



The Repercussions of the Russian–Ukrainian War on Energy Resources

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تداعيات الحرب الروسية الأوكرانية على موارد الطاقة

الكلمات المفتاحية: الحرب الروسية الأوكرانية، موارد الطاقة، التداعيات الاقتصادية، سوق الطاقة العالمي، أمن الطاقة

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الملخص

الحرب الروسية الأوكرانية وتداعياتها الاقتصادية لم تؤثر على الطرفين الى حد سواء، بل اجتاحت وأثرت على العالم برمته لأنهما يلعبان الدور الكبير بإنتاج وتصدير الحبوب من جهة وإنتاج الطاقة الروسية من جهة أخرى لأنها تمتلك مورد الطاقة الواسع التي يتصدر منها الى الدول الأوروبية، ويعد العراق أحد الدول المتأثرة بالحرب الروسية الأوكرانية وخاصة فيما يتعلق بموضوع الطاقة المتمثل بالنفط والغاز الطبيعي.

Abstract:

The Russian-Ukrainian war and its economic repercussions have not only affected both parties equally, but have also swept across and impacted the entire world because they play a major role in grain production and export on the one hand, and Russian energy production on the other, as Russia possesses vast energy resources that it exports to European countries. Iraq is one of the countries affected by the Russian-Ukrainian war, especially with regard to energy, namely oil and natural gas.

Keywords: Russian–Ukrainian War, Energy Resources, Economic Repercussions, Global Energy Market, Energy Security

1. Introduction:

Despite the global economy's failure to recover from the consequences of the COVID-19 pandemic over the past two years and the ensuing enormous economic, political, and health repercussions, and the global economy has not found a way to recover from the crises of inflation, rising energy prices, and disruption of global supply chains, the Russian-Ukrainian war broke out, which in turn affected Russia's political and economic dealings with consumer countries as a result of the Russian economy's strength in energy (oil and natural gas).

Naturally, after 2000, Russia witnessed a renaissance on the international stage following a change in political leadership and the arrival of Vladimir Putin, who was able to revive Russia's energy strategy and declare Russia a resource-rich country. However, with the outbreak of the Russian war, which took Ukraine as its target, this war had different and varied effects on different countries. Some countries were



affected economically, especially in the fields of energy and food, including Iraq, which was one of the countries that did not escape the repercussions and future developments of the war, despite the geographical distance between Iraq and Russia [1].

On the one hand, Ukraine and trade relations between Iraq and Eastern European countries, including Russia, account for only 2% of Iraq's trade volume. On the other hand, However, Iraq is part of the regional system, which is an integral part of the global system, especially the intertwined and complex economic system. Therefore, the Iraqi economy is not immune to the economic effects that this war will have on all countries of the world to varying degrees, and the impact of this war on Iraq will be both negative and positive [2].

1.1. Importance of Research:

The significance of this research stems from the impact of the Russian-Ukrainian war on the Iraqi economy, affecting macroeconomic variables on the one hand and energy sources on the other.

1.2. Problem of Research:

The research problem stems from the extent to which the Russian-Ukrainian war affects energy sources in Iraq.

1.3. Objectives of Research:

The research aims to highlight the effects of the Russian-Ukrainian war on macroeconomic variables and energy sources in the Iraqi economy.

1.4. Hypothesis of Research:

The research hypothesis is that the Russian-Ukrainian war will have economic effects and repercussions on macroeconomic variables and energy sources in Iraq.

2. Analysis of the Russian and Ukrainian economies prior to the crisis:

The Russian economy is characterized by being the largest country in the world in terms of area, with an area of more than 17 million km² in Europe and Asia, as well as being the seventh largest country in terms of population, with a population of 144 million, and administratively, it is divided into a republic, an autonomous region, and 128 nationalities. The Russian economy enjoys significant natural resources, as it has the largest reserves of minerals, accounting for 30% of the world's reserves of coal, phosphorus, iron, potassium, and gas, and 13% and 36% of the world's reserves, as well as being the fourth largest producer of copper, lead, gold, aluminum, diamonds, tin, nickel, and manganese in the world. This diversity of natural resources and its advanced ranking in the production of these resources has given it a huge productive, agricultural, and industrial base through which GDP is distributed among these sectors,



with an effective contribution of 26.4% in the industrial sector, 7.3% in the agricultural sector, 5.9% in the oil and gas sector, 36% in the transport and communications sector, and 10.2% in the services sector. These economic variables play an important role in influencing the foreign policy of each country. Despite its natural resources, it is necessary to have the means to exploit these resources optimally [3].

The political changes that surrounded the Soviet Union and led to its collapse in 1991 wreaked havoc on the Russian economy after four decades of reconstruction, development, and building following World War II. After the Soviet Union had been the second largest economic power after the United States, Russia lost its economic weight, and its gross domestic product fell by about 40% compared to that of the former Soviet Union. Therefore, Russia, with its status and importance, needs a whole lifetime to reach the level of development enjoyed by France, Germany, and the United States.

During the period from 1991 to 2000, the Russian economy was characterized by its dependence on and alignment with US policy, believing that opening up to the West was the best solution and the only option to bring the country out of the state of chaos and destruction in all sectors and return to the international system. However, these hopes were dashed by the failure to obtain financial aid and loans. Therefore, President Yeltsin believed that solving economic problems and transitioning to a capitalist system must be done in one fell swoop, i.e., through "shock therapy." This required several important and dangerous measures, including budget cuts, privatization of the economic sector, reform of the tax system, and others. However, these measures led to significant economic, political, and security chaos, as they weakened the economic and social role of the state, which led to a continuous decline in agricultural and industrial production and a deterioration of internal conditions in particular and external conditions in general [4]. Among the reasons for the severe financial crisis that the Russian economy suffered during 1997 were "the lack of liquidity in the market, high electricity and gas prices, customs tariffs on rail transport, the failure of tax collection policy, and the ineffectiveness of borrowing policy." Despite the severe crisis witnessed this year, for the first time during the five-year plan, economic growth reached 1.7%, and there are predictions that economic growth will reach 3.2% in 1998. In addition, there has been an improvement in economic and human development indicators, reflected in price stability, economic growth, and stable real incomes. Russia extracted 272 million tons of oil and 489 billion cubic meters of natural gas this year, and the overall price level did not exceed 0.6% at the end of the year. In addition, trade volume increased by 1.5% compared to the previous year, and gross domestic product increased by 0.4%. Gold and hard currency reserves reached \$22.9 billion [5].

The crisis and suffering of the Russian economy intensified in 1998 due to falling oil prices and capital flight abroad, during which Russia lost \$62.5 billion according to official bank information, the collapse of the government bond market, the accumulation of debt, and the government's inability to repay it, which was represented



by economic companies and factories towards the government, such as Gazprom and AvtoVAZ, among others, on the one hand, and government debts to citizens in the form of salary payments on the other. The debts of these companies to the government amounted to more than \$10 billion at the exchange rates at the time, while the state's debts to citizens amounted to more than \$7 billion, only part of which it was able to repay. As the Russian crisis worsened, the International Monetary Fund intervened to resolve the crisis and offered a financial package worth \$22 billion, of which the IMF provided \$11.2 billion, the World Bank provided \$6 billion, and the Japanese government provided the remainder. However, this was subject to specific conditions, namely “raising fuel and gas prices in the domestic market to bring them in line with international prices, ending the monopolies of giant Russian oil companies, and increasing foreign investment” [6].

During 1999, oil prices rose and Russian companies began to increase their oil production to 300 million barrels per year instead of 180 million barrels per year. The government contributed to this increase by investing \$5 billion in the energy and fuel production and refining sector. This policy was supported by increasing taxes on crude oil and increased fees on giant companies. However, the economic situation in Russia improved during the first phase of 2000, especially during Putin's first term as president, which led to an increase in gross domestic product and a decrease in the trade deficit. This helped raise global oil prices, improve the economic situation, and bring Russia out of its crisis to restore its global position as one of the world's major powers. From there, Putin presented three main goals to achieve his upcoming reform policy, which consisted of “doubling GDP, overcoming poverty, and supporting the energy sector” [7].

The Russian economy continued to improve, with the state regaining control of Gazprom in 2004, the improvement of conditions for small businesses, and the continuation of privatization. Russia achieved economic gains during the period (2008-2010) both domestically and internationally, ranking third globally in terms of central bank reserves at \$700 billion, behind Japan and China. Russian companies then entered various economic sectors in the West, with Lukoil acquired the Genie Oil Company in the United States with all its assets, including 1,400 product distribution stations, and the Russian company Igraz, the second largest steel producer, invested \$4 billion and then purchased Biis, the largest steel producer in Sweden, in partnership with the Russian company TMK. The gas and oil sector occupies an important place in the Russian economy, with oil production reaching more than 10 million barrels per day. The largest company in Russia is Gazprom, which aims to invest around \$450 billion in Russia. Economic indicators point to significant improvement in the Russian economy, with gains reflected in an increase in per capita income to \$10,000, the development of agricultural and industrial projects, and great success in the education and health sectors. This success in Russian economic reform is attributed to political leaders overcoming the 1998 crisis [3].



The economic indicators for the Russian economy for the period 1998-2007 can be illustrated by the following table:

Table (1): Economic indicators for the Russian economy for the period (1998-2007)

Year	GDP Growth Rate (%)	Oil Production Growth (%)	Oil Prices (\$/barrel)	Export Revenues (Billion \$)	Inflation Rate (%)	Unemployment Rate (%)	Fiscal Balance (% of GDP)	Current Account Balance (% of GDP)
1998	-5.3%	-12.4%	13.2	85	-10%	-5.3%	21	12
1999	6.3%	6.3%	12.4	37	-22%	-0.5%	58	17
2000	10.0%	18.1%	9.9	20	18%	3.5%	62	27
2001	5.1%	10.2%	8.8	19	20%	3.0%	40	23
2002	4.7%	2.8%	8.5	15	16%	1.4%	32	24
2003	7.3%	13.9%	7.8	11	11%	1.7%	51	27
2004	7.2%	11.3%	7.9	12	11%	4.5%	36	34
2005	6.4%	10.5%	7.5	11	13%	8.1%	30	50
2006	6.7%	12.6%	7.1	9	13%	8.5%	49	61
2007	7.3%	21.2%	6.3	11	16%	5.5%	48	69

Source: [6].

The significant progress made by the Russian economy, as shown by the indicators in Table 1, and Russia's exploitation of high oil prices to control domestic economic sectors in general and develop the energy sector in particular, apart from the Russian state's move towards capitalism and partnership with the private sector, with Russia reaching a stage of 70% public-private partnership. From this stage until 2014, the Russian economy was able to overcome the obstacles hindering its various industries by taking advantage of oil prices on the one hand and exploiting them for foreign investment on the other, which led to diversification of income sources and raised the standard of living of the population [6].



As for Ukraine, it is the largest country located entirely in Europe and the second largest country in Europe after the European part of Russia. It is a large and advanced industrial country and an exporter of technological and military equipment. Kiev, the capital of Ukraine, is about 757 km from Moscow, the capital of Russia. Russia and Ukraine have economic ties in the form of trade, which has been based on energy in general and natural gas in particular. Russia's vast oil and gas reserves have been passed on to Ukraine through a vast network of Soviet energy pipelines, which "one of the most important markets for Russia's Gazprom energy company, through which approximately 80% of the total gas consumed by Europe from Russia passes via Ukraine, while 3% of natural gas passes through Belarus."

The Ukrainian economy is one of the largest consumers of Russian energy, with its production to meet domestic demand reaching 3% of natural gas and relying on imports from the Russian economy to meet its remaining needs. In addition, European dependence on Russian energy sources exceeds Asian dependence, Russia exported about 70% of its oil exports and 90% of its natural gas to European countries in 2016, while Asian countries relied on 26% of oil exports and 10% of natural gas [5].

Based on the above, it is clear that Ukraine's important location as a transit route for gas from the East and Russia to Europe, as well as its location on the Black Sea and its natural resources, have made it a target for regional and international powers to interfere in its affairs. Russia views Ukraine as a dependent state, an extension of its colonies and influence, and an important source of energy and gas. Good trade relations between Kiev and Moscow form the basis of Ukraine's economy, but the Russian Federation has threatened to cut off these trade channels between itself and Ukraine after the 2014 crisis.

3. The economic impact of the Russian-Ukrainian war on the global economy:

3.1. The roots of the Ukrainian-Russian crisis:

Despite Ukraine's positive aspects and advantages in terms of location, natural resources, large area, and large developed industries such as minerals, weapons, and others, it also has negative aspects, namely its inability to govern itself with a strong, independent policy, which has made it the target of the ambitions and occupation of neighboring rival countries, especially Russia, leading to its rule by the Soviet Union. However, with the end of Soviet rule and Ukraine's attainment of independence and full sovereignty, it soon returned to problems of control, unrest, and political protests in order to gain power, which plunged Ukraine into crises that were not limited to the Ukrainian interior but also included foreign countries, starting with the political events that took place on November 21, 20 , represented by the Portuguese revolution as a result of electoral fraud and the failed elections that were held in Kiev to gain power. With the continuation of conflicts and parliamentary blocs between supporters of the Russian Federation and supporters of the West, and the victory of the pro-Western bloc in 2009, the crisis in Ukraine escalated when Russia raised natural gas prices and



stopped its supplies to Ukraine, which coincided with the effects of the global financial crisis [8].

These external crises and shocks to the Ukrainian economy were the result of its dependence on imports to meet its annual needs for oil, natural gas, and nuclear fuel. Ukraine imports about 70% of its natural gas from Russia, and natural gas pipelines from Russia to the European market pass through Ukraine. Russia has successfully used its natural gas as a weapon against Ukraine. In addition, Ukraine is a large, cold country that needs energy resources to meet its daily needs, and Russia raised natural gas prices to \$450 per 1,000 m³ in 2009 [9].

Ukraine's economic situation began to improve slowly from 2010 to 2013, after former President Yanukovich fled the country during the Revolution of Dignity. The international community, represented by the United States, the European Union, the International Monetary Fund, and other international financial institutions, tried to help the Ukrainian government to encourage it to make commitments and reforms in line with the Western vision. In March 2014, the Ukrainian government received the first tranche of an IMF loan worth \$14-18 billion. With these reforms, Ukraine attempted to make its country prosperous and developed. However, this stability did not last long for Ukraine, as Russia occupied the Crimean Peninsula in 2014 and its continued aggression against Ukraine damaged economic sectors, including economic contraction and damage to heavy industries. As a result, Ukraine's economic growth declined by 6.6% in 2014 and by 14.3% in 2015. Trade between the two countries deteriorated, and Ukraine is expected to integrate its economy with Europe and open its markets to trade instead of relying on Russian markets [9].

Many countries have strived to contain the Ukrainian crisis by signing a number of agreements, including the signing of the "Minsk I Agreement on September 5, 2014." after Ukrainian President Poroshenko ordered his country's forces to cease fire immediately after the agreement was signed as a first step towards resolving the crisis through negotiation and the withdrawal of Russian forces that had entered Ukraine. As for the second agreement, the Minsk II Agreement of 2015, its aim went beyond the first agreement, which was embodied in a ceasefire and the withdrawal of the Ukrainian army to the west after the separatists took control of new territories. After negotiations between the two sides, the United States, Russia, and Britain pledged to respect Ukraine's sovereignty and independence and not to threaten it in exchange for its renunciation of nuclear weapons [10]. Both agreements were controversial for Ukraine and the separatists, which contributed to delays in their implementation as both sides sought to achieve more gains, including Russia, which saw Ukraine implementing the agreement with Russian vision and objectives.

The failure to reach successful solutions to calm the Russian-Ukrainian situation was the reason for Russia's continued attacks on Ukraine in a series of cyberattacks, including targeting the electricity network in Kiev in 2016, followed by a large-scale



attack in 2017 targeting Ukraine's critical infrastructure. Russia's continued series of cyberattacks to date has contributed to the crystallization and exacerbation of the crisis and the transition from cold wars to military confrontations.

3.2. Economic impacts on energy sources:

Russian energy sources and mega-projects are among the most important tools of influence and external economic domination directed at European Union countries, which has been reflected in Russian national security, as the preservation and development of energy sources for economic development is one of the most important objectives of Russian national security, according to the Russian National Security Strategy of 2020, which considers energy security to be one of the most important national security objectives. The basic condition for achieving security, whether at the national or global level, is the modeling of multilateral relations through the creation and establishment of new markets for energy sources that are in line with the principles and regulations adopted by the World Trade Organization and international development and exchange [11].

Based on the above, we can diagnose the extent of energy's impact on Western European economies. Perhaps Russia and Ukraine are the most affected, given their enormous energy potential and the energy supply networks that cross their territories, which is a factor that fuels the ongoing conflict between them. Studies and forecasts indicate that Western Europe will be significantly affected by the war due to its heavy dependence on Russia for natural gas, as Russia is the world's second-largest producer. Russia accounts for about 17% of supplies in 2020, exports about 35% of its production, and sends about 70% through pipelines, most of which pass through Ukrainian territory. The disruption of Russian energy pipeline exports to Europe will have a negative impact on global oil prices, as the growing gap between supply and demand as a result of supply disruptions has contributed to higher natural gas prices in Europe, which has had an impact on oil prices. Countries are expected to shift away from natural gas, meaning that the disruptions in oil supplies from Russia will be reflected in a decline in its reserve power in other regions, contributing to an increase in oil prices to \$120 per barrel. as the decline in Russian oil exports to almost half their previous level has resulted in Brent crude oil prices rising to \$150 per barrel [1].

According to data released by official sources, gas and oil exports accounted for more than 60% of Russia's total exports in 2019, contributing about 30% to GDP and 39% to public budget revenues. Therefore, the decline in natural gas volumes from Russia to Europe has contributed to a crisis with a significant impact on European gas markets, even in countries that are not directly supplied by Russia, as Europe relies on Russia for about 40% of its natural gas. Oil markets may also be affected by the decline in natural gas exports, These tensions could cause oil prices to rise to \$150 per barrel and lead to a decline in global GDP to 0.9% in the first half of this year, while inflation rates will increase to more than 7.2%, meaning they will double [1].



Table 2 shows the world's natural gas production for 2019, with Russia ranking first with 654 billion cubic meters of total global production, while Ukraine ranks 29th globally with an estimated production volume of (21,050,000,000 cubic meters). It is noticeable that Ukraine's production performance is modest compared to Russia's natural gas production. However, Ukraine's geographical location has made it a link in the largest gas supply chain, which has led to its involvement in a crisis affecting energy security, particularly gas supplies to Western Europe.

Table (2): Global natural gas production in ten developed countries and Ukraine for 2019

Rank	Country	Export Value (USD)
1	SA Saudi Arabia	\$654,000,000,000
2	RU Russia	\$545,900,000,000
3	IQ Iraq	\$197,800,000,000
4	AE United Arab Emirates	\$187,000,000,000
5	KW Kuwait	\$133,200,000,000
6	NG Nigeria	\$114,700,000,000
7	KZ Kazakhstan	\$111,900,000,000
8	NO Norway	\$85,730,000,000
9	AZ Azerbaijan	\$76,330,000,000
10	BR Brazil	\$75,900,000,000
29	OM Oman	\$21,050,000,000

Source: [12].

Most strategic analysts agree that natural gas plays a role in conventional warfare similar to that of nuclear weapons, which is how Russia views it and continues to use it as a bargaining chip.

The Russian energy strategy adopted after 2004 contributed to changing the pattern of Russian energy resource development (oil and gas). One of the advantages of this strategy is that it does not rely on political factors but is based on economic realities. Russia has recognized that the oil and gas industry is the driving force behind economic growth. Recognizing the benefits of hydrocarbon exports will also remove political barriers to enhancing export capacity in the oil and gas industry. The aforementioned strategy aims to link the potential for developing the fuel industry with the expected demand for Russian oil in the domestic and foreign markets (domestic and foreign) on the other. The adoption of this strategy has made Russia stand out as a major economic power in terms of oil, in addition to its wide-ranging capabilities in global oil markets and prices [13].

The data in the table shows that Russia ranks third in terms of global oil production after the United States and Saudi Arabia, with Russian oil production accounting for approximately 13.4% of global production in 2019. while daily production amounted to approximately 10,800,000 barrels per day out of a total global production of



80,622,000 barrels per day. This means that Russia's impact on oil compared to total global production is very significant, Therefore, any delay in oil production will create a gap between oil supply and demand that will be difficult to bridge given the economic growth the world is witnessing. Table 3 also shows that Ukraine ranks 58th globally in oil production with 31,989 barrels per day. A comparison of the two countries' contributions to global oil production shows the fragility and low level of oil production in Ukraine compared to Russia, thus confirming the extent of the damage to global economies.

Table (3): Global oil production by ten developed countries and Ukraine in 2019

Rank	Country	Daily Production (Barrels)	Annual Production (Barrels)
1	us United States	15,043,000	35,922,000,000
2	SA Saudi Arabia	12,000,000	324,866,000,000
3	RU Russia	10,800,000	73,292,000,000
4	CA Canada	4,451,516	119,664,000,000
5	CN China	3,990,956	49,714,000,000
6	IQ Iraq	3,980,650	2,836,000,000
7	AE UAE	3,662,694	100,931,000,000
8	IR Iran	3,106,077	335,103,000,000
9	KW Kuwait	2,923,825	721,575,000,000
10	BR Brazil	2,515,459	554,000,000
58	OM Oman	31,989	720,000,000

Source: [12].

With the Russian-Ukrainian war continuing, World Bank data indicated that the natural gas index rose to 273.1 points in March 2022, a monthly increase of 38.24% and an annual increase of 316.1% compared to March 2021. Natural gas prices in Europe rose to \$42.4 million/ per thermal unit in March 2022, a monthly increase of 55.7% compared to last month and an annual increase of 591.9% compared to the same month in 2021, when the price was 6.1 million dollars per thermal unit, as shown in the figure:

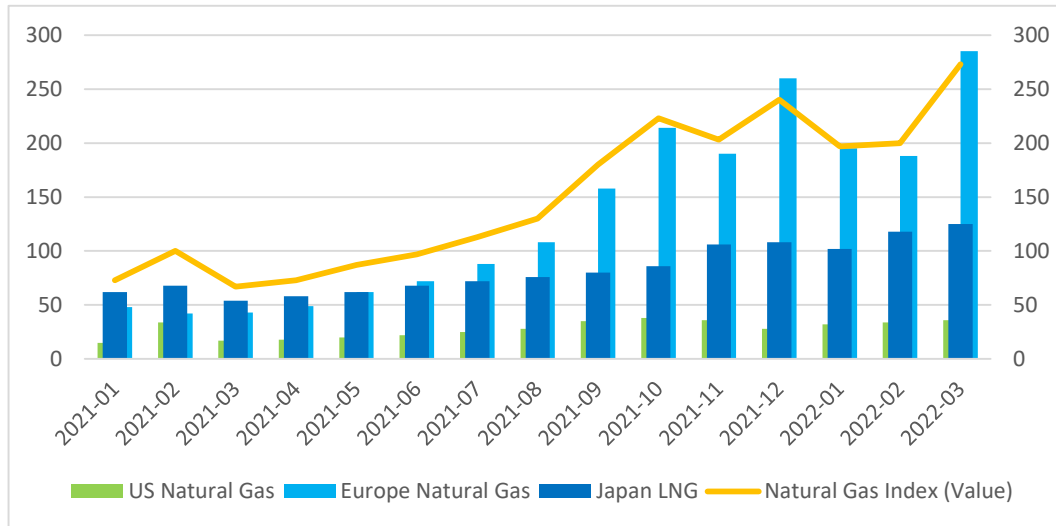


Figure (1): Average monthly price and index of natural gas for the period (2021-month 3/2022) (million/dollar thermal unit)

Source: [14]

As for global oil prices, they have continued to rise since the outbreak of the coronavirus pandemic, with the monthly change in the average global price of crude oil recording an increase of 20.3% at the end of March 2022 compared to February 2022, reaching \$113 per barrel. This represents an increase of 76.1% compared to the price in March 2021. According to data published by the World Bank in its Commodity Markets Outlook bulletin, the monthly change in the global average price of crude oil declined by 8% in April 2022 compared to March, as shown in the following figure:

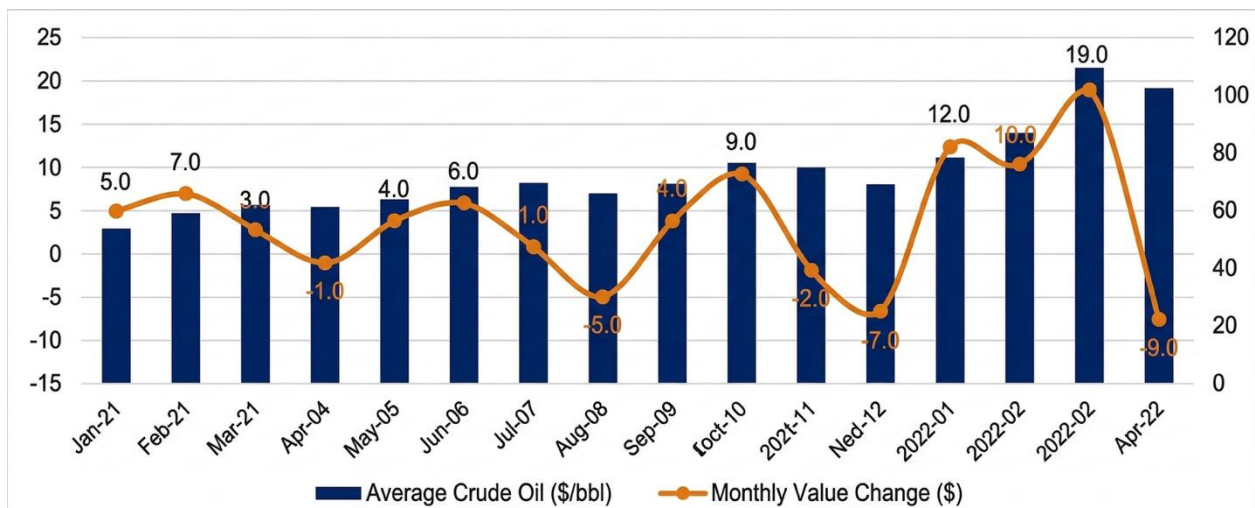


Figure (2): Global monthly average and monthly change in crude oil prices for the period (2021-April 2022) (USD/barrel)

Source: [15].

4. The Impact of the Russian-Ukrainian Crisis on the Iraqi Economy:



4.1. The Expected Effects of the Russian-Ukrainian War on Energy Sources in Iraq:

The war between Russia and Ukraine has had economic repercussions on the global economy, given the great importance of the Russian Federation as a major source of energy because it possesses vast reserves of oil, gas, and coal, in addition to the fact that these two countries represent a food basket for the whole world, especially with regard to grain production. Therefore, this war has had a major impact on the global economy in two areas: energy and food. Iraq is among the countries that have been affected by these impacts, which we will explain in this study.

With the start of the Russian war on Ukraine and the imposition of sanctions on Russian oil, global companies have already begun to avoid purchasing Russian oil, prompting Russia to make competitive offers that have already benefited China and India.

While Russia exports 7 million barrels per day, which is double Iraq's exports, questions arise as to whether Iraqi oil faces a major challenge with Russia taking over Iraq's share in the Indian and Chinese markets due to price discounts exceeding \$20 per barrel. Iraq relies on financial returns from crude oil sales for about 90% of its national income and to secure the operational and investment requirements of various sectors of the state. Iraq has an export capacity of about 3.3 million barrels per day, with India importing about 1.3 million barrels per day and China about 1.1 million barrels.

Global oil prices are rising rapidly after a long decline that lasted nearly two years due to the pandemic and lockdown restrictions imposed by the coronavirus. However, there are unexpected variables that could disrupt the recovery of crude oil prices in Iraq, namely the Russian-Ukrainian war that broke out on March 24. The United States imposed a package of economic sanctions on Moscow following its invasion of Ukraine, including a ban on the purchase of Russian oil and coal by many countries, especially Western ones [16].

Oil prices rose at the beginning of March to their highest levels since 2008, amid deepening supply concerns, after the United States announced that it was considering imposing a ban on Russian oil imports with its European allies. Prices jumped by 39% in March 2022, with Brent crude reaching \$13,139.

There are significant Russian investments in the Iraqi oil and gas sector, with Rosneft owning 60% of the Kurdistan Oil Pipeline, Iraq's main operational export pipeline. It is also building a new gas pipeline with an expected export capacity of 30 billion cubic meters of gas per year, which represents about 6% of total gas demand in Europe. Russian companies, represented by Lukoil, Gazprom, and Rosneft, are investing in the West Qurna 2, Badra, and Block fields, as well as some fields in Kurdistan. Most Russian investments in Iraq will be affected, especially companies operating in oil concession fields that pay their costs and profits in kind, i.e., in exchange for a certain



amount of oil produced, in addition to other difficulties related to how Russian companies implement their secondary contracts with other companies and how they finance them, which requires the search for a new mechanism for settling accounts with the Iraqi government [2].

As a result of rising oil prices, the quantities of Iraqi oil sold increased, with Iraq pumping 4.34 million barrels per day in March, an increase of 80,000 barrels per day from February, and slightly less than OPEC's production ceiling of 4.37 million barrels per day. According to the latest survey conducted by Standard & Poor's Global Commodity Insights, Since oil is the main resource in the preparation of the Iraqi general budget, as it is an important and primary source of financial resources in US dollars, accounting for more than 92% of the Iraqi budget's public revenues during the period 2004-2021.

Given that the Iraqi economy is one-sided, i.e., it relies entirely on oil revenues to finance its revenues due to the low diversification of non-oil sources of income in Iraq, as well as the volatility of public revenues and their almost complete dependence on oil revenues, these revenues have become the main source of financing for the Iraqi budget as a whole, rather than seeking alternative sources of income to strengthen the state treasury and its resources. Therefore, the rise in global oil prices has a positive impact on the Iraqi budget, as the current high prices in the global oil market are reflected in Iraq's oil revenues, which reached about \$28 billion during the first quarter of 2022, an increase of \$13 billion over the same period in 2021. Oil revenues during the first quarter of 2021 reached about \$15 billion, and if oil prices remain above \$100 per barrel, oil revenues are expected to reach more than \$110 billion in 2022, which is the highest price Iraq has seen in nearly a century. This development in oil prices will have a positive impact on the 2022 general budget, which is expected to record a surplus of at least \$20 billion [2].

Despite these positive effects, there are also negative impacts. Iraq's dependence on Iranian natural gas, which is closely linked to oil prices, means that when oil prices rise, so do the prices of Iranian natural gas. and the cost of imported electricity is likely to rise due to the increase in the price of gas used as fuel for electricity production, meaning that the damage and benefits are equal. If the war between Russia and Ukraine continues, a global energy crisis is inevitable. However, as an oil-exporting country, Iraq stands to benefit from increased oil revenues, despite other economic burdens. The following table shows the development of the average price per barrel of Iraqi oil for the period (2018-2022).



Table (4): Average price of Iraqi oil (USD/barrel) for the period (2018-2022)

Year	Average Price (\$/barrel)	Annual Change (%)
2018	\$65.98	—
2019	\$60.38	▼ -8.5%
2020	\$40.69	▼ -32.6%
2021	\$68.38	▲ +86.0%
2022	\$104.09	▲ +52.22%

Source: [17] [18].

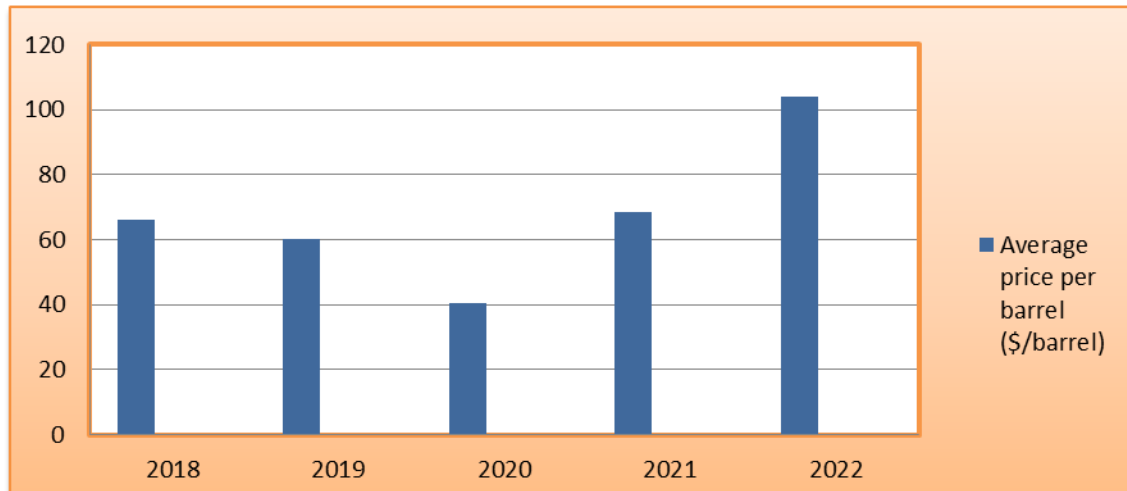


Figure (3): Average price of a barrel of Iraqi oil (\$/barrel) during the period (2018-2022)

The data in the table above shows that the average price of oil reached \$65.98 per barrel as a result of rising global oil prices and political and economic stability in the country. Meanwhile, the average price of a barrel of oil in Iraq fell in 2019 to \$60.38 per barrel, recording a negative growth rate of 8.5%. In 2020, the average price per barrel fell significantly to \$40.69 per barrel due to the COVID-19 pandemic, which affected the entire world and had a negative impact on economies worldwide. In 2021, oil prices recovered globally, with the average price per barrel reaching \$68.38, achieving a high growth rate of 86.0%, which is a very significant percentage. The average price of a barrel of Iraqi oil rose in 2022 to \$104.091 per barrel as a result of the war between Russia and Ukraine and a number of reasons that we mentioned at the beginning of our discussion of the impact of the Russian-Ukrainian war on the Iraqi economy.

4.2. The economic repercussions of the Russian-Ukrainian crisis on macroeconomic variables in the Iraqi economy:

The repercussions of the Russian-Ukrainian war on the Iraqi economy begin, even though Iraq is not a key partner for either country (Russia or Ukraine) like any other country, if energy sources (gas and oil) are excluded. the repercussions of the Russian war have had a negative or positive impact on the Iraqi environment. The rise in oil



prices, which is the main pillar of the Iraqi economy, and its fifth place in oil production and crude oil reserves (149 billion barrels for 2021), making it the third largest reserve in the Middle East, Therefore, the rise in global oil prices as a result of the Russian war will in turn be reflected in Iraq's financial revenues, and this rise in oil prices will lead to an increase in oil revenues, which constitute 40-60% of the gross domestic product. The latter is the most important indicator of a country's economic performance and the most comprehensive measure of a country's total production of all goods and services, as well as identifying weaknesses in the economic structure and the possibility of addressing them. Since the Iraqi economy relies on oil resources to drive the country's economy and financial affairs, this makes the structure of the Iraqi economy fragile and vulnerable to internal and external shocks, especially those affecting the global oil market, given its significant and decisive role in the Iraqi economy, the organization of public budget operations, and the management of other public sector functions, the latter of which has taken on an increasingly important role with the rise of terrorist activities and the deterioration of security conditions in the country.

As a result of the Russian-Ukrainian war and its consequences, the price of Iraqi oil has risen globally. Given that 90% of gross domestic product (GDP) depends on oil prices due to the lack of sources of economic diversification, it is noted that real GDP for 2021 reached (46,924.9) billion dinars and rose to (50,308.4) billion dinars during the first quarter of 2022 as a result of an 8.9% increase in oil prices due to the increase in production quotas under the OPEC agreement on the one hand, and on the other hand, due to a 5.5% increase in other activities as a result of the recovery of sectors from the COVID-19 crisis. Gross domestic product at current prices recorded a value of 63,700.5 billion dinars during the first quarter of 2021, rising to 90,694.3 billion dinars during the first quarter of 2022. These increases are the result of an 8.8% increase in crude oil exports on the one hand and a 62.1% increase in oil prices compared to the same quarter last year on the other. As for the rise in the general price level, as a result of the outbreak of the Russian-Ukrainian war on February 24, 2022, which had a negative impact on the Iraqi economy, inflation rates for the consumer price index during the first half of 2022 recorded (5.1%), reaching 109.6 points during the first half of 2021 and rising to 115.2 during the first half of 2022 as a result of the global and political conditions that have affected the world in general and Iraq in particular, which relies on imports to cover its consumption. As for inflation rates, after excluding "fruits, vegetables, and petroleum derivatives," they recorded 4.7%, or 116.6 points during the first quarter of 2022, compared to 111.4 points for the first quarter of 2021 [19].

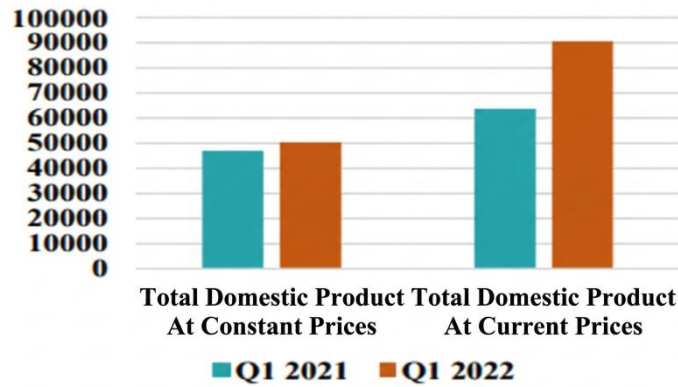


Figure (4): GDP at Current and Constant Prices for the quarter first for the period (2021-2022)

Source: [19].

As for foreign reserves, they recorded (149.9%) over last year, reaching (97.4) trillion dinars for the first quarter of 2022, compared to (84.8) trillion dinars for the first quarter of 2021. This increase is likely due to the rise in investments and gold, which recorded 20.3% and 14.8%, respectively, while the foreign currency balance at the Central Bank of Iraq reached 62.3%. as a result of the deteriorating fiscal policy, as the foreign currency balance exceeded 2% of foreign reserves, with the money supply from reserves reaching 67.9%, which is a high percentage indicating the effectiveness of monetary policy. The same applies to the general budget, with revenues and expenditures reaching 101.6% and 34.4%, respectively. This increase in revenue was the result of the economic recovery after the coronavirus crisis, which was due to a 31.0% increase in current expenditure due to the increase in the number of beneficiaries of labor and social services during the coronavirus crisis, as well as an 187.5% increase in investment spending [19].

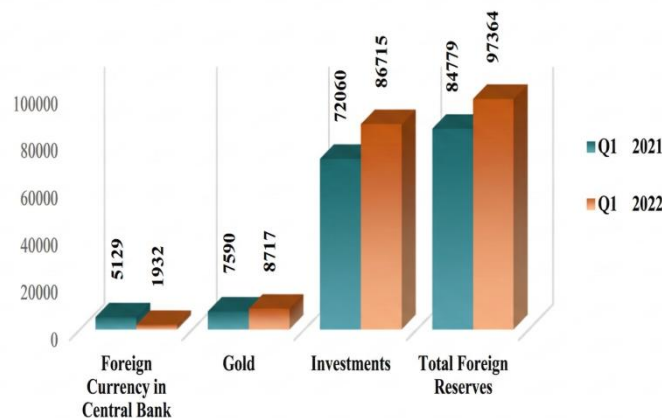


Figure (5): Foreign reserve at the Central Bank of Iraq for the first quarter of the period (2021-2022)

Source: [19].

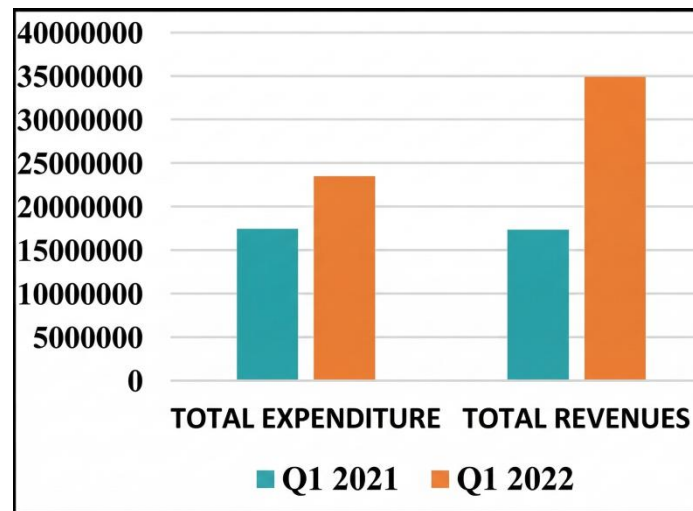


Figure (6): General revenues and expenses for the first quarter of the term (2021-2022)
Source: [19].

4.3. An analytical view of the expected scenario of the economic repercussions of the Russian-Ukrainian war on Iraq:

Since the outbreak of the Russian-Ukrainian war, Iraq has refrained from taking a firm stance on the war. Iraq voted in favor of an Arab League statement on Ukraine that did not assign responsibility to Russia, and on March 2, Iraq abstained from voting in the UN General Assembly on condemning Russia's aggression against Ukraine, merely expressing "regret" over "the deterioration of the situation and the escalation of tensions between the Russian Federation and Ukraine."

Iraq justified its abstention by highlighting the dangers of terrorists exploiting divisions within the international community and pointing to its historical background, which included "the suffering caused by the ongoing wars against our people." Regardless of these official statements, political opinion in Iraq on Russian behavior is divided along partisan and sectarian lines. The imposition of sanctions on Russia has complicated its energy investments in Iraq and potential arms purchases from Moscow and could have a long-term negative impact on the Iraqi economy. The economic repercussions for Iraq can be summarized as follows:

1. The current war in Ukraine has had serious negative economic effects on Iraq, even if higher oil prices have improved the situation.
2. Iraq imports 50% of its food supplies, and although it does not depend on wheat from Russia or Ukraine, rising global prices have an indirect impact.
3. The Iraqi Ministry of Trade has explained that rising cooking oil prices have led to supply disruptions caused by the war in Ukraine, as well as protests in southern Iraq.



4. The government proposed paying a monthly allowance of \$70 to economically vulnerable citizens, which was granted for only one month. The Iraqi authorities also subsidized wheat and cooking oil, as food prices doubled in late March.
5. If the ceasefire in Ukraine holds, the current rise in food prices is likely to ease, although the long-term impact of sanctions against Russia remains unclear.
6. On March 1, the Russian ambassador to Iraq confirmed Moscow's desire to maintain and expand its \$14 billion investment portfolio in Iraq, most of which is concentrated in the oil and gas sector.
7. Iraq may face difficulty finding alternative investors, as companies will need to allocate 20-25% of their budgets to security when investing in the country. Iraq should highlight the decades of experience that Russian companies have in Iraq, while exercising caution about deepening economic ties with Russia.
8. Iraq has received requests from European and American oil buyers, which may allow it to abandon Russian investments. The Central Bank of Iraq and the Commercial Bank have called on companies to avoid transferring funds to Russia in order to isolate the economy from Western sanctions.
9. Given the possibility of long-term sanctions on Moscow and increased Western demand for alternative suppliers, the Iraqi government must invest \$10 billion in its oil sector to increase production to nearly 8 million barrels per day, up from 4.25 million in early 2022.
10. Given that Iraq's OPEC+ production quota is 4.28 million barrels per day, it is unclear how this target can be achieved.
11. It is very likely that Iraq will adopt efforts to diversify the commercial ties of its energy sector and gradually reduce its dependence on Russian investment in the coming years. The withdrawal of investments will have a profound impact on the Kurdistan Region, as Rosneft acquired a 60% stake in its main oil pipeline for \$1.8 billion in October 2017.
12. Russia's Rosneft failed to make a profit on its \$4 billion energy investments in the Kurdistan Region between 2017 and 2019 and its plans to sell gas from Iraqi Kurdistan via Turkey to Europe due to tightening sanctions. It has also become very clear that lucrative deals in the Kurdistan Region are rapidly declining.
13. Although Iraq has avoided taking sides in Russia's war with Ukraine, the conflict could exacerbate divisions and profoundly affect the trajectory of the Iraqi economy in the near term.
14. The war is unlikely to destroy the Russian-Iraqi cooperation of the past decade. The Iraqi government will likely limit its cooperation with Moscow to essential areas and overcome the impact of sanctions by adopting a multipolar foreign policy.

5. Conclusions and Recommendations:

5.1. Conclusions:



1. Chapter Three demonstrates that the Russian-Ukrainian war led to severe disruptions in global energy markets due to declining Russian supplies and increased demand, resulting in unprecedented rises in oil and gas prices.
2. The analysis in Chapter Two showed that Russia is one of the world's largest energy producers and exporters, meaning any disruption to its production or exports has a direct impact on the global economy, particularly for European countries dependent on Russian gas.
3. Chapter Four reveals that the Iraqi economy, despite limited direct trade with the warring parties, is indirectly affected through global channels, especially by fluctuations in energy prices.
4. The analysis confirms that the rise in oil prices resulting from the war had a positive impact on Iraq's public revenues, leading to budget surpluses and improvements in some macroeconomic indicators such as GDP and foreign reserves.

5.2. Recommendations:

1. The need to diversify Iraq's economic base by developing non-oil sectors, thereby reducing dependence on oil revenues and enhancing economic stability.
2. Directing investments towards developing the domestic natural gas sector to achieve self-sufficiency and reduce reliance on imports, particularly in electricity generation.
3. Adopting flexible fiscal and monetary policies capable of absorbing external shocks, especially those related to fluctuations in global oil prices.
4. Investing the financial surpluses generated from high oil prices in establishing sovereign wealth funds or sustainable development projects that support the economy in the long term.
5. Diversifying economic and investment partnerships with multiple countries to reduce the risks associated with dependence on specific countries or companies, especially in light of geopolitical tensions.
6. Enhancing the efficiency of energy sector management by modernizing infrastructure and improving production and consumption technologies to contribute to achieving sustainable energy security.
7. Adopting effective policies to curb inflation through subsidizing essential goods and monitoring markets to maintain economic and social stability.
8. The need to build proactive strategies based on an analysis of future scenarios for international crises, enabling decision-makers to deal flexibly with global changes.

References:

- [1] A. S. S. Al-Shamri, *The Russian-Ukrainian War and Its Impact on Energy Markets (Proposed Solutions and Affecting Restrictions)*, Baghdad: Al-Bayan Center for Studies and Planning, 2022.
- [2] N. J. Al-Marsumi, "The Effects of the Russian-Ukrainian War on the Iraqi Economy," *Iraqi Journal of Economic Sciences*, vol. 20, no. 73, 2022.



- [3] S. S. Shadhan Al-Zuhairi, "The Impact of Economic Reform on the Economy of the Russian Federation," *Wasit Journal of Humanities*, vol. 8, no. 20, 2012.
- [4] M. Majdan, *Russia's Foreign Policy (1992-2014): Capabilities, Challenges, and Risks*, Faculty of Political Science and International Relations, University of Algiers 3, 2015.
- [5] V. H. Francis, *Geopolitics of Russian Foreign Policy: A Study of the Impact of Geopolitics on Russia's Relations with Neighboring Countries*, Alexandria University, Faculty of Economic Studies and Political Science, 2019.
- [6] L. Sayedham, "The War Economy as a Driver of Russian Foreign Policy after 2015," *Algerian Journal of Security and Development*, no. 13, 2018.
- [7] W. N. G. Nassar, "Russia as a Major Power," *Arab Journal of Political Science*, no. 20, 2008.
- [8] N. M. R. Al-Khairi, "The Political Crisis in Ukraine and the East-West Tug of War," *Political and International Journal*, Al-Mustansiriya University, Faculty of Political Science, Iraq, no. 26-27, 2015.
- [9] V. A. M. Laund, "The Ukrainian Crisis in Russian and American Politics and Its Future Dimensions," *Journal of Sustainable Studies*, vol. 3, no. 3, 2021.
- [10] A. Haddad, "Hybrid Wars: The Ukrainian Crisis as a Model," *Political Orbits Journal*, Faculty of Political Science and International Relations, University of Algiers 3, Algeria, 2017.
- [11] N. Aba Ji, *The Place of Oil and Gas in the Russian Economy: Indicators and Dimensions*, Egyptian Institute for Studies, Economic Studies, Egypt, 2021.
- [12] World Bank, "Data," [Online]. Available: <https://www.albankaldawli.org/ar/home>.
- [13] M. J. H. Al-Khafaji, *Russia and the Game of Energy Hegemony (A Vision of Roles and Strategies)*, First Edition, Amjad Publishing and Distribution, Amman, 2019.
- [14] World Bank, "Commodity Price Data," April 12, 2022. [Online]. Available: <https://www.worldbank.org/en/research/commodity-markets>
- [15] World Bank, "Commodity Price Data," May 3, 2022. [Online]. Available: <https://www.worldbank.org/en/research/commodity-markets>
- [16] "Oil in Iraq-Russia-Asia," [Online]. Available: <https://al-ain.com/article/oil-iraq-russia-asia>
- [17] Central Bank of Iraq, *Consolidated Economic Report for Various Years*.
- [18] Somo-Oil Company, *Reports and Studies*, 2022.
- [19] Central Bank of Iraq, *Quarterly Economic Report, First Quarter of 2022*, Statistics and Research Department, Macroeconomics Section.