



The Impact of Oil Prices on Foreign Reserves and Exchange Rates in Iraq During The Period (2012-2022)

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Abstract

The aim of the study investigates the, impact of oil prices at the international level on exchange rates And foreign reserves in Iraq for the duration (2012-2022). Its importance lies in studying the issue of developments in international oil prices and their impact on exchange rates and foreign reserves, due to the importance of international oil prices to the Iraqi economy. The study focuses on the sharp fluctuations in crude oil prices, which caused major economic problems and challenges for the Iraqi economy during the period (2014-2020), as well as affecting the exchange rates and foreign reserves. This study aims to examine and analyze the impact of oil prices on foreign reserves and exchange rates in Iraq during the research period. It is based on the hypothesis that there is a positive relationship between oil prices and indicators of the exchange rate and foreign reserves in Iraq, as the higher the oil prices, the higher these indicators will be with positive values, and vice versa. It adopts The method is analytical and descriptive for analyzing statistical data and financial and economic indicators in order to obtain and analyze results. It reveals a significant decrease in oil prices during the year 2020 from (64) dollars per barrel in 2019 to (41) dollars per barrel in 2020, with a decrease rate of (-34%), as a result of termination procedures witnessed by the international markets due to the spread of Corona virus. The results also show that the exchange rates of the US dollar against the Iraqi dinar fluctuated between increase and decrease in the official and parallel prices result of the drop-in oil prices. has decided to raise the official exchange rate from (1182) in 2019 to (1460) in 2020. In addition, there was decrease in the volume of foreign reserves at the Central Bank of Iraq as a result of the drop. Hence, Iraq's total foreign exchange reserves have decreased. Finally, the study shows an increase in Iraqi foreign reserves during the years 2021-2022, reaching (100) billion dollars

at the end of 2022, , in addition to the policy of the Central Bank of Iraq to raise prices of exchange to confront currency trafficking and money laundering.

Keywords: international oil prices, international supply and demand for oil, exchange rates, foreign reserves, the Central Bank of Iraq.

INTRODUCTION

The price of oil at the international level has been subjected to continuous series ,fluctuations, due to instability of. oil markets. The instability of oil markets is a result of the intertwining of economic and geopolitical factors affecting these markets. This, in turn, is reflected in the oil revenues of the producing countries, making them subject to continuous fluctuations, until the phenomenon of fluctuations became a matter of concern at the international level. As for Iraq, it has suffered a lot from this phenomenon, world oil price, and a major source of hard currency. This has made the Iraqi economy vulnerable to many suffocating crises when oil prices drop, including the shrinkage of GDP, the emergence of a deficit in the state's general budget, the decrease in the reserves of the Central Bank, the rise in the exchange rates of the dollar against the Iraqi dinar,

Research importance

The importance of this study lies in the consequences of the instability of The price of crude oil on global reserves and exchange rates as part of For general economic indicators in Iraq. In addition, this study attempts to define a strategy to mitigate these consequences and present them to the political decision-makers in Iraq.

Research problem

The research problem focuses on the sharp fluctuations in the crude oil prices at the international level, which caused major economic problems and challenges for the Iraqi economy from 2014 until 2020, leaving clear effects on exchange rates and foreign reserves.

Research objectives

The research aims to achieve the following objectives:

1. Highlighting the developments in oil prices at the international level.
2. To learn about the ,impact of the oil price, foreign reserves, and the exchange rate in Iraq,Proposing solutions that can be used to mitigate the economic effects of the drop-in oil prices.

Research hypothesis

The research is based on the hypothesis that there is a positive relationship between oil prices and indicators of the exchange rate and foreign reserves in Iraq, as the higher the oil prices, the higher these indicators will be with positive values, and vice versa.

Research Methodology

The research methodology relied on the descriptive analytical approach adopted in the statistical analysis of financial data and economic indicators to obtain the results.

The First Section: Developments in oil prices and the policy. of the Central Bank of, Iraq in managing the exchange rates and foreign reserves

1. Historical development of oil prices (1973-2022)

Since 1973, crude oil prices have been subjected to many violent changes, up and down, which were known at the time as oil shocks. The oil shock can be defined as successive waves of sharp rises, followed by other waves of sharp declines that occur during periods ranging from (3) to (8) years at the global level.

The first of these shocks in the history of modern oil occurred during the Arab-Israeli war in October 1973, when the average annual price of the OPEC basket of oil increased from (2.90) to (11.65) dollars per barrel in late 1973 (Musa, 2015: 10). The prices continued close to this level until

the Middle East region witnessed political disorders that led to raising prices again, the most prominent of which was the cessation of Iran's oil exports due to the outbreak of demonstrations and protests in 1979, then the outbreak of the Iran-Iraq war in September 1980 (OPEC, 2023). This led to a decrease in the exports of the two countries from about (6) million barrels/ day before the war to about (2) million barrels/ day, i.e. to a third of what it was before the outbreak of the war. As a result of these repercussions, the average price of the OPEC basket jumped from (17.25) dollars in 1979 to (28.64) dollars in 1980, then to (32.51) dollars in 1981. After that, prices began to decline gradually until they reached (11) dollars in 1987. This period witnessed the second oil shock (Kose, 2015: 5-6).

The third oil shock came in the early 1990s, following Iraq's invasion of Kuwait, as the average price of oil for the OPEC basket increased from (17.31) dollars in 1989 to (22.26) dollars in 1990. As a result of this struggle, OPEC increased the export quotas of the producing countries, following the financial crisis that afflicted the economies of South Asia at the time (OPEC, 2000: 111-112).

Prices had risen again since mid-1999, continuing to improve, as the OPEC basket prices exceeded \$94.45 per barrel in 2008. Due to the global financial crisis that began in December 2008, the global demand for oil decreased, which pushed prices down. The average price decreased to (61.06) dollars only during 2009 (OPEC, 2010: 83).

International oil prices had recovered again, especially after the noticeable increases in the prices of the OPEC basket during the period 2010-2013, as it peaked at \$109 - 2012 (OPEC, 2015: 81-82). With the beginning of the second half of 2014, they began to decline sharply, as they fell to less than (40) dollars per barrel at the end of the second half of 2014, losing about (69) dollars per barrel. Therefore, the average prices settled at (49) and (38) dollars per barrel during the years 2015-2016, respectively. This stage can be considered as the fourth oil shock.

The Covid 19 virus crisis appeared in China at the end of 2019, known as (Corona), and it spread throughout the world. The United States and Europe have been hit hardest by the rapid spread, deaths and injuries. Many countries have closed borders, stopped air, land and sea transport, frozen production in all fields, and imposed curfews to limit the transmission of the epidemic among the population. This put the international economy in an exceptional stage of stagnation, and led to a decline in oil demand, offset by the failure of the OPEC + Russia group to agree to cut production to counter the decline in demand. Finally, prices collapsed from an average price of (64) dollars per barrel in 2019 to an average of (20) dollars during the first quarter of 2020 (OPEC, 2023).

Prices improved during 2021, as a result of the efforts of OPEC to reduce production during 2020, the success of OPEC+ in pushing some non-OPEC producing countries to reduce their production, in addition to the success of vaccines in limiting the spread of the Corona pandemic. Thus, the closure measures were eased, leading to the revival of the transport and international production sectors. Accordingly, oil prices witnessed a noticeable improvement, as the average price of the OPEC basket reached (69) dollars in 2021, after it recorded (41) dollars during 2020, with an increase of (31%) (OPEC 2020, 66).

Improvements in oil prices continued during 2022, exceeding their annual average during the same year by (100) dollars, benefiting from the efforts of OPEC and the OPEC+ agreement to regulate production quantities with the aim of creating a state of balance between production quantities and oil demand in international markets (International Energy Agency, 2022). Table (1) shows developments in international oil supply and demand during the period 2012-2022.

Table (1) global supply and demand for crude oil during the period (2012-2022) (million barrels/day).

Year	Supply of petroleum	Oil demand	Surplus/ deficit
2012	90.9	90.7	0.2
2013	91.2	91.9	-0.7
2014	93.7	92.09	0.80
2015	96.6	94.16	2.44
2016	90.9	96.02	4.73
2017	91.2	97.70	-0.7
2018	100.83	99.30	1.1
2019	100.75	100.1	2.8
2020	101.03	95.62	1.9
2021	95.69	97.12	1.43-
2022	99.85	99.42	0.43

Source: International Energy Agency, Annual Statistical Supplement (2022).

2. The policy followed by the Central Bank of Iraq managing reserves and exchange rates

Foreign exchange reserves, in their strict sense, are the hard-foreign currencies owned by the central bank, in addition to deposits and bonds in foreign currency. However, the most used term Also, gold reserves, special rights of withdrawal (SDRs), and IMF reserves positions. Foreign currencies of countries are defined as deposits and bonds of foreign currencies held by the central banks (Mostafi & Sanya, 2014: 27-28).

The US dollar has been considered the global reserve currency since the “Breton Woods” conference that took place in July 1944 at the end of World War II, when the US dollar was adopted as the currency of the global monetary reserve, in addition to establishing a fixed exchange rate with the US dollar, so that all world currencies pegged to the US dollar (Abed, 2012: 45-46).

In addition to the dollar, foreign reserves include deposits n the yen, the pound sterling and the euro. These reserves contribute to supporting the price of the local currency and paying state debts due to other countries (Matar et al., 2008: 23).

Foreign reserves with central banks consist of major foreign currencies and gold bullion, as well as reserves deposited by, central bank with the International, Monetary Fund. After the formation of the new Iraqi state in 2004, the Central Bank of Iraq gained its independence in conducting the monetary and financial policy in Iraq, based on Law No. (56) of 2004, related to the Central Bank of Iraq, which is considered as a transitional stage in the history of the Iraqi banking system, as it

contained instructions and orders regarding monetary, financial and credit policy. Maintaining the stable exchange rates for the Iraqi dinar was the primary goal of the monetary authority according to this law, by using it as an intermediate goal to control the accumulated and continuous inflation, due to the application of import policies without external transfer, and the issuance of the local currency without adhering to the rules and conditions of sound monetary issuance during the nineties (Siddiq, 2013: 30-31).

The first ways to use the Central Bank of Iraq to address the inflation situation was the price tool represented by working on the proportionality of, exchange rates of the local. currency towards foreign currencies. Thus, the Central Bank began working with foreign currency sales to activate its monetary tools, especially open market operations, in addition to achieving the goal of the first central bank, i.e. working to raise the value of the Iraqi dinar against the main foreign currencies, then maintaining the stability of this value. This was confirmed by the aforementioned law, which contributed to the state losing billions of dollars that were trafficked out of Iraq by various means (Mater et al., 2008: 23).

The Central, Bank of Iraq pursues a monetary policy based on intervention to determine The exchange rate of the currency. This is called the open operations of the central bank, where the central bank intervenes as a seller of the US dollar, with the aim of influencing the equation of supply and demand for the national currency, and thus affecting its price.

This monetary policy is implemented through sale, which is held by, where it sells amounts ranging between (120) and (180) million dollars per day, at an official price specified in Iraqi dinars. Thus, the value of the Iraqi dinar against the US dollar is determined. The Central Bank of Iraq has maintained the stability of the Iraqi dinar exchange rates, relatively continuously since 2004. However, the price was excessive, as it forced large quantities of the US dollar into the markets on a daily basis, which contributed to the state's public treasury losing billions of dollars, and helped build banking systems for trafficking dollars out of Iraq.

The Second Section: Exchange rates are affected by fluctuations in the price of oil Table (2) shows the average exchange rates of the Iraqi dinar against the US dollar for the period 2012-2022.

Table (2) The US dollar against the dinar exchange rates dollar for the period (2012-2022)

Year	Oil prices \$	Central bank exchange rate	Parallel market exchange rate	The value of the rise in the parallel markets	Increase in the parallel markets
2012	109	1166	1200	34	2.9%
2013	105	1166	1232	66	5.6%
2014	96	1187	1214	27	2.2%
2015	49	1188	1247	59	4.9%
2016	40	1190	1275	85	7.1%
2017	52	1184	1250	60	5.0%
2018	69	1183	1223	27	2.16%
2019	64	1182	1195	28	2.28%

2020	20	1460	1500	40	2.7%
2021	69	1460	1500	40	2.7%
2022	100	1320	1550	230	17.4%

Source: Central, Bank of Iraq, a group of reports on exchange rates in the central bank sale and parallel markets, and the annual statistical releases of OPEC for the years 2011-2022.

Table (2) shows that the central bank follows a policy of fixing the exchange rates of the dinar, as the central bank adopted a policy of fixing the currency rate through the general sale of the dollar. Indeed, the Central Bank of Iraq has been enabled to maintain relatively stable exchange rates, with the nominal exchange rate of the Iraqi dinar against the US dollar ranged between (1\$ / 1166 dinars) and (1\$ / 1460) in the Central Bank sale during the period 2004 – 2022. Nevertheless, the prices in the parallel markets have recorded an increase compared to the nominal prices, as they ranged between (1\$ / 1182 dinars) and (1\$ / 1500) for the same period. The reason for this is due to the increase in demand for the dollar by banks, merchants and individuals over the quantities offered by the Central Bank in its daily sale. In addition, the rates of parallel price increases have ranged over the nominal prices between (2.2%) and (17.4%) during 2012-2022. However, this percentage increased significantly during 2015-2016-2017-2020, reaching (4.9%), (7.1%), (5.0%) and (5.05), respectively. The rate of increase in the parallel markets during 2022 has been the highest, as a result of reducing the amount of dollars offered by the Central, Bank of Iraq, according to the electronic platform adopted by the Central Bank to control dollar trafficking operations outside Iraq in addition to combating money laundering. The increase was by (17.4%) since the end of 2022 (Central Bank of Iraq, 2023).

The Third Section: The impact of oil price fluctuations on foreign reserves

Table (3) clarifies the economic effects of fluctuations in oil prices on the volume of foreign reserves.

Table (3) Oil prices and the volume of foreign reserves with the Central Bank of Iraq for the period (2012-2022) (billion dollars)

Year	Oil price \$	Foreign reserves	Change value	Percentage change
2012	109	70.325	9,642	15,8%
2013	105	77.186	6,861	9,7%
2014	96	64.896	12,290-	15,9%-
2015	49	52.188	12,708-	19,5%-
2016	40	43.697	8,491-	16,2%-
2017	52	46.218	2.521	5.8%
2018	69	54.621	8.403	18.1%
2019	64	66.386	11.765	21.5%
2020	41	55.493	10.893 -	16.4% -

2021	69	63.373	7.880	14.2%
2022	100	106.125	42.752 -	67.5 %

Source: Central Statistical Organization, Iraqi Ministry of Planning, Annual Statistical Bulletins for the period 2012-2022.

Figure (1) Oil prices and developments in the balance of foreign reserves in Iraq for the period (2012-2022)

Source: Central Bank of Iraq, Foreign Reserves Indicators, available on the Central Bank of Iraq website on the Internet, on 6/18/2023, www.cbi.iq

Table (3) and figure (1) show the increase in total. foreign reserves of Iraq during the period 2012-2013. They increased from (70,325) billion dollars to (77,186) billion dollars, supported by the increases in the quantities and prices of exporting Iraqi crude oil, which increased the foreign financial resources of the state and thus increased the volume of foreign reserves with the Central Bank of Iraq.

However, the decline in oil prices during 2014 left clear effects on the amount of foreign reserves, as it decreased from (77,186) billion dollars in 2013 to (64,896) billion dollars in 2014. The decline in the volume of foreign reserves continued until 2017. The remarkable improvement in oil prices since 2017 led to an increase in foreign reserves to witness a new phase of growth during the period 2017-2019, as they increased from (43.697) to (66.386) billion dollars, with an average increase rate of 13.7%. This is a relatively large percentage achieved thanks to the rise in oil prices from (\$40) to (\$64) per barrel during 2016-2019, with an increase of about 34.3%.

In 2020, the quantities of Iraqi foreign reserves witnessed a severe deterioration under the influence of the drop-in oil prices, which began at the end of 2019, as oil prices fell from (64\$) to (41\$) dollars per barrel in 2020, as a result of the spread of the Corona virus and the closure measures that it witnessed. The world attempted to prevent its spread among the population, total foreign exchange reserves from an amount of (66.386) billion dollars at the end of 2019 to an amount of (55.493) billion dollars at the end of 2020, as the amount of decrease amounted to about (11) billion dollars during a one-year period of falling oil prices since the end of 2019 (Central Bank of Iraq, 2023).

Based on the above, the volume of foreign reserves in Iraq is affected by the drop in oil prices, and this is normal if most of the public revenues during the research period are petroleum revenues in the light of the collapse of the productive structure of the manufacturing and agricultural sectors, due to the wars and challenges that Iraq went through during the past stages, in addition to the intense competition that national products face from foreign products, due to the absence of a customs system that works to protect national production, with the aim of increasing non-oil exports, and working to reduce the flow of the US dollars abroad due to the growth of foreign imports.

Results

Year	Oil prices \$	Central bank exchange rate	Parallel market exchange rate	The value of the rise in the parallel markets	Increase in the parallel markets
2012	109	1166	1200	34	2.9%
2013	105	1166	1232	66	5.6%

2014	96	1187	1214	27	2.2%
2015	49	1188	1247	59	4.9%
2016	40	1190	1275	85	7.1%
2017	52	1184	1250	60	5.0%
2018	69	1183	1223	27	2.16%
2019	64	1182	1195	28	2.28%
2020	41	1460	1500	40	2.7%
2021	69	1460	1500	40	2.7%
2022	100	1320	1550	230	17.4%

The study The results come to, which were as: follows:

1. International oil prices were subjected to a wave of sharp decline during the year 2020, due to the Corona virus and the consequent negative effects on international transport and production, then the price of a barrel of oil decreased from 64 dollars per barrel during 2019 to 41 dollars per barrel during 2020, a decrease of 33.8% In just one year.
2. The rise in the prices of the Iraqi dinar against the US dollar and a decline in the official and parallel rates, due to the drop in the oil price. The Central Bank of Iraq decided to raise the official exchange rate from (1182) in 2019 to (1460) in 2020. Exchange rates also increased in parallel markets during 2021, as a result of the decrease in the quantities of dollars offered by the Central Bank in implementation of the policies to combat currency trafficking and money laundering.
3. The volume of foreign reserves at the Central Bank of Iraq decreased, due to the drop in oil prices. Iraq’s total foreign exchange reserves decreased from (77,186) billion dollars at the end of 2013 to (46,218) billion dollars at the end of 2017. The amount of decline was about (18) billion dollars during a period of (4) years of falling oil prices since the second half of 2014.
4. There was a clear increase in the Iraqi foreign reserves during 2021-2022, as they reached about (100) billion dollars a year by the end of 2022, , in addition to policy Central Bank Iraq in raising exchange rates and confronting operations of currency trafficking and money laundering.
5. There was a decrease in foreign reserves during 2020, as a result of the drop-in oil prices due to the spread of the Corona virus, the closure procedures and the curfew around the world. So, the reserves decreased from (66.386) billion dollars at the end of 2019 to (55.493) billion dollars at the end of 2020 by (10.893) billion dollars in just one year.

Recommendations

Based on the findings, this study suggests adopting a set of recommendations, as follows:

a. Reforming the monetary policy of the Central Bank of Iraq by:

1. Working to liberalize exchange rates gradually through preparing the necessary plans, legislation and procedures to ensure the liberalization of foreign exchange rates, due to the exorbitant costs caused by the processes of determining the exchange rates of the Iraqi. dinar against foreign currencies, which the public treasury bears by sacrificing and wasting large amounts from foreign currency.

2. Paying attention to the market mechanism to determine As a result of the dinar exchange rate, the fixed exchange rate policy approved by the Central Bank was canceled, leaving a supply and demand mechanism, with the possibility of influencing prices in cases of extreme necessity by increasing the quantities supplied from the dollar.
3. Working to prevent the trafficking of the US dollar outside Iraq by adopting strict instructions that determine the quantities of dollar in proportion to the volume of imports of necessary commodities only, and hence controlling dollar leakage and trafficking operations outside Iraq.
4. Reforming the Iraqi banking system by developing and implementing a national strategy to improve banking work, and dissemination of banking culture among the public, with the aim of encouraging savings, and activating the role of banks in financing investment projects in all economic sectors.

b. Working to establish a solid national monetary reserve fund by:

1. Providing cash surpluses from the state's general budget during periods of improvement in oil prices, and depositing them in the National Reserve Fund, in order to be used during periods of low oil prices.
2. Establishing a council of financial experts (international and national) to consider the possibilities and opportunities for investing the balances of the National Cash Reserve Fund in short and medium-term investments locally and internationally, with the possibility of recovering them to face periods of low oil prices.
3. Working to diversify the balances of the National Reserve Fund by investing them in various investment and financial portfolios, and emphasizing investment in reliable international institutions and companies, with the aim of achieving stable financial returns that increase the balances of this fund and its importance and economic returns for the national economy.

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