand for the US Dollar. This leads to an increase in the global rate fluctuations, as the demand for the US Dollar increases, directing to a preference for its value.

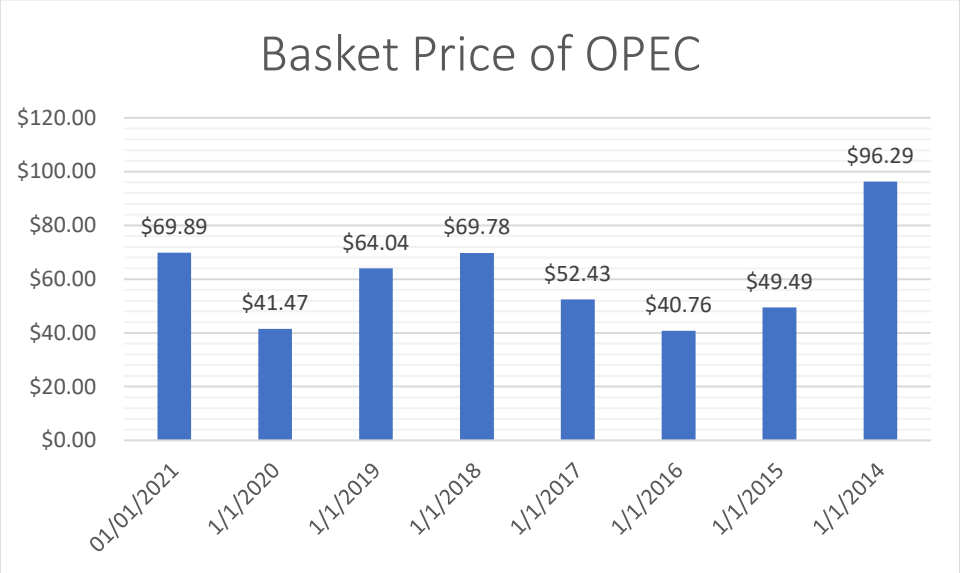

Figure 9: Basket Price of OPEC from 2014 to 2021

Second, the exchange rate of the US Dollar affects global rate fluctuations by affecting the prices of goods and services. When the US Dollar appreciates, it makes goods and services more expensive for people who are not using US Dollars. This leads to an increase in global rate fluctuations, as the prices of goods and services in other currencies increase. In addition, the exchange rate of the US Dollar affects global rate fluctuations by influencing the price of commodities. When the US Dollar appreciates, it makes commodities more costly for people who are not utilizing US Dollars. This leads to an addition in global rate fluctuations, as the prices of commodities increase [1]. The exchange rate of the US Dollar affects global rate fluctuations by affecting the financial markets. When the US Dollar appreciates, it directs to an expansion in the demand for US assets, directing to an increase in global rate fluctuations.

Geopolitical Instability

Geopolitical instability has been one of the primary factors that have caused fluctuations in global oil rates and, in turn, had a significant effect on OPEC countries over the past decade. Since 2010, the Organization of the Petroleum Exporting Countries (OPEC) has been subject to a series of geopolitical

events, including the Arab Spring, the Ukraine Crisis, the Iranian Nuclear Deal, and the US-China trade war, which have all had an influential effect on the global oil production market.

The Arab Spring, which began in 2010, triggered a series of political uprisings in the “Middle East and North Africa”, creating a time of political and economic instability in the region. This instability disrupted oil production and exports, leading to a sharp rise in global oil prices, which had a direct impact on OPEC countries [8]. The Ukraine crisis of 2014 also had a significant effect on the global oil market. The crisis caused a drop in oil production and exports from Russia, one of the world's leading oil producers and an OPEC member. This caused global oil prices to rise and had a direct impact on OPEC countries. The Iranian Nuclear Deal of 2015 resulted in the lifting of sanctions against Iran, allowing it to export more oil to the global market. This increased supply of oil resulted in a decrease in global oil prices, which had a direct impact on OPEC countries.

Finally, the US-China trade war of 2018 had an influential effect on the global oil production market. The trade war induced a reduction in the need for oil from China, one of the world's largest consumers of oil, which induced a drop in global oil costs. This had an immediate effect on OPEC countries. Geopolitical fluctuation has been a significant factor in the instabilities of global oil rates and their effect on OPEC countries over the past year [22]. From the “Arab Spring” to the “US-China trade war”, a sequence of circumstances have induced disorders in oil production and exports, directing to a rise and decline in global oil expenses, which has had an unpretentious impact on OPEC countries.

Conclusion

The global oil fluctuation rate and its effect on OPEC countries from 2010 to 2021 has been subject to great concern. The cost of oil has been combustive during this duration, generating substantial economic and political disturbances in the OPEC bloc. OPEC countries have been pushed to trim production to strengthen their market share. This has led to a reduction in their revenue and has had a negative impact on the economic strength of the area. Despite these challenges, the OPEC countries have been capable to support some degree of strength in the global market by performing together and handling collective activity. This has allowed them to keep some management over the oil market and its fluctuations. The future of the OPEC bloc will rely on its capacity to continue to collaborate and take a collective effort to secure the strength of the global oil market.

DOI: 10.33687/jhssr.002.03.000223

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DOI: 10.33687/jhssr.002.03.000223

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Appendices

Appendix 1: Trend of Oil Price

2012M05	**9/11 INCIDENT**	**0**
2013M09	Iraq war	20
2014M05	Demand of Emerging economies	40
2015M09	Arab spring	60
2016M01	Economic recovery	80
2017M09	Financial Crisis is 2008	100
2018M01	OPEC policy, supply exceeds demand	120
2019M05	COVID 19 pandemic	140
2020M07	Iran-US Tension	160

Appendix 2: Average oil rent

OPEC COUNTRIES	AVERAGE OIL RENT (% OF GDP)
ALGERIA	18.8
ANGOLA	44.2
ECUADOR	12.9
IRAN	21.7
KUWAIT	44.2
LIBYA	40.7
NIGERIA	33
SAUDI ARABIA	40.4
UAE**	22.4
VENEZUELA	24.8
QATAR	33.9

DOI: 10.33687/jhssr.002.03.000223

Appendix 3: **Global oil fluctuation percentage**

Country	Crude Price	Industry Margin	Tax
China	45%	17%	38%
Uk	34%	15%	51%
India	25%	16%	59%
Italy	25%	15%	60%
Germany	26%	17%	57%
France	26%	14%	60%
Korea	50%	7%	43%
Japan	35%	27%	38%
Canada	41%	26%	33%
USA	50%	31%	19%

Appendix 4: **Global oil demand and supply balance from 2018 to 2021**

	2018	2019	2020	1Q21	2Q21	3Q21	4Q21	2021
World oil demand and supply balance								
World demand *(mb/d)*								
Americas	25.41	25.47	22.44	22.73	24.33	24.74	24.89	24.19
of which US	*20.60*	*20.65*	*18.35*	*18.65*	*20.21*	*20.39*	*20.56*	*19.96*
Europe	14.31	14.31	12.43	11.91	12.63	13.84	13.64	13.02
Asia-Pacific	8.01	7.93	7.14	7.67	7.04	7.11	7.72	7.39
Total OECD	**47.73**	**47.72**	**42.02**	**42.31**	**44.00**	**45.70**	**46.26**	**44.59**
China	13.01	13.65	13.52	13.79	14.55	14.52	15.21	14.52
India	4.93	4.99	4.51	4.94	4.50	4.59	5.12	4.79
Other Asia	8.91	9.06	8.13	8.56	8.98	8.34	8.62	8.63
Latin America	6.53	6.59	6.01	6.25	6.16	6.46	6.35	6.30
Middle East	8.15	8.20	7.55	7.95	7.77	8.24	7.99	7.99
Africa	4.33	4.35	4.08	4.37	4.08	4.15	4.40	4.25
Eurasia	3.55	3.57	3.39	3.65	3.42	3.63	3.76	3.61
of which Russia	*1.21*	*1.19*	*1.07*	*1.23*	*1.24*	*1.09*	*1.28*	*1.21*
of which other Eurasia	*0.74*	*0.76*	*0.70*	*0.78*	*0.72*	*0.73*	*0.79*	*0.75*
Total non-OECD	**51.34**	**52.38**	**48.96**	**51.52**	**51.43**	**51.74**	**53.52**	**52.06**
(a) Total world demand	**99.07**	**100.10**	**90.97**	**93.83**	**95.43**	**97.44**	**99.77**	**96.65**
Y-o-y change	**1.40**	**1.03**	**-9.12**	**-0.71**	**11.82**	**6.00**	**5.51**	**5.67**
Non-OPEC liquids production								
Americas	24.03	25.81	24.70	24.10	25.17	25.20	26.21	25.17
of which US	*16.66*	*18.47*	*17.61*	*16.63*	*17.93*	*17.85*	*18.61*	*17.76*
Europe	3.84	3.71	3.90	3.96	3.52	3.81	3.81	3.77
Asia-Pacific	0.41	0.52	0.52	0.50	0.45	0.53	0.53	0.50
Total OECD	**28.28**	**30.04**	**29.12**	**28.56**	**29.13**	**29.54**	**30.55**	**29.45**
China	3.98	4.05	4.16	4.30	4.34	4.33	4.25	4.30
India	0.86	0.82	0.77	0.76	0.75	0.75	0.74	0.75
Other Asia	2.73	2.69	2.51	2.52	2.46	2.33	2.36	2.42
Latin America	5.79	6.08	6.04	5.94	5.97	6.09	5.82	5.96
Middle East	3.19	3.19	3.19	3.22	3.23	3.24	3.27	3.24
Africa	1.49	1.51	1.41	1.37	1.35	1.32	1.32	1.34
Eurasia	11.52	11.61	10.59	10.47	10.74	10.81	11.16	10.80
of which Russia	*3.08*	*3.07*	*2.91*	*2.96*	*2.89*	*2.79*	*3.08*	*2.93*
of which other Eurasia	*0.12*	*0.12*	*0.12*	*0.12*	*0.12*	*0.11*	*0.11*	*0.11*
Total non-OECD	**32.75**	**33.14**	**31.71**	**31.65**	**31.85**	**31.77**	**32.13**	**31.85**
Total non-OPEC production	61.03	63.19	60.82	60.21	60.98	61.32	62.68	61.30
Processing gains	2.34	2.36	2.15	2.28	2.28	2.28	2.28	2.28
Total non-OPEC liquids production	**63.37**	**65.55**	**62.97**	**62.49**	**63.26**	**63.60**	**64.96**	**63.58**
OPEC NGL + non-conventional oils	5.29	5.21	5.05	5.10	5.12	5.17	5.18	5.14
(b) Total non-OPEC liquids production and OPEC	**68.66**	**70.76**	**68.02**	**67.59**	**68.38**	**68.77**	**70.14**	**68.73**
Y-o-y change	***3.05***	***2.10***	***-2.74***	***-4.56***	***2.18***	***2.20***	***2.96***	***0.71***
OPEC crude oil production (secondary sources)	31.35	29.36	25.65	25.15	25.52	26.89	27.68	26.32
Total liquids production	100.01	100.13	93.67	92.75	93.90	95.66	97.82	95.05
Balance (stock change and miscellaneous)	0.94	0.03	2.69	-1.08	-1.53	-1.79	-1.96	-1.60
OECD closing stock levels (mb)								
Commercial	2,873	2,896	3,035	2,921	2,879	2,759	2,725	2,725
SPR	1,552	1,535	1,541	1,546	1,524	1,513	1,485	1,485
Total	**4,425**	**4,432**	**4,577**	**4,467**	**4,402**	**4,272**	**4,209**	**4,209**
Oil-on-water	1,058	1,033	1,148	1,138	1,131	1,169	1,201	1,201
Days of forward consumption in OECD *(days)*								
Commercial onland stocks	60	60	68	66	63	60	61	59
SPR	33	37	35	35	33	33	33	32
Total	**93**	**105**	**103**	**102**	**96**	**92**	**94**	**91**

(Source: https://www.opec.org)

DOI: 10.33687/jhssr.002.03.000223