

تأثير عائدات النفط على القطاع الصناعي في العراق (دراسة تحليلية للفترة 2016-2020)

م. بان ياسين مكي

جامعة البصرة / كلية الادارة والاقتصاد / قسم العلوم المالية والمصرفية

Banyaseen30@gmail.com

الملخص

شملت الدراسة تأثير العوائد النفطية في العراق على القطاع الصناعي، الذي يعد قطاعا حيويا ومهما في تحقيق التنمية الاقتصادية اولا، وفي تكوين الناتج المحلي الاجمالي ثانيا، لكن هذا القطاع تعرض الى الكثير من الاهمال من قبل الحكومات المتعاقبة، وكان التوجه والاعتماد على عوائد النفط الحاصلة من التصدير لتكوين الناتج القومي او للبناء والاعمار للبنى التحتية او توفير رواتب الموظفين وغيرها، الامر الذي يجعل الوضع الاقتصادي غير مستقر ويعاني من اختلالات مستمرة في ميزان المدفوعات، وقد تم استخدام دالة معدل النمو لغرض تحليل بيانات المتغيرات النفطية وكذلك تحليل بيانات القطاع الصناعي، كما تضمنت الدراسة اهمية الصناعة النفطية وكذلك اهمية الصناعة التحويلية وماهي المعوقات التي واجهتهم خلال فترة الدراسة 2016-2020.

كما اوصت بضرورة الاهتمام بالقطاع الصناعي، وتخصيص جزء أكبر من موازنة الدولة للنهوض بواقعه وتهيئة المستلزمات الضرورية لخلق بيئة مناسبة، وتشجيع الصناعات الوطنية.

الكلمات المفتاحية: عائدات الصناعات النفطية في العراق، القطاع الصناعي، معدلات النمو للعوائد النفطية للصناعة.

Impact of Oil Revenue on Industrial Sector in Iraq (an Analytical Study for the Period 2016-2020)

. Ban Yaseen Makki

University Basra / College of Administration and Economics
Department of Banking and Financial Sciences

Abstract

The study included the impact of oil revenues in Iraq on the industrial sector, which is a vital and important sector in achieving economic development, and in the formation of gross domestic product, but this sector subjected to a lot of ignorance by the Iraqi successive governments, and the trend and dependence on oil revenues obtained from export to form the national product or to build and rebuild the infrastructure or to provide the salaries of employees and so on. This makes the economic situation unstable and suffering from continuous imbalances in the balance of payments. The growth rate function was used for the purpose of analyzing the data of oil variables as well as analyzing the data of the industrial sector. The study also included the importance of industry as well as the importance of the manufacturing industry and what are the obstacles, they faced during the study period 2016-2020. The study recommended the necessity of paying attention to the industrial sector and allocating a larger part of the state budget to advance its reality and provide the necessary requirements to create suitable environment and encourage national industries.

KEYWORDS: Oil revenues in Iraq, the industrial sector, growth rates of oil revenues and industry

INTRODUCTION:

Iraq is the fifth-largest proven petroleum reserves and the world fifth-largest oil producer in 2022. However, only a small portion of Iraqi available resources are being developed. Iraq may be one of the last areas where enormous, known, and undiscovered reserves have hardly been utilized. About 94 percent of Iraq's energy requirements are satisfied by oil, which dominates the country's energy sector. In recent years, military occupation and civil instability have harmed the nation's energy sector. It is anticipated that unexplored areas in the country could contain significant undiscovered oil deposits. The development of its oil infrastructure has also been hit by economic sanctions, armed conflicts, and political unrest, making it less able to earn national income through exports. The cities with most of the nation's reserves are Basra, Baghdad, and Ramadi. Iraq is a prime example of the issues associated with significantly relying on one industry, specifically hydrocarbons. While budget restrictions which specifies the country's overall spending limit on oil industries, limit fiscal space and any chance for countercyclical policies, the country's overwhelming reliance on oil exposes it to macroeconomic instability. With a population of 40.2 million as of January 2021, Iraq's unemployment rate was more than ten percentage points higher than its 12.7 percentage point pre-COVID-19 level. The unemployment rate among the displaced, returnees, women seeking work, pre-pandemic contract workers, and unorganized employees is still high. The economy further suffers when government spending is drastically reduced when prices collapse. Iraq's GDP growth decreased by approximately 16 percentage points in 2020, when oil prices fell by 35 percent. A diverse economy is often more resistant to price volatility in one sector, but a healthy economy requires stable growth rather than unpredictable growth.

PROBLEM STATEMENT

The problem statement of this study has a significant impact on the revenue situation of Iraq from Oil. Covid-19 Pandemic left several strains upon the economy, and now the economy is gradually recouping from the COVID19 shocks. Following a severe decline of 11.3% in 2020, real GDP is predicted to have slightly increased by 1.3% in 2021. As oil production rises and COVID-19 limitations are loosened, domestic economic activity is being restored, putting oil and non-oil growth on track to exceed pre-pandemic levels.

Aim of the study

The main aim of the research is to analyze the impact of oil revenue on the industrial growth of Iraq, the main objective of the study is:

- To analyze increase or decrease in the oil revenues in Iraq over the years 2016-2020
- To understand the impact of oil revenues on the growth of the industrial sector in Iraq.
- Extracting the growth rate of the variables of oil industry, as well as the growth rate of the variables of industrial sector to know the effect between them

RESEARCH QUESTION S

Considering this, the main research questions of the study are as follows

- What is the impacted revenues of the Oil industries in Iraq from 2016 to 2020?
- How do exports lead a significant role in affecting the revenues from oil industries in Iraq?

- What are the factors helped to overcome the impacted revenues from oil industries in Iraq?
- What is the impact of the oil revenues on the growth of the industrial sector in Iraq?

Re search limits:

- 1- Spatial boundaries: The State of Iraq.
- 2- Time limits: for the period, (2016-2020)

Methodology:

The research relied on the analytical approach, using the growth rate function by analyzing the official data published in the Ministry of Oil, the Department of Studies, Planning and Follow-up, and the annual statistical collection of the Ministry of Planning for separate years., as well as presenting, the theoretical aspects of the research topic and then employing them on the Iraqi economy.

SECTION ONE: Impact and recovery from covid-19

Oil revenues from Iraq's industrial sector are a prime example of the country's dependence on hydrocarbon-based industries. Iraq is one of the most oil-dependent economies in the world: IN 2020, the oil industry Are revenues constitute 99% of exports, 85% of the country's budget, and 42% of the gross domestic product . These figures would have been higher if not for the fall in oil prices due to last year's corona virus outbreak. Thus, the oil industry accounted for more than 43% of GDP in 2019 and more than 100% of export revenues in 2018. Iraq is affluent if the oil in the ground is money in the bank. 2 billion barrels may be produced annually in Iraq. That oil is sold for \$200 billion at \$100 per barrel. Iraq has a population of 24

million people, meaning that each individual receives \$8000 from oil. (Bakr, 2022.7)

As COVID-19 containment measures were relaxed (Salmana & Ameen, 2019.4). Due to Iraqi early-year adjustment to its OPEC+ quota, this recovery exceeded the decline in the oil sector. As a result of increasing oil prices, which in 2021 averaged US\$68.3/barrel (78% rise over the previous year), government revenues increased by 73% year over year. The currency depreciation and policies to increase non-oil domestic income, primarily from customs, contributed to these fiscal advantages (Rahi. M. G, & Farag, s. t. r 2022.9).

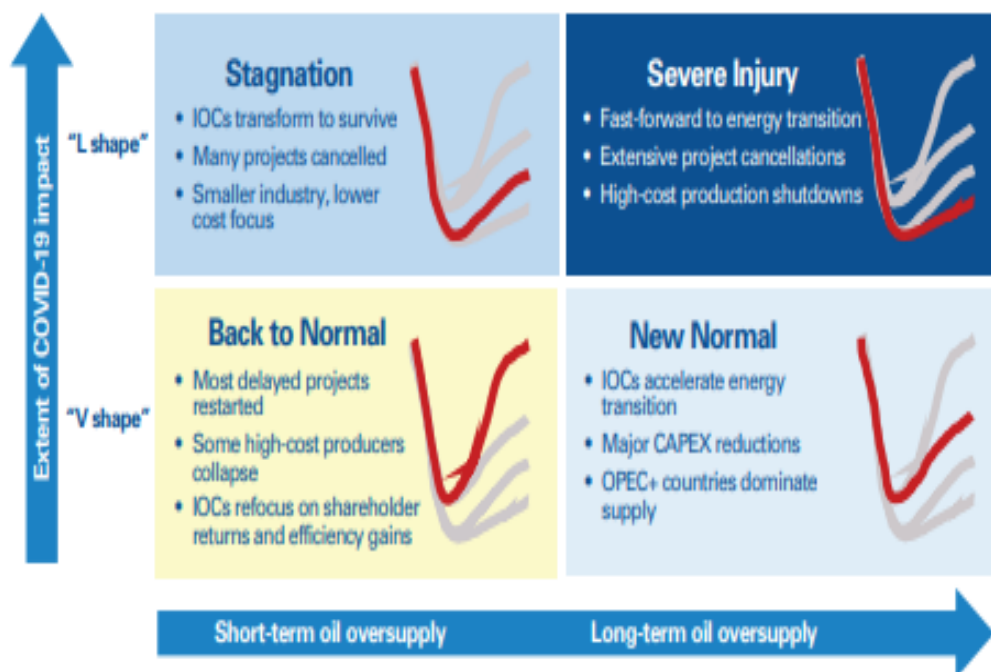
Section two: The impact of the oil industry on the Covid-19 pandemic

COVID-19 pandemic-induced worldwide lockdown has plunged a developing sector into a severe predicament. Early in 2020, the gradual decline in global oil demand was made worse by the developing structural oversupply that brought on the competition for market share. Together, these two elements caused oil prices to reach a 20-year low. Although nations and other producers eventually agreed on specific output cuts, these price-support initiatives have had a relatively small impact (Mohammed, 2022.8). the impact of COVID-19 on demand and the likelihood that structural oversupply will continue, given anticipated medium-term oil prices. Each type of industry actor. We describe how the crisis will affect the present carbon transition in the future and offer insights into the tactics used by oil and gas CEOs.

The COVID-19 crisis's economic collapse is anticipated to devastate many businesses since the oil and gas sector is now caught in a vicious cycle of oversupply, low pricing, and instability. Over the past ten years, investors have grown less

interested in the industry. The old oil & gas business model will likely be abandoned if oil prices remain low for an extended time and become even more risky and unprofitable. The business was regular before COVID-19 (Jassim, 2021.5). Due to decreased economic activity and mounting pressure to switch to greener energy sources, the oil and gas sector is more likely to experience extended periods of significantly decreased demand. The sector must also deal with oversupply problems, whether as a result of rising oil quantities.

Figure (1) Impact on Economy, Oversupply and Surviving the COVID-19 Pandemic

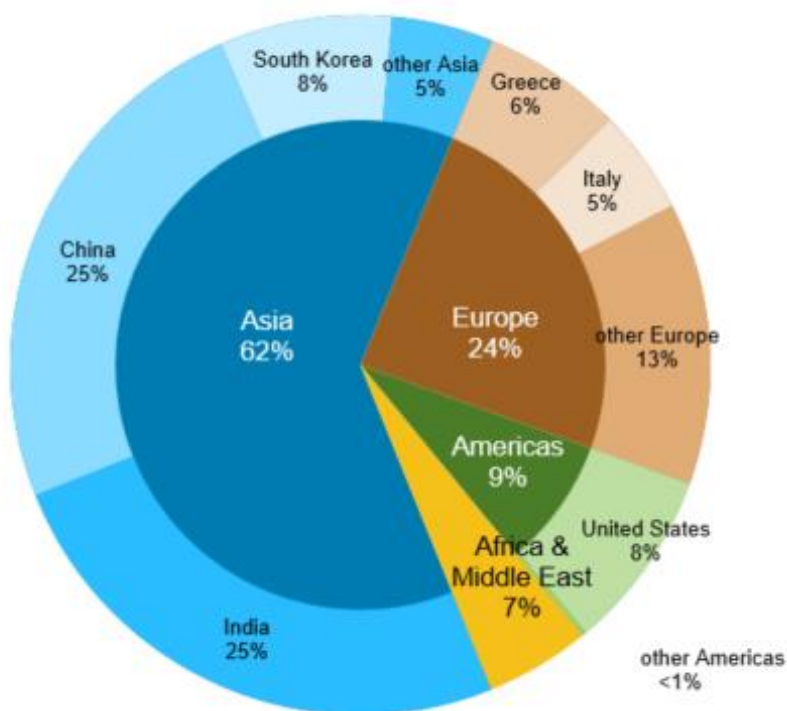


Source: (Abdlaziz& Yaqub., 2022)

SECTION Third: Current Situation of the Oil Industry in Iraq 2016 - 2020

The world's fifth -largest oil producer in 2020, Iraq produced 4.3 million barrels daily. With 147 billion barrels, it has the world's third-largest confirmed conventional petroleum reserves. The global ranking for it is sixth. An amount equal to 1.1% of its overall proven reserves is produced by Iraq each year. According to, the country intends to increase its crude production to 7 million barrels per day by 2027. billion (Jassim, 2021.6). This indicates that more than 100 million barrels have been sold globally in only the month of June. In 2021, the United States imported an estimated 157,000 barrels from Iraq daily (aktug .S.S.&Star.H, 2019.6)

Figure (2) Iraq Crude Oil Exports

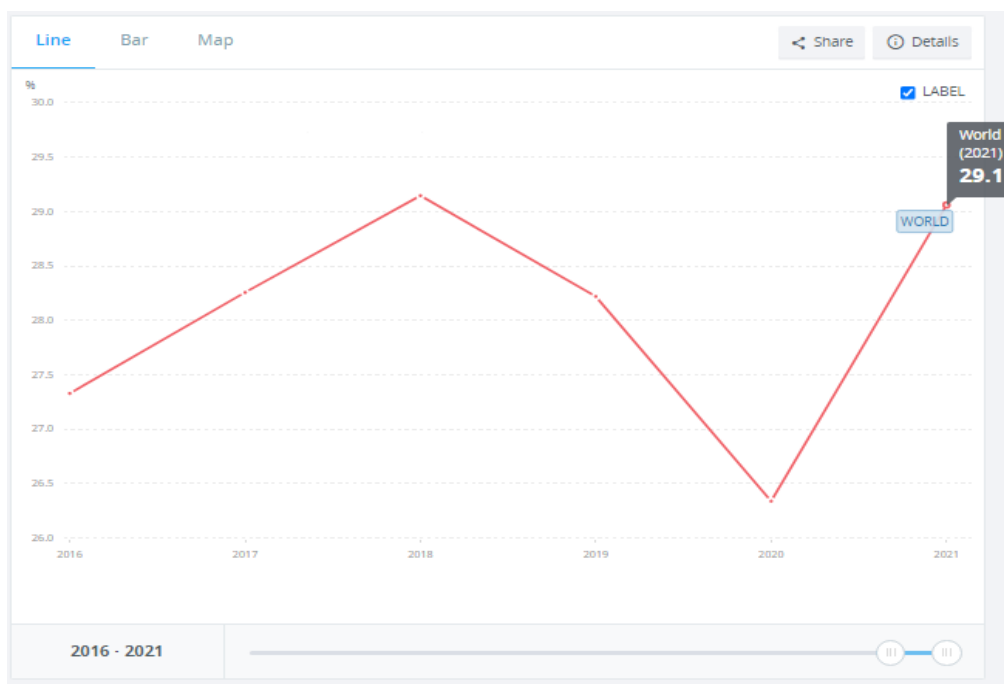


Source: (Rahi. M. G,& Farag ,s. t. r 2022.9)

From 2016 to 2019, Iraq's crude oil output increased by roughly 300,000 barrels per day (b/d), averaging 4.7 million b/d in 2019. Iraq's crude oil output averaged roughly 4.4 million b/d in the first half of 2020. In the second quarter of 2020, Iraq voluntarily decrease its crude oil output (Mohammed. & Talib, 2020.3).

These production projections consider crude oil produced in the Kurdistan northeastern part of Iraq. The income from the sale of crude oil is vital to Iraq's economy. According to the International Monetary Fund, 91% of Iraq's total government earnings in 2018 came from crude oil exports. However, due to reduced prices, Iraq's net earnings from crude oil exports were \$87 billion, approximately \$6 billion less than in 2018.

Figure(3) Crude Oil Exports from IRAQ



Source:(Sun, D., Xia .2022.9)

According to tanker loadings reported by Clipper Data, the total amount of crude oil exported by Iraq for seaborne commerce was close to 4 million b/d in 2019, a modest increase over 2018 (Mohammed, 2022.15). The Basra light and heavy crude types were exported from the southern ports in the Persian Gulf, which handled Iraq's seaborne exports. Pipelines transport crude oil from northern Iraq to Ceyhan, Turkey, shipped from the Ceyhan port. Nearly one million b/d of crude oil was brought into China and India from Iraq. Iraq's crude oil was mainly imported into Asia (dominated by India, China, and South Korea), which received 62% of the country's crude oil exports. The United States purchased 331,000 b/d of Iraqi crude oil, the biggest outside of Asia.

Table (1) The variables of oil industry in Iraq

years	Produced Oil\mil. Barrels (1)	Growth % (2)	Exported oil\mil. Barrels (3)	Growth% (4)	The value of oil revenues Mil.us. \$ (5)	Growth % (6)
2016	1525.2	----	1208.4	----	43622.9	----
2017	1543.2	1.18	1207.8	-0.0496	59560.3	36.534
2018	1609.8	4.315	1445.9	19.713	83810974	140.616
2019	1670	3.739	1448	0.145	78527	-99.9
2020	1465	-12.275	1257	-13.19	28978.8	-63.09

Source: Columns 1,3,5 from the data of the Ministry of Planning and the Statistics Department at the Ministry of Oil, and columns 2,4,6 from the researcher's work using the growth rate function

It is noted from Table No. (1) that oil production began to gradually increase since 2016, recording high growth rates, and then began to decline in 2020, recording a low growth rate of (12.275) due to the Covid-19 pandemic and the harsh conditions accompanying the pandemic in the country. The same applies to For the amount of oil exports, the increase began in 2016 and

recorded high growth rates, which reflects the picture of recovery in the amount of oil exports, Then, it soon fell dramatically in 2020 to reach 1257 million barrels, recording a negative percentage of the growth rate, which is a low percentage compared to the previous year.

As for oil revenues, their value witnessed a remarkable increase, as it recorded its highest value in 2018, when it amounted to 83,810,974 million dollars, with a high growth rate of 140,616. After that, oil revenues tended towards a gradual decline due to the export obstacles accompanying the emergence of the Covid 19 pandemic, until it reached its lowest value in 2020, amounting to 28978.8 million dollars, with a very low growth rate of (63.09).

SECTION FOURTH: Industrial Sector in Iraq and Impact of Oil Revenues during 2016-2020

The industrial sector is of great importance due to its effective role in economic development in addition to its contribution to the formation of the gross domestic product, due to the production process it performs to increase exports and reduce imports, which improves the balance of payments, but the industry in Iraq suffers from the stoppage of most of its factories and lines. Because of many obstacles, including the obsolescence of machines and equipment and the lack of introduction of modern technology that improves production. The greatest concern has become directed towards oil production and dependence on its revenues from oil exports

There is no shortage of economic research emphasizing the necessity of economic diversification for healthy, resilient, and long-term growth, and countless real-world case studies back up such advice. Simply put, a country that puts all of its dependence

on one sector is vulnerable to exogenous variables beyond government control, hurting "prospects for longer-term economic growth," as defined by the World Bank ((Rahi.M.G,& Farag ,s.t.r 2022..10).

Iraq made capital investments in large-scale industrial facilities such as steel factories in the early 1970s. Many of the facilities were acquired turnkey from foreign contractors and builders. Iraq's economy is dominated by the oil sector, which has supplied around 99.7% of the country's foreign exchange profits over its modern history. As of 2021, the oil industry accounts for around 92% of foreign exchange profits. The 2020 oil and COVID19 shocks to the economy are slowly abating. Real GDP is anticipated to increase by 1.3% in 2021 following a significant decline of 11.3% in 2020. The 2020 oil and COVID-19 shocks are having a slow but steady recovery on the economy. After a significant decrease of 11.3% in 2020, real GDP is predicted to have slightly increased by 1.3% in 2021. As oil production rises and COVID-19 limitations are loosened, domestic economic activity is being restored, and both oil and non-oil growths are on course to recover their pre-pandemic levels. Oil refining, food processing, textiles, leather goods, cement and other construction materials, tobacco, paper, and sulphur mining are the major businesses. Iraq has eleven oil refineries, all of which are overseen by the Oil Refineries Administration. (Yaqub, K. Q.2019.11)

Therefore, it is easy to understand the impact of oil prices on the Iraqi economy. When prices are high, the economic benefits and government spending increase. When prices plummet, the economy suffers, and government spending drops dramatically. It is like we are on a roller coaster ride that we

cannot control. In 2020, when oil prices fell 35 percent, Iraq's GDP growth rate dropped by about 16 percentage points. Diverse economies tend to withstand price volatility in one sector, but a healthy economy requires stable, not erratic, growth (Ismail& Hussein., 2021.5). Despite compelling evidence and decades of advice, oil-rich Iraq is still struggling to diversify its economy. The release of the 2020 White Paper on Economic Reform gives optimism that the process will finally move forward. One of the document's main goals is to put the economy and national budget on a sustainable development track, strengthen the private sector and "revitalize non-oil industries." . (Mohammed & Talib, 2020).

Table (2) the industrial statistics of large industrial establishments in Iraq for the years 2016-2020 million dinars

Years	The value of industrial production is one million dinars (1)	growth rate % (2)	The value of production inputs million dinars (3)	growth rate % (4)	The sales value is one million dinars (5)	growth rate % (6)
2016	4969233	-----	2810026	-----	4533565	growth rate %
2017	5998391	110.72	3489331	24.17	5656813	growth rate %
2018	7191329	19.88	3866641	10.813	6770147	growth rate %
2019	-----	-100	-----	-100	-----	growth rate %
2020	6346161	-----	3746075588	-----	5858072	growth rate %

Source: Columns 1,3,5 from the data of the Ministry of Planning . and columns 2,4,6 from the researcher's work using the growth rate function

Table No. (2) shows the value of industrial production, the value of industrial production requirements, in addition to the value of sales with extraction of growth rates for the aforementioned industrial variables during the study years. It is

noted that the value of production was low at the beginning of the period, due to the political conditions in that period.

Which is represented by the ISIS terrorist gangs attacking Iraqi lands and occupying a third of those lands, which affected the pace of industrial production and the value of production requirements and the value of sales, and most of the national industries stopped working, which led to an increase in unemployment and thus a decrease in purchasing power To citizens and thus lower sales value in 2016.

Then the values began to gradually rise in subsequent years, recording high growth rates that ranged between 110.72 and 19.88 for the value of production, and 24.17 and 10.813 for production requirements, while the growth rate for sales ranged between 24.77 and 19.68, but in 2019, most national industries stopped. Because of the political, economic and environmental conditions alike, demonstrations and protests swept the country against the country's bad situation.

Which led to a halt to industries due to the workers' strike and their participation in the protests, then in the same year the world was exposed to a severe epidemiological attack represented by the Covid 19 pandemic, which led to a decrease in the growth rates of industrial variables.

Then, in 2020, the gradual recovery from the pandemic began, as well as the demonstrations stopped and the national industries returned to return, and the value of industrial production amounted to 6346161 million dinars, and the value of production requirements was 3746075588 million dinars.

As for the value of sales, it amounted to 5,858,072 million dinars Returning to the figures achieved by the country's oil revenues during the years of study, we note that revenues constitute 99%

of exports, 85% of the country's budget, and 42% of the gross domestic product. (Bakr, 2022, 8)

This means that Iraq relies heavily on oil revenues and with the existence of corruption, mismanagement, and a loss of justice in distributing the state budget between the different sectors, focusing attention on oil, and neglecting the industrial sector, which needs a lot of money for the purpose of advancing it, and that what urges are expenses Increasingly imported goods and services that fill the markets, which worsened the situation of the national industrial sector

However, this advantage diminishes when the harsh macroeconomic realities are considered. Iraq's break-even price are around \$64 per barrel in 2020 ; Brent crude will not cover its costs at an average price of \$42 per barrel in 2020. Iraq needs a much higher oil price than the market offer to balance the books, even though the cost of producing a barrel of oil is about \$11. Thus, it is the lowest-cost producer in the current situation, and its ability to displace other producers is severely limited. However, by diversifying the economy and reducing its dependence on the oil industry, Iraq's balance of payments position could be significantly improved, allowing it to take full advantage of its low-cost reserves. (Rahi.M.G,&Farag,s.t.r 2022.8).

Interestingly, Iraq only needs to look at its oil industry to see the benefits of active participation in the economy. Unlike many of its neighbors, such as Saudi Arabia and Kuwait, Iraq has allowed private investment and foreign oil companies to enter the country since 2009. This measure has allowed Iraq to significantly increase its oil production, potentially setting a new record and outpacing the production growth of its competitors, especially within OPEC. Despite Iraq's high contribution to the

Extractive Industries Transparency Initiative (EI),(Al-Aboodi.A.H.&Ibrahim.2018.10)

Despite decades of data and guidance, economic diversification in oil-rich Iraq remains a work in progress. However, the release of the White Paper on Economic Reform in 2020 provided some hope that the process was finally gathering traction. The paper's primary goal is to "put the economy and federal budget on a sustainable path, increase the private sector, and revitalize non-oil sectors .(Salmana &.Ameen, 2019.10)

On the other hand, Cynics would warn of a well-known pattern among oil producers in which significant reforms are proclaimed during economic hardship following a decrease in oil prices, only to be put on hold, limited, or forgotten entirely when prices rebound.

CONCLUSION

It is time for the world's fifth largest oil producer and proved oil reserves holder to turn those riches into strong economic growth and long-term development. Iraq has historically been resource-rich yet economically underdeveloped. However, suppose Iraq effectively implements a healthy diversification policy. In that case, it has the potential to be both resource-rich and economically sound, even as oil increasingly loses favour in the rest of the globe. Over 90% of the financial income for the Iraqi governorates comes from oil exports, making Iraq one of the biggest oil exporters in the world. In general, the oil industry plays a significant part in various economic activities. The economic crisis in Iraq is not a result of the present or fluctuations in the price of oil; instead, it is a result of structural imbalances in the sectors of the economy that are not developing quickly enough to counterbalance fluctuations in the price of oil.

Recommendations

To advance the reality of the Iraqi economy and get it out of the routine of dependence on oil revenues in its various aspects of development, education, infrastructure, health and the environment, attention must be directed to the industrial sector and a significant part of the budget funds should be identified to address the imbalance in this important sector, and work to encourage national industries, which reduces imports Significantly

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