

To What Extent Libya is Considered a Highly Attractive Oil Area?

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الكلمات المفتاحية

النفط الخام ، الحرب ، النزاعات الجيوسياسية، ليبيا ، الاتحاد الأوروبي.

الملخص

على الرغم من وجود العديد من مصادر الطاقة بما في ذلك الفحم والطاقة النووية، إلا أن النفط الخام لا يزال مصدرًا رئيسيًا للطاقة. لقد شهد العالم ولازال الكثير من الصراعات بسبب الطاقة ولاسيما النفط والتي كان لها تأثير عميق على موازين القوى بين المصدرين و المستهلكين. هذه الدراسة توضح إلى أي حد يعتبر النفط الليبي مهم بالإشارة إلى الموقع الجغرافي المهم مع تزايد المخاوف الجيوسياسية بما في ذلك الحروب في عدد من البلدان والتي تشكل خطرًا كبيرًا على إمدادات النفط التي ألقت بظلالها على أسواق النفط على مدى العقود الماضية. وتتملك ليبيا العضو في أوبك أضخم احتياطي نفطية مؤكدة في إفريقيا وهي مورد مهم للخام الخفيف منخفض الكبريت والتي تعتمد عليه الدول الأوروبية. إلا أن قطاع النفط تأثر بشكل مباشر بسبب ما شهدته ليبيا من أحداث منذ 2011. فقد أثر العنف بشكل مباشر على مواقع النفط والغاز مما أدى إلى انخفاض الإنتاج وبالتالي الصادرات بشكل كبير. ومما زاد تعقيد أزمة الطاقة في الآونة الأخيرة اندلاع الحرب في أوكرانيا مما أثرت على إنتاج النفط والغاز وأسعارهما. وتنتظر دول أوروبا إلى ليبيا كمورد نفط بديل مهم لروسيا. وفي عام 2010 وعلى الرغم من أن نسبة إنتاج النفط الليبي شكلت فقط 2.09% من إنتاج العالم، و5.1% من ما تنتجه الدول الأعضاء في أوبك إلا أنه تم تصدير ما نسبته 85% من النفط الليبي إلى الأسواق الأوروبية. فقد بلغت صادرات النفط الليبي إلى الاتحاد الأوروبي 11% جاعلة إياها ثالث أكبر مصدر بعد النرويج وروسيا.

Abstract

Despite there are many energy sources including coal, and nuclear power, crude oil still a primary and powerful source of energy in addition to a raw item in the majority manufacturing sector. There are few regions similar to North Africa and few energy powers like Libya, which are being so deeply affected by changes in the geopolitics of energy that they are having a profound impact on the balances of power between suppliers and consumer countries (Cobo, 2022,1). This paper attempted to answer few questions, the main one is that to what extent Libya is considered as a highly attractive oil area to the EU? Geopolitical worries or warfare in a number of countries continue to be a significant risk to oil supplies. Many factors affected oil market over last decades including wars. In 2011, Libya experienced civil war. The violence affected oil and gas locations directly. Political instability is a major challenge for the government which it could not be solved properly. Foreign investors feel insecure while investing in the Libya due to this political instability and security issues. Political stability and economic growth are directly with each other and oil and gas sector carries equal importance of each factor (Ibrahim et al.,2013,205). More recently, war in Ukraine would affect oil and Gas production and their prices. Because of its location, Europe countries are looking to Libya as an important alternative oil supplier to Russia.

Keywords

Crude
civil war
Geopolitical worries
Libya

1- Introduction

In 1859, the first big discovery of oil took place in Pennsylvania in the USA. The success of this drilled well marked the beginning of the modern petroleum industry in the United States (Biltayib, 2006). However, the Chinese are recognized to be the first civilization to drill for oil. As early as 300BC, they pounded holes in the ground with heavy, bronze bits suspended from spring poles (Fagan, 1991, 2).

The exploration rapidly extended to the rest of the world such South America and to the Middle East. Few years after independence of Libya, a first concession for oil exploration were granted to foreign companies. In 1959, the first successful discovered by Esso Libya in Zletin oil field.

General looking on the Libya's history, it can be seen that the Libya was very attractive area over decades. Recently, more attention was given to Libya. Libya is considered as rich oil exporting country. Libya has the largest oil reserves in Africa, the fourth largest gas reserves on the continent, and is also one of the world's leading suppliers of light and sweet oils low in sulphur, which are highly sought after in Europe (Cobo, 2022, 3).

Objectives of the Study

The main objective of the study was to examine to what extent Libya is considered a highly attractive oil area.

In order to accomplish this objective, this study attempts to answer the following questions:

What is crude oil? Where the most oil reserve?

Who produces and who consumes the oil and gas? What affects oil prices? To what extent Libya is considered a highly attractive oil area to the EU?

Research Structure

This study will be divided into eight sections. Literature review will be next section. Third section answers the first question of study's

questions, while sections four to six discuss produces, consumes, reserves and prices of oil and gas respectively. Section seven shows the importance of Libya's oil. Section eight illustrates some foreign Intervention in Libya. Results and suggestions will be shown in the conclusion section.

Research Methodology

In order to achieve the objective of this study to collect data for this research study only secondary sources were used. Its collected through the researcher-reviewed articles related to the research topic that appeared in the scholarly literature, journal and reports.

2- Literature Review

Cobo, I. Fuente (2022) has described The ceasefire agreement signed on 23 October 2020 by the two main factions in the Libyan conflict, the UN-backed Government of National Accord (GNA) based in Tripoli and General Khalifa Haftar's Benghazi-based Libyan National Army (NLA).

He argues that this agreement has boosted Libya's comparative advantages over other regional or global competitors to become a major energy power and a powerful supplier of energy resources to Europe. There are many reasons for this including Libya has the largest oil reserves in Africa, the fourth largest gas reserves on the continent, and is also one of the world's leading suppliers of light and sweet oils low in sulphur, which are highly sought after in Europe. He concludes that the international community and Spain should undoubtedly play a constructive role to this end, enabling better use to be made of the enormous opportunities Libya offers. Achieving this is precisely in the interests of both Spain and Europe.

Yilmazi and Erturk, (2020) explain that Turkey and Libya have signed a memorandum of understanding between the National Reconciliation Government on the restriction

of the Marine Jurisdiction of the new continental shelf in the Eastern Mediterranean - sole economic zone boundaries of the draw. Greece could do with other countries and Turkey's jurisdiction in front of the agreements that may restrict the movement area said to pass. US and European Union (EU) against Turkey, Israel and the GCA also had some side following the gas partnership with European countries. This article focused on the ongoing competition of Libya, considering the oil geopolitics of Libya and the disputes in the Eastern Mediterranean region.

Energy is relevant in the sense of the Libyan crisis between the opposing parties in Libya, regionally and the global climate of geoenergy. Libya, with its four basins, the Sirte Basin being the most important one, cooperates with several international companies from Italy, Germany, France, Spain and the Gulf countries. They conclude that the agreement, which was later supported by military cooperation with the National Consensus Government, also determined the new continental shelf - the exclusive economic zone borders in the Eastern Mediterranean.

Barltrop, Richard (2019) analyses the political economy of oil and gas in Libya, examining how the country's politics affect the oil and gas industry, and the implications and outlook for the future. Overall, in the post-2011 era, the NOC and the oil sector have therefore presented something of paradox: insecurity and conflict have had a major impact on oil infrastructure, production, and exports; but the NOC and other companies have, to some extent, remained above and protected from the political disorder. This was true even when the Tobruk-based administration tried in 2015 to establish its own NOC. And it was true in 2016-18 when control of the Gulf of Sirte export terminals was repeatedly fought over by the eastern-based military leader Haftar and his LNA, the Tripoli-based GNA, and local militias or more formally based units such as the PFG. Local actors and national rivals

have sometimes fought to control oilfields, pipelines, or terminals, usually for the sake of direct or

indirect financial benefit; but in the longer run they have sought to co-operate with the NOC, and for production and exports to continue or resume. These dynamics are likely to continue for as long as the rift over national government is not resolved, and for as long as Libya do not have unified armed forces. Divisions between Libyans run deep, and divisions in international policy towards Libya are entrenched.

This political and security outlook will not prevent investment in the oil and gas sector during the next five years, but it is likely to constrain investment, albeit not as severely as during much of 2011-18.

A study was conducted by Ibrahim, Mutalib, Abdulaziz (2013) to analyze the importance of oil and gas sector in Libya. They describe the current scenario and future trends in oil and gas sector of the country and the benefits of oil and gas sector in the economy of Libya. It is analyzed that oil and gas is facing many challenges such as political instability, transparency in business practices, security issues and practical logistic issues. The government of Libya must solve these issues in order to sustain the development of economy. This sector also contains some major opportunities such as development of economy through better infrastructure, revamp its global strategies to attract global oil and gas companies, to explore new reserves in the country and use new techniques for exploration and production of oil and gas. The government of Libya must work out on these opportunities for enhancing the economic development.

3- What Is Crude Oil?

Crude oil is a natural black liquid creation from changes that occurred in natural material deposited in layers in the sediments of seas and lakes some 150 to 300 million years ago (Appleton et al., 1995). Petroleum (or crude oil) is a complex, naturally occurring

liquid mixture containing mostly hydrocarbons, but containing also some compounds of oxygen, nitrogen and sulfur. It is often referred to as the “black gold (Hallett, 2002, 138).

This hydrocarbon made up of carbon, hydrogen, and oxygen. Natural gas is mostly methane (CH₄). Methane usually makes up more than 80 percent of the energy gases present at a location. Other natural gases include ethane, propane, butane, and hydrogen (Hyne, 2001). There are more than hundred different crude oils. However, Weight, Sweetness, and TAN count are the three different oil primary qualities types. Generally, crude is classification of crude oil can be one of two types which based on density or on sulfur content. Figure 1 illustrates common these two classifications.

As for natural gas, it was considering as a secondary product of crude oil therefore many countries did not search it separately as well as did not give attention to estimate it reserve. However, few years after Second World War, natural gas consumption has increased in the USA. In 1952, natural gas accounted the fourth of used energy in US. Since that discover operations were directed to search for natural gas separately of oil.

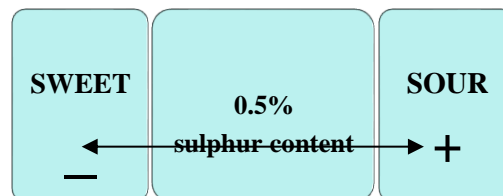


Figure 1: crude oil classifications.

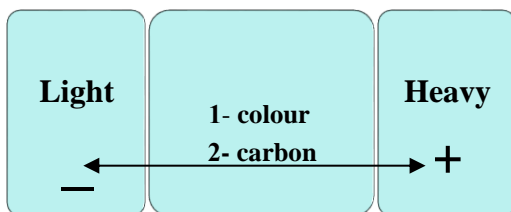
Despite there are many energy sources including coal, and nuclear power, crude oil still a primary and powerful source of energy in addition to a raw item in the majority manufacturing sector. Many European refineries are prepared to refine only the ‘sweet crude’ coming mostly from Libya, hence a substitution of the source is not easily possible (Joy, 2011, 21).

Libya has high quality oil commonly known as light and sweet oil. The former refers to the oil with low sulphur content, whilst the latter means the oil has a high API gravity.

4- Who Produces and Who Consumes the Oil and Gas?

Table (1) shows the production and consumption of oil and natural gas by major areas of the world. The largest producers in 2003 are the Middle East and North America

Classifications 1



Classifications 2

Table (1): The Production and Consumption of oil and Natural Gas
 by major areas of the world in 2003.

	Main Producers		Deficit ² Areas	The Main Consumer		Major Consumers	
Regime	The Middle East and Africa	Central and South America & the Former Soviet Union	-North America -Europe -Asia, except the Middle East Pacific Asia	Japan	Norway and the UK	other European countries	US
Shear of Export	more than two thirds		consumed more than produced		produce oil in significant quantities		consumes more than twice its own production of oil

Source: created by author

Table (2): The largest oil producers in 2021

Country	Million barrels per day	Share of world total
United States	18.98	20%
Saudi Arabia	10.84	11%
Russia	10.78	11%
Canada	5.54	6%
China	4.99	5%
Iraq	4.15	4%
United Arab Emirates	3.79	4%
Brazil	3.69	4%
Iran	3.46	4%
Kuwait	2.72	3%
Total top 10	68.92	72%
World total	95.70	

Source: <https://www.eia.gov>

The deficit areas consumed more than twice as much oil as they produced.²

Table (3): The largest oil consumer in 2021

Country	Million barrels per day	Share of world total
United States	19.89	21%
China	14.76	15%
India	4.79	5%
Russia	3.67	4%
Japan	3.41	4%
Saudi Arabia	3.35	3%
Brazil	2.96	3%
South Korea	2.58	3%
Canada	2.26	2%
Germany	2.13	2%
Total top 10	59.80	62%
World total	96.66	

Source: <https://www.eia.gov>

with 30 percent and 20 percent respectively. Among the developing countries, the two countries with the highest rate of growth in oil use are China and India, whose combined populations account for a third of mankind. They are the biggest oil importing countries (Joy, 2011, 21).

Table (2) shows the largest oil producer in 2021. We can see that the USA, Saudi Arabia and Russia are the biggest oil producers.

Even Libya is not on the list of the top 10 producers, it is the seventh-largest crude oil producer in OPEC3 and the third-largest total petroleum liquids producer in Africa. At the end of 2021, Libya held 3% of the world's proved oil reserves and 39% of Africa's proved oil reserves. However, Table (3) shows that the USA, China and India are the biggest oil Consumers.

5- Oil and Gas Reserves

Global reserves of oil and gas are being used up far faster than significant new supplies can be found. Oil Proven Reserves are randomly distributed around our planet.

The world oil reserves estimated trillion barrels .The highest region of reserve is Middle Eastern regime. It is estimated 65 percent of global oil reserves. In contrast, the least one is Western Europe region of just 2 percent. It is clear that the oil reserves controlled by Middle East region, where as this percentage reached 7 percent in Africa including Libya. Approximately 80% of Libya's oil reserves are in the Sirte basin as well as its oil production. According to EIA, Libya had proved oil reserves of 48 billion barrels.

Usually, gas is discovered when searching for oil. Even the ratios of Natural gas consumptions rise due to the worldwide demand; Natural gas reserves have had increasing. Libya's proven natural gas reserves are estimated to be 52 trillion cubic feet,

although, like the country's oil reserves, Libya's gas holdings may be significantly higher given the generally under-explored status of Libyan territory.

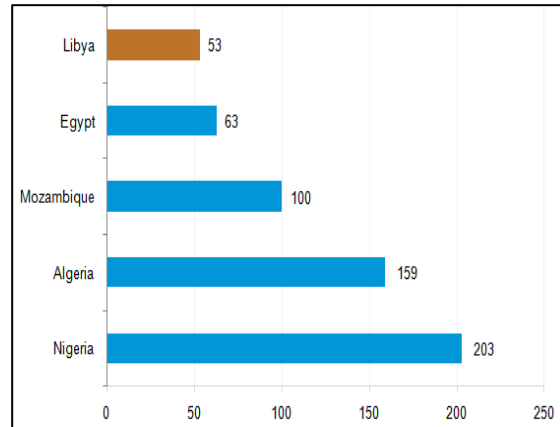


Figure 3: Largest proved reserve holders of total oil, 2021.

Source:

<https://www.eia.gov/international/analysis/country/LBY>

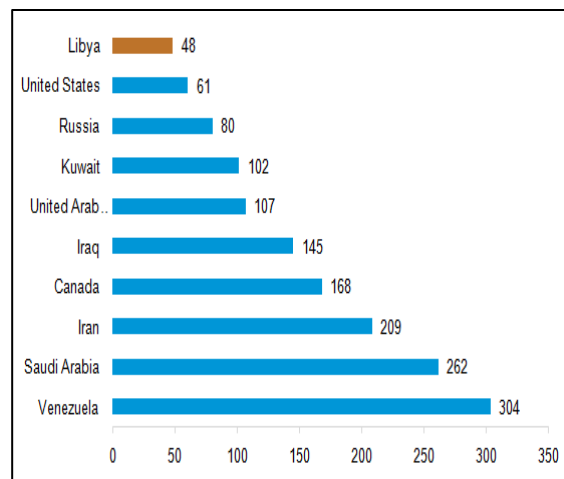


Figure 4: Largest proved reserve holders of natural gas in Africa, 2021.

Source: U.S. Energy, 2021

As with oil production, the development of natural gas production and export capacity has been limited by restrictive investment policies and international sanctions (Blanchard,

Libya joined OPEC in 1962.³

2005,20). Libya had proved natural gas reserves of 53 trillion cubic feet (Tcf), the fifth-largest in Africa behind Nigeria, Algeria, Mozambique, and Egypt (Figure 4).

As we know that Libya exports a massive natural gas to Italy. However, Libya contains less reserves of gas than oil. Libya holds 53 (Tcf) of proven gas reserves as of 2017, ranking 21st in the world and accounting for about 8% of the world's total natural gas reserves of 6,923 Tcf. Figure 5 illustrates that Libya has proven reserves equivalent to 338.2 times its annual consumption. This means it has about 338 years of gas left (at current consumption levels and excluding unproven reserves). Major producing fields include Attahadi, Defa-Waha, Hatiba, Zelten, Sahl, and Assumud.

Table(4): Libya's Gas Reserves Rank

	Million Cubic Ft4 (MMcf)	Global Rank	Africa Rank
Gas reserves	53183.000	21st (2017)	4th (2012)
Gas production	591.526	40th	
Gas consumption	185.564		
Net Exports	251.090		

In 2011, the wave of demonstrations in large-scale in Tunisia, Egypt and Libya caused an instability political situation not in these countries but in Middle East. Since Libya is an

⁴ This volume is usually expressed in BCF (billion cubic feet), TCF (trillion cubic feet) and MCF (thousand cubic feet).

oil producer, this would be influence oil market.

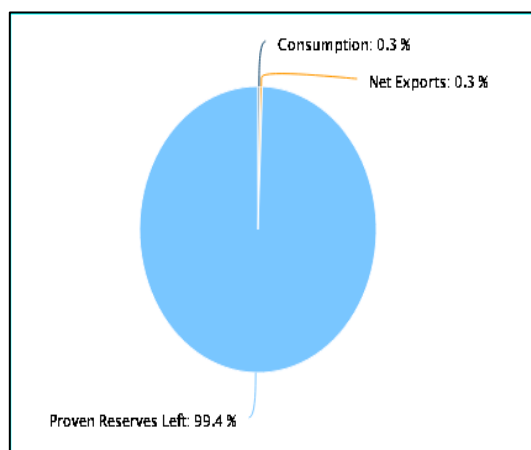


Figure 5: Libya's proven Reserves Left

Source: <https://www.worldometers>.

Many factors affected the economy of Libya which emerged after 2011, such as political instability, the division of Libyan institutions and others. The collapse of security after the revolution had a negative effect on state institutions.

In the first weeks of the crisis, after the pullout of the European and Asian workers and engineers, the oil production dropped to 290,000 bpd from 1.48 mln bpd two months earlier (Dimitro, 2011,3).

The National Oil Corporation (NOC) struggled to continue producing oil. Oil exports have dropped significantly as a result of events in the country. Production in July 2011 decreased to 22,000 barrels per day.

Since many European companies are prepared to refine only Libyan crude oil which sweet crude, and therefore replace other type of source would takes time and cost money. For this resone, the crude price of oil is expected to be increased.

In 2013, the oil price was \$115 a barrel .However, since June the oil price has fallen by more than 40%, to below 70\$. The price of a barrel of Brent crude oil in European countries fell from than \$100 p/b in Sept 2014 to less than \$46 p/b in January 2015. The oil price has more than halved in less than eleven months since Sept 2014. Besides, the decline was the third largest over the past 30 years, has particularly interesting parallels with the episode in 1985-86 (Moftah, n.d.).

Petroleum fields are considered one of the main conflicts disputed by these regional powers and oil is the country's major revenue source, which accounts for 95% of Libya's export revenues before the outbreak of the Libyan revolution. Closing Oil field during the period from 2013 to late 2016 cost Libya \$160 billion according to CBL figures.

In 2022, Libyan National Oil Corporation in Libya announced the end of the closures in all oil fields and ports and the lifting of force majeure.

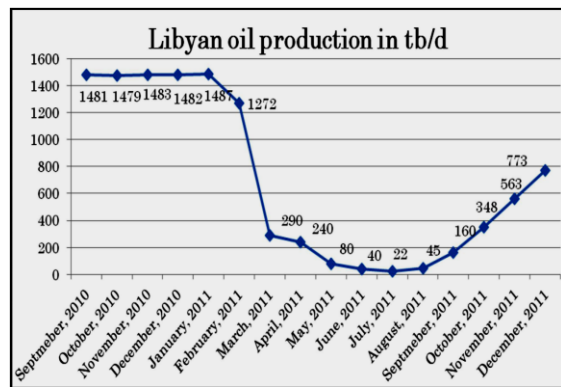


Figure 6: Oil production (2010-2011)

Source: (Dimitrov,2011,3)

by 2012 oil production was expected to rise compare to 2010 levels. However, the worldwide recession and the civil unrest of 2011 clearly put these goals at risk. The period which began in 2011 brought major disruptions

and difficulties for the oil and gas sector (Bartrop,2019,14).

Production was low in 2015, recording less than 400,000 bpd in July 2015. This was due to the closure of oil export ports. In June 2018 renewed armed clashes in Crescent oil, which led to the exit of some reservoirs export capacity, which led to a decline in the ability to export crude oil and thus affected the economy in general. In 2019, the southern regions of Tripoli witness a new armed conflict. More Recently in 17th of January 2020 oil fields were closed over again because of instability circumstances.

6- What Affects Oil Prices?

The current supply is the total world output of oil. OPEC produces about 40% of the world's crude oil and thus has a huge impact on determining the world's oil prices.

Access to future supply depends on oil reserves. It includes what's available in U.S. refineries as well as in the Strategic Petroleum Reserves. Traders look at world oil demand, particularly from the United States and China. U.S. estimates are provided monthly by the Energy Information Agency. In January 2020, many governments began restricting travel and closing businesses to stem the coronavirus pandemic. As a result, demand for oil began falling. World crises in oil-producing countries, or concern about crises, dramatically increase oil prices. This is because traders worry the crisis will limit oil supply, which increases demand and prices (Amadeo,2022).Oil price has also influenced by a number of other factors include:

- A marked drop in surplus supply capacity in the international petroleum market.
- Conflicts in major petroleum producing countries such as Saudi Arabia and Russia that resulted in concerns about supply interruptions (Biltayib, 2006,43).
- Geopolitical worries or warfare in a number of countries continue to be a significant risk to oil supplies. First, the Middle East trouble spots have enormous strategic significance

since it is variously expected to include between half and two-thirds of reserves of oil. Therefore, any conflict in the area would cause uncertainty amongst oil traders and increase the risk relating to oil. In addition, recent disagreements between western countries and Iran over the latter's nuclear agenda has been a significant issue likely to cause increasing pressure on oil.

- Climate change could in the future cause impermanent supply troubles (e.g. as happened in August 2005 when hurricanes occurred in the Gulf of Mexico). In contrast, heat waves and severe winters in the northern hemisphere, possibly related to global warming, may push up the demand for energy in particular oil in the short term, thus forcing up prices.

In the short term, three significant supply risks can be identified; these being OPEC production cuts, extreme weather conditions, and geopolitical concerns or warfare.

Following the Libyan government's nationalization of a controlling interest in all other petroleum companies operating in the country in 1973, the state owns all the oil fields and controls of 70% of its domestic oil production. Its oil production (almost all of which was exported) reached about 3.3 (mb/d) (National Authority for Information and Documentation, 1980).

During the sanctions era, the companies' holdings were managed by a subsidiary of the Libyan NOC and all revenue from the sale of oil produced from the concession areas accrued to the Libyan government. Following the lifting of U.S. sanctions in 2004, a number of U.S. oil companies have successfully bid for re-entry into Libya's energy market, and U.S. businesses have resumed trade relations with Libyan firms (Blanchard, 2005, 6). Indeed, American oil corporations hoped to restart business in Libya. In 2005, they began to flood back to Libya after 19-year absence.

Seven Sisters are the leading oil-market companies; at that time they were the Royal Dutch Shell, Standard Oil of New Jersey, Anglo-Persian Oil, Standard Oil of California, Standard Oil of New York, Texas Company and Gulf Oil (Tesi di Laurea, 2012, 3).

Libya, with its four basins, the Sirte Basin being the most important one, cooperates with several international companies from Italy, Germany, France, Spain and the Gulf countries.

7- Importance of Libya's oil

Firstly, Libya is a North African country situated on the southern coast of the Mediterranean Sea and bordered by six countries. This location has enabled Libya to become an important bridge linking Africa and Europe. Its the fourth largest country in Africa and fifteenth among the countries of the world. It is about the size of Spain, Portugal, France, Germany and the UK combined and ranks 17th in the world in size.

Everything changed in 1955, when the oil was discovered below Libyan Desert (Tesi di Laurea, 2012, 17). Libya is considered a highly attractive oil exploration due to its low cost of oil recovery (Biltayib, 2006, 78). Libya is an oil producer country: in this sense, Libya can be considered a rich economy, and therefore economically attractive, despite not being diversified (Tesi di Laurea, 2012, 12).

According to OPEC (OPEC, 2010/ 2011) Libya has huge proven crude oil and natural gas reserves of 47.1 billion barrels and 1.5 billion cubic meters, respectively, in 2010. Second, Libyan oil is of a high quality with production costs among the lowest in the world. Third, Nowadays the majority of Libyan crude oil and natural gas are exported to European countries, including Italy, France, Germany, and Spain (Ali and Harvie, 2013).

Concerning Libya's oil crude, Libya's location is a very important advantage to the European countries for many reasons including lower

transportation costs, unlike some other oil producer countries; such oil export pipelines project would cross only Libya. In addition, there were some advantages exploring Libya's oil: the pipelines to transport the oil did not have to cross any countries or be shipped through the Suez Canal or around the Cape of Good Hope (Ali and Harvie, 2013).

The Italian key is Green Stream, a 520-kilometre-long pipeline with an annual capacity of up to 10 billion cubic metres of gas (10 BCM) that crosses the Mediterranean Sea through Sicily to the Italian mainland. The pipeline is operated by the Italian national company ENI in conjunction with the Libyan national company NOC and its operation in the direction of Italy started in October 2004. It is part of the Western Libyan Gas Project and is comprised of the Mellitah compressor station on the Libyan coast, the pipeline itself and the receiving terminal on the Italian island of Sicily. To this must be added the fact that ENI imports 23.3% of the oil it consumes from hydrocarbon production and processing facilities in Libya. Spain is one of Libya's most important trading partners, as its second largest customer after Italy in 2019 (Italy 18.1%, Spain 14.16%, China 16.1%, Germany 15%, France 5.5%) and its fifth largest supplier (China 15.2%, Turkey 12.9%, UAE 10.2%, Italy 8.7%, Spain 6.2%) (Cobo,2022,13).

Thus, the energy sector in post-Gaddafi Libya can be expected to influence the world oil price and, therefore, the European and global economies. the recent political change in Libya, the willingness of European countries to diversify their crude oil and gas suppliers and, also, declining oil production from the North Sea ensure that this unique relationship will remain strong and enable Libyan oil and gas to be shipped to the rest of the world through Europe. The return of Libyan oil to the international oil market is likely to put downward pressure on oil prices and ease global inflationary pressure Libya (Cobo,2022,13).

Most of Libya's crude oil is sold to European countries. In 2020, Europe's imports accounted for about 63% of Libya's crude oil and condensate exports. Most of Libya's exports went to Italy, Germany, and Spain. Asia, mostly China, received an estimated 25% of Libya's oil exports in 2020 .The energy factor changed the geopolitical importance of the Eastern Mediterranean and it has become a critical area of struggle. After Ukrain war, EU countries in general seem to give more attention to Libya.

The invasion of Ukraine affected energy markets globally, particularly in Europe, which remains the main market for Russian oil and gas due to the lack of these energy sources in European countries.

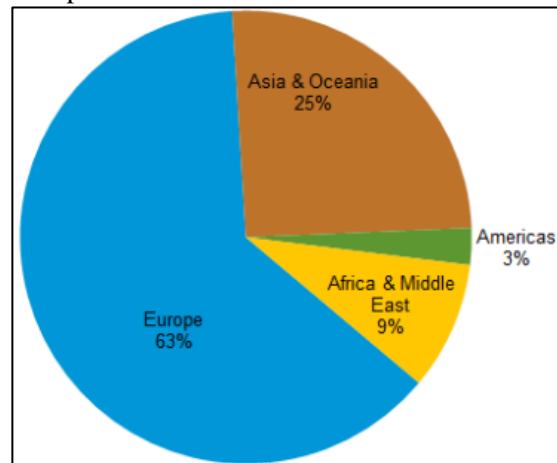


Figure7: Distribution of Libya's Oil Exports by Country, 2020

Source: Country Analysis Executive Summary: Libya, 2022.

Therefore, Libya exports a limit natural gas to European countries. The domestic war in Libya has increasingly become a global dispute and it seems that despite news of the Russian involvement in Libya, it would transform into an international crisis. As energy-consuming companies play the role of lobbying all countries to solve the Libya crisis, the conflict's

dynamics become more complex. Russia do not consider the continuation of the conflict in Libya as wrong, because the European alternative to its gas is perceived as a danger that must be confronted strongly. An arrangement or protocol between Turkey and Libya on maritime boundaries and defense relationships was accepted to reach a compromise between the powers intervening with Libya. If there is logic for cooperation between regional countries, Libya may constitute a state of stability, however, it is an important source of danger, which makes it an area for international war (Yilmazi and Erturk, 2020, 24).

However, on 27 November 2019, Turkey and Libya signed the memorandum of understanding⁵ under UNCLOS law of 1982 with the National Reconciliation Government on the restriction of the Marine Jurisdiction of the new continental shelf in the Eastern Mediterranean - exclusive of the economic zone boundaries of the draw, Greece could do with other countries and Turkey's jurisdiction ahead of the agreements may restrict the movement area that is said to pass It includes a protection and maritime agreement memorandum which allows Turkey to demarcate its maritime borders and prevents Egypt and Greece from monopolizing the Eastern Mediterranean region (TRT World News, 2019 (Yilmazi, and Erturk, 2020,10).

Concerning recent political and economic world's events in general and Ukraine war in particular, oil and gas are predicated to remain dominant commodities in the world 's energy supply for at least the next 50 years.

8- Oil and Foreign Intervention in Libya:

The dynamics and strategic relationships of the energy generation in Libya could be

⁵ The agreement was signed by Turkish President Recep Tayyip Erdogan and Chairman of the Presidential Council of Libya, Fayiz es-Serrag.

understood by focusing on three main concerns: The first concern is the North and Central Africa's European competition and its energy resources. Secondly, what is known as the Atlantic Strategy, which is a complex strategy that prevents Russia's presence in North Africa, seeks to reduce its reliance on Russia's sources of energy, making North Africa or the Eastern Mediterranean an appropriate alternative to it, and thus the recurrence of the Cold War or European conflict — normally Eastern Europe. Thirdly, the gas problem in the Eastern Mediterranean and how new complexities could be generated in the Libyan dispute particularly after a joint protection and maritime agreement has been signed by Libya and Turkey (United Nations, 1987) (Yilmazi and Rturk,2020,16).

9- Conclusions

Even though, some believe that the trend may be change due to some factors including: high price of oil and consumers in search of alternative clean supply of energy, the oil still continue to be the main sources of energy in the future.

With most of the area being desert, the climatic conditions in Libya are characterized by extreme heat and aridity, and the poor soils have limited its agricultural output. However, the discovery of oil in 1959 further and forever changed the country's fortunes, but in highly unexpected and unexpected ways.

Results

- Even the ratios of Natural gas consumptions rise due to the worldwide demand; Natural gas reserves have had increasing.
- Libya is considered a highly attractive oil country to European. It has a rich economy, and therefore economically attractive.
- Many oil and gas companies are willing to invest in Libya with the purpose of exploration and production of oil and gas (Ibrahim et al., 2013, 206).

- There are some advantages exploring Libya's oil: the pipelines to transport the oil did not have to cross any countries or be shipped through the Suez Canal or around the Cape of Good Hope (Tesi di Laurea, 2012,17).
- Even though oil and gas sector is playing a vital role in the economy of Libya but there are many challenges for the government in order to keep this process continues in the future. It is very difficult for government to run all the operations in the oil and gas fields even after finishing the conflicts. It is examined that Libya holds limited recourses and administrative capacity therefore it can't work on every place at the same time. It is a tough decision for government to leave everything on the behalf of other companies (Ibrahim,2013,205).
- Oil is a primary reason for foreign investment in the country.
- Several [European oil companies](#) including Total, Repsol S.A., and Eni, have been active in Libya for decades and their operations have been severely impacted by the conflict. Eni is the [largest foreign oil producer](#) in Libya; however, it is facing increasing competition from Total who is expanding across the country.
- The strategic importance of Libya for Europe's countries, particularly France, Italy, Great Britain and Germany, the countries which operate under the oil industry and Libya as a transit region between Europe and Africa has emerged since Libya was discovered (Yilmazi and Rturk,2020,15).
- Libyan oil offers a [strategic advantage](#) to the European Union; following g the war in Ukraine, the continent has been increasingly concerned about reducing its dependence on Russian oil (Davenport , 2021).

Suggestions:

At this time of conflict in Ukraine, European consensus on the importance of Libya's stability and a practically unanimous conviction of the need to neutralise the supply of oil and gas and free it from any link to the current local and international conflicts are therefore essential. In this regard, it is unlikely that, barring any unexpected tensions related to conflict between the parties, the oil sector will be imminently affected by the Russian-Ukrainian crisis in a way that could again lead to the suspension of production (Cobo, 2022, 19).

Policies makers should focus on increasing productivity through increased investment in infrastructure (physical capital), human capital and technology acquisition in the non-oil output sector (Ali & Harvie, 2013,274). However, Libya needs the support of the international community.

"The oil and gas sector provides many opportunities for Libyan government including:

- It can build up its infrastructure through revenue of oil and gas sector
 - Oil and gas sector has potential to decrease the unemployment rate at a minimum level in the country.
 - It contains the opportunity to revamp its strategies for attracting new global oil and gas companies.
 - The government has the opportunity to explore new oil and gas reserves in the country
 - To use the latest techniques and tools for exploration and production of oil and gas"
- (Ibrahim,Abdul Mutalib, Abdulaziz ,2013),

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