

The effects of dollar exchange rate changes on the feasibility of projects in the Iraqi economy

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Abstract: This research aims to know the change effect of dollar exchange rates on the Iraqi economy and its sectors and the feasibility of projects. It clarifies the problem of research in the extent to which the global economy and economic sectors in Iraq are affected by changes in dollar exchange rates, and whether these changes in the short term have negative effects or not. Will it affect the estimates made by consultants in calculating the feasibility of projects?

The research time period was determined during the period between the years (2018-2022) due to what it witnessed from two global crises. The result of was the change in dollar exchange rates, which left an impact on the Iraqi economy. The research uses the descriptive and analytical approaches, through the analysis of statistical, financial and economic data during the research period, in order to obtain the results and analyze them economically.

The study showed a clear impact as a result of the change in dollar exchange rates on the Iraqi economy during the short term. Also, there are many problems with the Iraqi system followed and must be repaired, and reformed in all sectors, including the sector of trade, transport, industry, health and medical sectors. There should be an appropriate study before taking any step towards changing the exchange rates of the dollar, whether rising or falling, especially in rentier countries, including Iraq

Keywords: Dollar exchange rates, Project feasibility

Introduction:

The exchange rate is one of the most important tools of monetary policy aimed at achieving growth and comprehensive economic stability, by directing exchange rates towards achieving the stability of the general level of prices. It encourages the establishment and success of productive investments that create jobs, reduce unemployment rates and poverty rates, improve the performance of the trade balance and reduce external indebtedness.

The Central Bank of Iraq adopts a monetary policy based on intervention to determine the exchange rates of the dinar against the dollar, which is called the currency selling window of the Central Bank of Iraq. The Central Bank sells the US dollar according to specific prices on a daily basis, with the aim of affecting the forces of supply and demand between the dollar and the dinar. It thus achieves planned exchange rates and reducing the gap between the official exchange rate and the parallel exchange rate. The currency selling window also enables the Central Bank of Iraq to maintain the stability and stability of the exchange rates of

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the Iraqi dinar against the dollar on a relatively continuous basis according to the conditions that prevail due to the speed of Iraq's vulnerability to external and internal conditions because it is a rentier country. The Central Bank decided to reduce the exchange rate of the dinar as a result of the decline in oil prices since 2019, with the aim of facing the decline in public revenues. So, a large budget deficit emerged as a result of the decline in oil prices caused by the spread of the Corona pandemic through the world. The decision to reduce the exchange rate was a way to reduce the real costs of public expenditures, by reducing the value of the national currency. In other words, it enables the government to obtain a larger volume of revenues achieved from the sale of dollars in the currency auction, Iraq witnessed internal and external pressures and shocks during the research period that led to a change in dollar exchange rates worldwide in general and Iraqi in particular. This showed many problems in the entire Iraqi state system, including the system (economic, political, social, financial) that must be addressed and medium and long-term solutions developed.

The importance of research:

The research derives its importance from its study of the subject of changing dollar exchange rates and their impact on some economic sectors in Iraq. In addition, it studies the reasons that led to the change in dollar exchange rates worldwide in general, and Iraq in particular by the Central Bank. It examines the chronic problems in the Iraqi economy, including unemployment, inflation, budget deficit, health and high consumer prices. It tries to find solutions through which the exchange rate tool can be directed to ensure the achievement of development and economic stability in Iraq.

Search problem:

The research problem is concentrated as follows:

- 1- To what extent are the economic sectors in Iraq in general **affected by changes in dollar exchange rates** and the feasibility of projects?
- 2- Was the change in dollar exchange rates a positive or negative impact on the Iraqi economy and the feasibility of projects during the short period, especially during the exposure of successive shocks during the research period?

Research Objectives:

The research aims to achieve the following objectives:

1. Determining the reasons for the decision to change the exchange rates of the dollar at the local level in Iraq during the research period.
2. Analyzing the impact of changing dollar exchange rates on the economic sectors in Iraq and the feasibility of projects.
3. Knowing the pros and cons of changing the dollar exchange rate on some economic sectors in Iraq, including (trade, transportation, industry, health and medical sectors).
4. Proposing possible and urgent solutions introducing them to the Iraqi state to reduce the negative effects of the decision to reduce the exchange rate of the dinar against the dollar, as well as developing solutions to reduce the impact of internal and external shocks on the Iraqi economy in the medium and long term.

Research hypothesis:

The research is based on the hypothesis that the change in dollar exchange rates during the research period leaves various negative effects on the Iraqi economy and feasibility studies for projects. In particular, this change was the result of the global crisis (low global oil prices, and the emergence of the Corona pandemic). Also, there is an impact on economic variables, the most important of which are inflation, high unemployment rates, budget deficit, index and consumer prices resulting from the change in dollar exchange rates.

Research Methodology:

The research used the descriptive and analytical approaches, through the analysis of statistical, financial and economic data during the research period, in order to obtain the results and analyze them economically.

Data sources:

The research is based on statistical data and official financial and economic indicators issued by the Iraqi Ministry of Oil, the Central Bank of Iraq, and the Iraqi ministries (Finance and Planning, Health). In addition, the data is issued by OPEC and websites and international organizations in addition to books, magazines, research and websites.

Time limits of the research:

This research deals with the time period (2018-2022), due to the importance of this period in determining the impact of the change in the exchange rate of the dollar towards the Iraqi dinar and its impact on the economic sectors in Iraq. These years witnessed changes with a significant impact on the Iraqi economy, namely the improvement of oil prices during 2018, as well as the exposure of the Iraqi economy to two double crises. One is internal, which is the decline in the exchange rate of the dinar against the dollar, while the external. The decline in oil prices during the years 2019-2020 and the emergence of the Covid-19 pandemic at the beginning of 2020 were also contributors.

Research Structure:

The research was divided into five axes, the first part dealt with scientific methodology, the second part to study the impact of dollar exchange rates on the Iraqi economy in general during the research period. The fourth part was devoted to studying the impact of dollar exchange rates on some sectors of the Iraqi economy (trade, transport, industry, health and medical) during the research period. The fourth part included conclusions and recommendations.

The impact of dollar exchange rates on the Iraqi economy

First: The concept of the exchange rate, its types and the factors affecting it:

1- The concept of the exchange rate: axis It is also defined as: the value of a currency in foreign currencies, which is determined by the interaction of supply and demand for it in the exchange market (Adnan & Amin, 2010).

2- Types of exchange rate: (Ali, 2022; Hassan & Ayoub, 2021)

A - Nominal exchange rate: it is defined as the price of a foreign currency in terms of local currency units, and the nominal exchange rate indicates the current currency rate, which does not take into account its apparent strength of goods and services between the two countries. It is the nominal exchange rate of a currency is determined according to the demand and supply in the exchange market at a certain moment in time, and the nominal exchange rate changes daily, either a deterioration or an improvement. The nominal exchange rate is divided into an official exchange rate and a parallel exchange rate, which is the rate applicable in parallel markets.

B- Real exchange rate: The real exchange rate expresses the competitiveness of national products, as it shows the number of units of foreign products needed to see one unit of local goods, and the closer the real exchange rate to the nominal exchange rate, the lower the inflation rate. It also benefits economic operators in making their decisions.

E- Equilibrium exchange rate: It is the exchange rate consistent with the macroeconomic balance, that is, the equilibrium exchange rate is that price determined by the strength of supply and demand when the exact equality occurs between the required quantity and the quantity offered of one of the currencies regardless of the impact of speculation and unusual capital movements. Thus, we find that the equilibrium exchange rate is like the equilibrium price for any commodity traded in the free markets in the case of complete competition, and this price is synchronized with the balance in Balance of payments.

3- Factors affecting the exchange rate:

One of the most prominent factors that affect the exchange rate are those factors that directly affect supply and demand, and therefore these factors can be summarized as follows: (Al-Ghalbi, 2011, 61-76), (Qadi, 2003, 136-137)

1- **Relative inflation rates:** The inflation rate is an important and influential factor in the exchange rate. Since any country is exposed to inflation, its exports to the other country will decrease and thus the demand for its currency will decrease, and this demand must increase its imports (due to the inflation conditions it suffers from). Thus, the supply will increase on its currency, in other words, an increase in the supply of the currency against less demand for it, which causes a decrease in the value of the balance.

2- **Relative interest rates :** The interest rate affects exchange rates by attracting foreign capital, for example, raising the interest rate of a country by (8%) compared to a second country with an interest rate (5%). It transfers the capital from the second country to the first country and increasing the demand for the currency of the second country until it becomes useless to buy it when its price rises

equivalent to the interest rate difference between the two countries of 3% and thus reaches the equilibrium exchange rate .

- 3- **The relationship between payments and receipts of the balance of payments:** The foreign exchange rate rises as a result of the increase in the supply of foreign currency and the need in return to increase the demand for the supply of the national currency due to the increase in the export of goods, services and foreign investments.
- 4- **Money supply:** The increase in the domestic money supply aims to finance the growing government deficit, which leads to an increase in the amount of money in circulation and thus an increase in the value of goods and services. It increases the level of local prices and pushes the value of the local currency to decrease.
- 5- **Income levels:** The increase in income in a country will reflect its impact on the demand for foreign goods and goods. This increases the supply of the currency of that country due to the increase in imports of foreign goods and thus will lead to a decrease in the balanced exchange rate of that country.
- 6- **Government budget deficit and fiscal policy:** Fiscal policy tends to generate differentiated effects on the exchange rate, if the government takes a more restrictive fiscal policy to achieve a budget surplus or at least reduce the existing deficit. It will work to reduce aggregate demand, decrease economic activity and lower the inflation rate, which results in a decrease in imports and increased exports, and the current account tends to achieve a surplus in the trade balance that raises the value of its currency in the exchange markets and reduces the foreign exchange rate.

Second: The impact of dollar exchange rates on the Iraqi economy and the feasibility of projects:

The Iraqi economy is a rentier economy, as it depends on the export of oil significantly in order to obtain public revenues that it uses to finance the general budget, and that the Iraqi economy is affected by external changes, especially oil prices as a rentier economy, while the internal variables that affect the economy are numerous, including political, financial, religious and social.

A- Dollar exchange rates on the Iraqi economy before the global crisis represented by (Corona crisis, and the decline in global oil prices):

The exchange rates and the Iraqi economy in 2019 were stable for several reasons, including:

- 1- After getting rid of the effects of the two shocks: the decline in international oil prices and the entry of ISIS.
- 2- The return of high international oil prices, increase government revenues, and improve the economic and security conditions in Iraq.
- 3- Also, due to the decrease in new loans and rescheduling loans, the internal debt decreased to (43.954) billion dinars while the external debt reached (30) billion dollars.

B- The impact of dollar exchange rates on the Iraqi economy during the global crisis (Corona crisis, and the decline in global oil prices) and after:

At the beginning of 2020, the global economy was exposed to a global crisis represented by (the Corona crisis, and the decline in global oil prices), while the Iraqi economy was affected by it and turned into a triple crisis (financial, political, health), which led to the turmoil of the financial situation, especially after the decline in global oil prices. It is the only resource for the federal budget, as well as the planned deficit that the budget suffers from. The internal debt rose again to reach (66.255) billion dinars, while the external debt rose to (30.605) billion dollars at the end of 2020 (Geek & Muhammad, 2020).

In light of the increasing spending in the face of the health crisis represented by the outbreak of the Corona pandemic and the decline in oil revenues. It caused a deficit in the public budget, which prompted the government to borrow internally in order to cover basic expenses, which prompted the Central Bank to submit a statement on December 19, 2020, in order to adjust the exchange rate, in addition to financing the budget deficit by reducing the exchange rate. Also, this measure will provide sufficient financial resources to allow to cover part of the deficit, allow the payment of basic spending requirements, ensure the flow of salary payment, and maintain foreign reserves, the Central Bank decided to change the exchange rate of foreign currency as follows: (1450 dinars = 1 dollars). Yet, the price of buying foreign currency from the Ministry of Finance (460 dinars = 1 dollar), the selling price of foreign currency to banks (1470 dinars = 1 dollar) and the price of selling foreign currency to the public. (Central Bank, 2020)

Exchange rates in the local exchange markets in Iraq witnessed a rapid and noticeable increase after the leak of the initial draft of the 2021 budget, and the adoption of the new exchange rate by the Ministry of Finance. The increase was to cover the deficit between expenditures and revenues, and as a result of the decline in oil prices and the financial pressures that faced the Iraqi government in 2020. This matter prompted the Central Bank in consultation with the Ministry of Finance to raise the exchange rate of the Iraqi dinar in the 2021 budget, from (1196 dinars = 1 dollar), (1450 dinars = 1 dollar). It aims at maximizing the financial revenues derived from the export of Iraqi oil, which was estimated at (10 trillion Iraqi dinars) and maintaining the foreign reserves with the Central Bank (Al-Tohme, 29/3/2021).

In the opposite direction, we see that there are reasons why the devaluation of the Iraqi dinar is not suitable in order to finance the budget deficit (Tohme, 2021):

1- Double the rate of government revenues derived from this decision, which was estimated at about (8 trillion dinars annually), compared to the economic and social costs left by this decision by reducing the value of the real incomes of employees, in addition to generating pessimistic expectations on the investment and consumption side, and then the decrease in the rate of aggregate demand.

2- As a result of the lack of an efficient production apparatus and the country's dependence on imports in the provision of basic commodities, it will generate inflationary pressures and high prices for imported products, and this matter will affect the owners of limited income, as a result of the lack of price control in the local markets.

4- The decision to devalue the Iraqi dinar in this period is unnecessary, in order to raise the capacity of local production, and support it by reducing the exchange rate of the dinar, as a result of the lack of a flexible production apparatus, and local goods capable of competing in foreign markets.

5- There are some goods that are produced locally, in need of spare parts and secondary supplies. These are imported from abroad in foreign currency and increase the cost of production and lower returns for the investor.

Some of the impact of dollar exchange rates on the Iraqi economy before, during and after the crisis can be clarified, as in the following tables:

Table 1: Average exchange rates of the Iraqi dinar against the US dollar for the period (2018-2022)

Percentage increase in parallel markets	The amount of rise in the parallel markets	Parallel Markets Exchange Rate	Central Bank Exchange Rate	Years
1.5%	19	1209	1190	2018
% 0,5	6	1196	1190	2019
3.6%	44	1234	1190	2020
2.5%	30	1490	1460	2021
2,4%	29	1485	1460	2022

(Central Bank of Iraq, 2020)

* The rate of increase in the exchange rate of the dollar against the dinar was extracted through the following equation: the percentage of change in the new rate = $\frac{\text{the exchange rate of the new dollar} - \text{the exchange rate of the old dollar}}{\text{the exchange rate of the old dollar}} \times 100 = \frac{1460 - 1190}{1190} \times 100 = 22.6\%$, which is the percentage change in the new price.

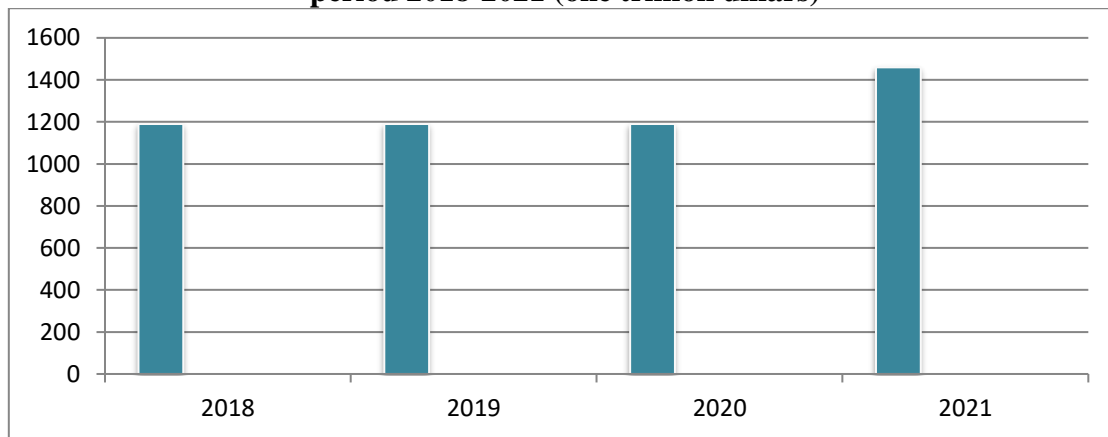
Table 2: The relationship between public revenues and the exchange rate of the dinar during the period 2018-2021 (one trillion dinars)

% Change	Change	Total public revenues	Dinar exchange rate	Years
37,9	29,3	106,6	1190	2018

0,93	1,00	106,7	1190	2019
41,2-	44,4-	63,2	1190	2020
60,2	38,1	101,3	1460	2021

(The Central Bank of Iraq, 2021)

Figure 1: The relationship between public revenues and the exchange rate of the dinar during the period 2018-2021 (one trillion dinars)



Exchange prices

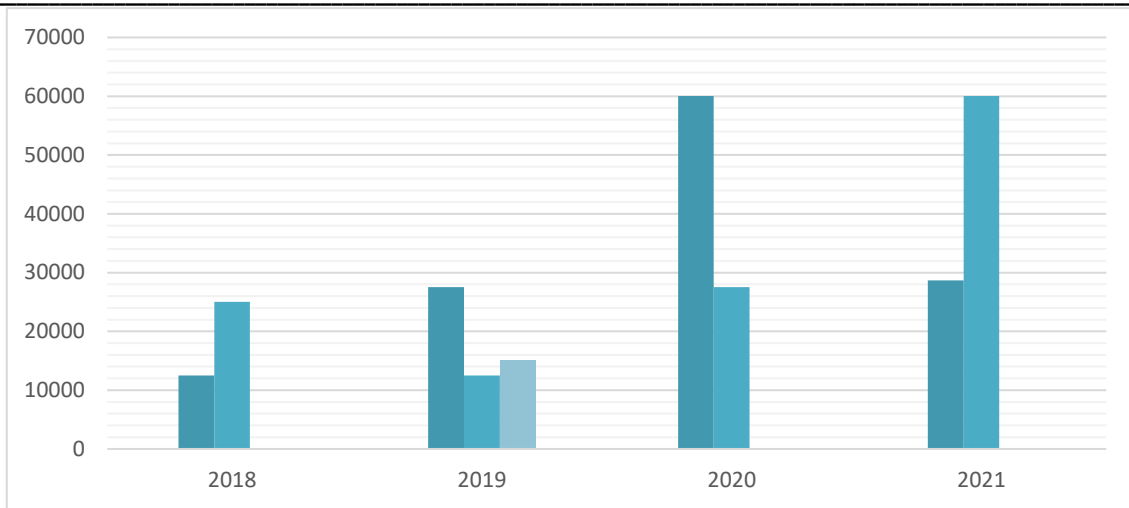
(The Central Bank of Iraq, 2021)

Table (3): Dinar exchange rates and the size of the public budget deficit in Iraq for the period (2018-2021) (one trillion dinars)

Percentage change in disability	Change	Previous budget deficit	Current budget deficit	Exchange rate of the dollar against the dinar	Years
%49,9-	- 12,505 - 12,505	25,019	12,514	\$1=1190	2018
%20,1	15,032	12,514	27,537	\$1=1190	2019
% 117,9	32, 480	27,537	60,017	\$1=1190	2020
%52,2-	- 31,345	60,017	28,672	\$1=1460	2021

(Federal Budget Laws, 2021)

Figure 2: Dinar exchange rates and the size of the public budget deficit in Iraq for the period (2018-2021) (one trillion dinars)



Exchange prices
 (Federal Budget Laws, 2021)

Table 4: The relationship between the exchange rate of the dinar and unemployment in Iraq during the period 2018-2021

Percentage change in unemployment rate (%)	Overall unemployment rate (%)	Exchange rate of the dollar against the dinar	Years
-	12,87	\$1=1190	2018
0,8	12,76	\$1=1190	2019
7,6	12,74	\$1=1190	2020
22,9	16,00	\$1=1460	2021

(World Bank Group data, 2023)

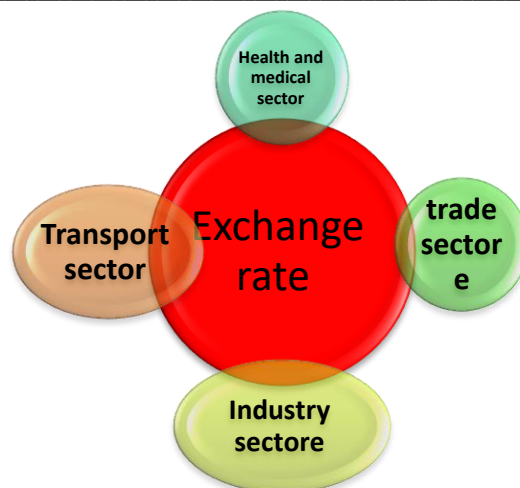
Table 5: Developments in the Consumer Price Index in Iraq during the period 2018-2021 Base year (2012)

Percentage change	Change	CPI	Years
-0,3%	0,4	104,7	2018
-0,1%	0,2-	104,5	2019
0.5%	0,6	105,1	2020
%7,3	7,6	*112,7	2021

(Central Bureau of Statistics, 2021)

The impact of dollar exchange rates on the sectors of the Iraqi economy

Figure (3) The impact of dollar exchange rates on the sectors of the Iraqi economy prepared by the researcher



First: **The** impact of dollar exchange rates on the Iraqi trade and transport sectors:

The impact of exchange rates on the commercial and transport sectors can be known by knowing the change in the values of imports and exports.

A- Imports: (Annual Imports Report, 2020: 3-4)

1. Commodity imports (non-oil): - The total imports for the year 2020 of non-oil commodity materials amounted to (13.8) billion dollars. It is equivalent to (16.5) trillion Iraqi dinars, recording a percentage of (23.2%), while in 2019, it amounted to (18.1) billion dollars, equivalent to (21.5) trillion Iraqi dinars, at the current exchange rate of the customs declaration by (-36.1%) in 2018.

2. Oil imports: - The total imports for the year 2020 of petroleum products amounted to (1.6) billion dollars, equivalent to (1.9) trillion Iraqi dinars, by (43.3%), while in 2019, it amounted to (2.8) billion dollars, equivalent to (3.3) trillion Iraqi dinars, by (-25.2%) in 2018.

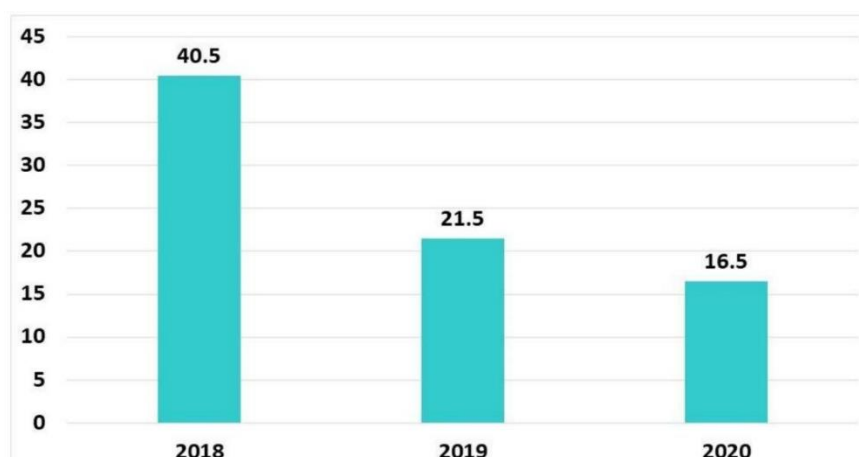
Imports by route and border crossings:

A- Land Road: The total imports of goods (non-oil) according to land border crossings amounted to (2.8) billion dollars, equivalent to (3.4) trillion Iraqi dinars, recording a percentage of (35.3%), while in 2019, it amounted to (4.4) billion dollars, equivalent to (5.2) trillion Iraqi dinars, constituting (20.4%) of the total commodity imports (non-oil) for the year 2020.

B- Sea Route: The total imports of goods (non-oil) according to the maritime border crossings amounted to (10.4) billion dollars, equivalent to (12.4) trillion Iraqi dinars, recording a percentage of (19.3%) in 2019, where it amounted to (13) billion dollars, or (15.4) trillion Iraqi dinars, constituting (75.3%) of the total commodity imports (non-oil) for the year 2020.

E- Air route: The total imports of goods (non-oil) according to air border crossings amounted to (0.6) billion dollars, equivalent to (0.7) trillion Iraqi dinars, recording a percentage of (18.9%) As for 2019, it amounted to (0.7) billion dollars, equivalent to (0.9) trillion Iraqi dinars, constituting (4.3%) of the total commodity imports (non-points) for the year 2020.

Figure (4) Commodity imports (non-oil) during the years 2018-2020 Value (trillion Iraqi dinars)

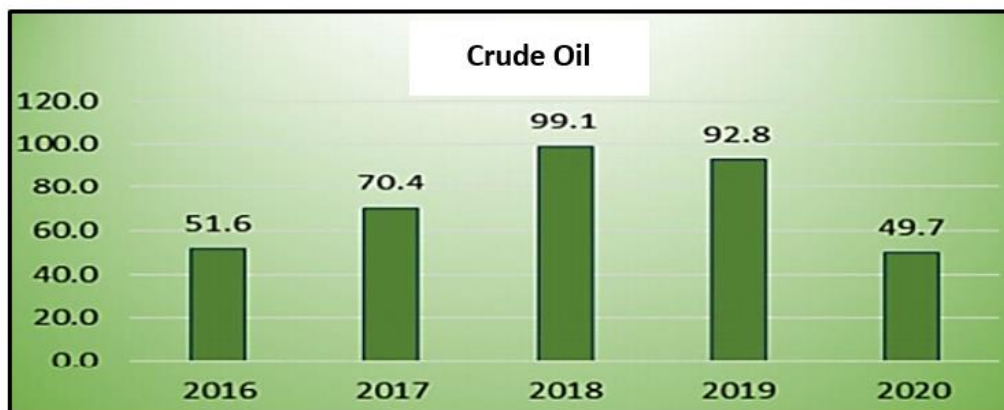


(Central Bureau of Statistics, 2020)

B- Total exports: The total exports of crude oil, petroleum products and commodity materials amounted to (57.1) trillion dinars for the year 2020, equivalent to about (47.9) billion US dollars, with a decrease of (41.8) from the year 2019, where it reached (98.2) trillion dinars, equivalent to (83.1) billion US dollars, and a compound growth rate (2.5%) from the year 2016.

1. Crude oil exports: The value of crude oil exports reached (49.7) trillion dinars for the year 2020, equivalent to (41.8) billion dollars, with a decrease of (46.5%) from 2019, reaching (92.8) trillion dinars, equivalent to (78.5) billion dollars, and a compound growth rate of (-0.9%) from 2016.

Figure (5) Value of crude oil exports for the years 2016-2020



(Central Bureau of Statistics, 2021)

From the above that in the trade and transport sectors, it seems that there is a clear impact and weakness during the previous years due to successive shocks before and after 2003.

Positive aspects of the changes in dollar exchange rates on the Iraqi trade and transport sectors:

- A- There has been an improvement in the economy for some years, including (2010-2013) due to the rise in international oil prices, which increased the exports of crude oil and its derivatives, which led to an improvement in the revenues of the Iraqi state and the stability of exchange rates from the years and the period (2016-2019) due to the return of the security and economic situation to improvement and the stability of the exchange rate.
- B- The decision to raise the value of the dollar against the dinar (devaluation of the dinar against the dollar) came with an important result. It is to reduce to the least possible amount of foreign currency smuggling operations abroad or carry out fake import operations taking advantage of the low price of the dollar in the Iraqi currency, after the decision to raise the exchange rate decreased the sales of the Central Bank of Iraq of foreign currency from an average of 200 million dollars per day to close to zero.

The negative side of the changes in dollar exchange rates on the Iraqi trade and transport sectors:

- A- As for the shocks to which Iraq was exposed, for example, political and economic shocks, which affected the exchange rate during (2014-2016) due to the ISIS war and the social, economic and political effects it left behind.
- B- Oil price fluctuations and the COVID-19 pandemic have amplified Iraq's economic problems, reflecting two years of steady recovery, and these twin shocks have deepened existing economic and social fragility and added new justifications to the pre-pandemic popular discontent.
- E- Since the Iraqi economy is a monolithic economy in production depends on the export of oil, the devaluation of the exchange rate of the local currency does not contribute to increasing the export of oil, since the latter is determined by its prices in the global market with a single price system.

H- The high cost of foreign government transactions with regard to imports, and the payment of the value of financial obligations to the world, since the government here needs larger amounts of dinars in order to obtain dollars to carry out the settlement process.

Second: The impact of dollar exchange rates on the Iraqi industrial sector:

The Iraqi industry has been subjected to many shocks during the previous and current years, including the disruption of many agricultural, industrial and commercial projects. It also includes the destruction of infrastructure in Iraq during the repeated wars before and after 2003, an increase in imports of necessary and non-essential goods, the discouragement of national products and sufficiency instead of importing the same commodity and resources from abroad at high prices, and the export of some raw materials at low prices. Also, investment expenses in the budget, especially at the time of exposure to crises, the latest of which is a crisis decreased. The double global (external) crisis guarantees both the (Covid-19) pandemic and the decline in global oil prices, either the internal crisis is the change of the exchange rate in an ill-considered way or in a thoughtful way, but at an inappropriate time that has serious effects on the economy. This is as if the gap between the official exchange rate and the parallel exchange rate widens and the parallel exchange rate will not reflect the prices of local commodity prices.

A- Pros of the rate of change in the exchange rate of the dollar on the industrial sector: Exports of national (local) products and goods increased due to the low prices of these products and commodities in the eyes of foreigners.

B- Cons of the rate change in the exchange rate of the dollar on the industrial sector:

- 1- The decline in oil revenues due to the decline in prices and exported quantities as a result of the recession in the global economy during 2020, has once again led to an increase in the gap between the official exchange rate and the parallel rate, which exceeded its normal rates in mid-December 2020. It reached the limits of (1300) under the pressure of the conditions generated by the financial crisis witnessed by the Iraqi economy this year and the increasing role played by unreal demand factors and speculation in the currency market, and expectations. The market devaluation of the dinar as a measure to finance the deficit generated concern among the holders of the dinar towards buying the dollar. Under these circumstances the currency market needs reassurance and calm by the monetary authority to absorb the factors of concern and enhance confidence in the Iraqi dinar and return the parallel exchange rate to its normal rates(Al-Khayyat, 2020).
- 2- Projects (small, medium, large) existing or in one of the stages of completion bear additional costs due to being affected by exchange rate changes, including high storage costs and contractual obligations and thus the high cost of completing projects.
- 3- Lack of support or protection of national products.
- 4- As a result of the lack of an efficient production apparatus and the country's dependence on imports in the provision of basic commodities, it will generate inflationary pressures and high prices for imported products. This matter will affect low-income people, as a result of the lack of price control in the local markets.
- 5- In 2020, budget revenues fell by more than 9 percentage points to 32 percent of GDP, with a sharp contraction in oil revenues. To deal with the situation, the Iraqi government reduced non-binding expenditures, including reducing public investments by 87 percent and rescheduling part of the domestic debt(Al-Ani, 2021).

Third: The impact of changing dollar exchange rates on the health and medical sectors:

In many respects, public health in Iraq is witnessing an old crisis whose consequences are unfolding today. Decades of conflict, coupled with international sanctions and poor attention to the health sector, have severely damaged the healthcare system, creating an environment that has driven many qualified doctors and other medical professionals to leave the country(Zarocostas, 2007).

The neglect of the health sector for a long time also led to the weakness of the public health system in Iraq, which had a clear negative impact on the health infrastructure of the country. The health centers suffer from a chronic shortage of medical supplies and resources, the number of health workers and health centers is very small and does not keep pace with the population increase. There is a shortage of medical supplies and mismanagement of human resources, and waiting lists in public hospitals are very long, and

patients prefer the private sector to them. These problems posed the challenges of the Iraqi health sector in the face of COVID-19.

A- Pros of the rate change in the dollar exchange rate on the health and medical sectors:

It benefits the revival of all sectors and the re-operation and encouragement of laboratories and pharmaceutical factories and production and to improve its quality and provide it to the local and foreign citizens.

B- Cons by the rate of change in the dollar exchange rate on health and medical:

- 1- One year after the World Health Organization declared COVID-19 a global pandemic, Iraq's health sector is still unable to adequately address the crisis. Corruption and socio-economic neglect have made the country and its health system ill-prepared for the pandemic.
- 2- Iraq spends less on health than many of its neighbors, with the country's annual budget in 2019 amounting to about 133 trillion Iraqi dinars, of which only six trillion (4.5%) was spent on health and the environment(Budget Law, 2019).
- 3- Government medical care services are inexpensive for Iraqis, but their quality is so substandard that many turn to the private sector (if they have the financial means), or many Iraqis seek medical care in other countries, such as India, Iran, Jordan, Lebanon and Turkey.
- 4- The lack of private health insurance causes the average Iraqi to pay out of pocket about 70 percent of their personal health expenses, making the cost of quality health care high for most people(Alwan, 2019).
- 5- In March 2020, the Iraqi government launched the COVID-19 "crisis cell" to prepare and implement preparedness measures that included a comprehensive curfew, the closure of schools and universities, the suspension of international air travel, and financial and security support for Ministry of Health's purchases from Necessary medical supplies(The Government of Iraq, 2020).
- 6- The World Health Organization (WHO) has warned of a significant shortage of personal protective equipment (PPE) in Iraq and stated that this shortage puts frontline workers at risk and will become a major factor in the further spread of the virus in the country(World Health Organization, 2020).
- 7- There was a rapid response of donors and UN agencies to donate personal protective equipment and establish new COVID-19 laboratories(UNDP, 2020).
- 8- By late March 2021, after another significant increase in infections, the number of Iraqis infected with the virus exceeded 3,844,000, of whom more than 4.14,200 died and the number of infections is about 22 per 1,000 inhabitants, a rate that makes Iraq one of the most affected countries in the Middle East(Reuters, 2020).
- 9- At the beginning of the pandemic, people who tested positive were isolated in medical facilities that in many cases lacked essential medical supplies.

Conclusions and recommendations

Conclusions: -

- 1- The reasons for the change in dollar exchange rates globally are the decline in global oil prices in 2019 and then the emergence of the Covid-19 pandemic at the beginning of 2020, which led to negative effects globally, which is a global economic recession.
- 2- The State of Iraq is one of the rentier countries that depend on the export of one of the commodities to a large extent, which is the export of oil in order to obtain public revenues, which are included in the state budget.
- 3- The reasons for the change in the exchange rates of the dollar in Iraq by the Central Bank of Iraq, as a result of the two shocks, one of which is internal, represented by the budget deficit and the emergence of many problems. In addition to that, Iraq is a rentier country, while the external shock is the decline in global oil prices and the emergence of the Covid-19 virus.
- 4- The change in exchange rates of the dollar globally with this crisis led to the emergence of all the problems in the system followed in Iraq and its fragility, whether the political, economic, financial and health aspects that have not been addressed during the previous years.

- 5- The Iraqi government has done using the exchange rate in order to correct some problems has negatively affected the Iraqi economy, including its negative impact on the low-income classes, the rise in the prices of local goods and the reduction of investment expenses.
- 6- The shock to which the Iraqi state was exposed showed many problems in the health sector, including the lack of a health system, cadres and medical supplies, and despite the efforts made during the crisis, the number of injuries continued to rise exponentially throughout the country within months. Also, the majority of the population did not follow the guidelines for wearing masks in public places and adhering to social distancing.
- 7- The change in dollar exchange rates by the Central Bank of Iraq at an unstudied time and in light of a rentier country such as Iraq leads to many problems, including high inflation rates, high rates of unemployment, poverty, budget deficit and other economic variables, in light of dependence on foreign imports of necessary goods and foodstuffs. Because of the weakness and many problems in all Iraqi economic sectors, the change in dollar exchange rates led to the collapse of sectors in it, which exposed The Iraqi economy is at great risk during the research period.

Recommendations: -

- 1- There should be a study by specialists to identify all economic capabilities before taking any step towards changing the exchange rate of the Iraqi dinar against the US dollar.
- 2- The commercial and transport sector must be revitalized. Iraq's strategic location must be taken advantage of, and revenues must be obtained that help reduce the deficit and poverty in Iraq.
- 3- The industrial and agricultural sector must be revitalized to the maximum extent possible because of Iraq's primary resources, fertile lands and factors that help in the success of projects, whether industrial or agricultural, and achieve financial savings and reduce the level of unemployment in Iraq.
- 4- Reforming and addressing the problems of the political, financial, administrative and economic system in Iraq in order to achieve relative stability in all respects, even relatively in the short term and permanent stability in the medium and long term are required. This will lead to getting rid of or reducing the effects of internal and external shocks on the Iraqi state.
- 5- Reforming the health and medical system in Iraq, providing equipment, devices and medical cadres with professionalism and good experience It is recommended to build laboratories and hospitals in order to achieve a good level of health care for the Iraqi citizen instead of the Iraqi citizen going abroad for treatment at reasonable prices, as well as providing good revenues for the state.
- 6- Making the decision to change the exchange rate of the dollar correctly and after studying the economic situation results in positive effects on the proportion of society and all sectors in the Iraqi economy.
- 7- The investment expenditures in the Iraqi budget law must be increased and used correctly, which leads to an increase in the production of goods and products whose price is cheap in Iraq and of medium quality or on it. It provides them to citizens at reasonable prices and export the surplus abroad and benefit from their revenues in order to improve their quality or open new production lines and factories and get rid of dependence from external influences, including imported goods with high costs and poor quality.
- 8- Improving the security and economic situation encourages investment and studying any decision aimed at improving the economy or solving one or all of its problems in order to achieve the best results and with the least losses

References

1. Adnan, H., & Amin, Z. (2010). *International Economy* (1 ed.). Ithra for Publishing and Distribution.
2. Al-Ani, T. M. (2021). Capture of Reform and Management of Economic Fluctuations in Iraq. *Al-Arab International Newspaper(Asharq Al-Awsat)*.
3. Al-Khayyat, A. H. (2020). The Problem of Exchange Rate Management in Light of the Financial Economic Reality in Iraq", Center for Strategic Studies, University of Karbala.
4. Ali, Z. T. (2022). The Impact of Exchange Rate Fluctuations on Some Economic Variables Iraq for the Period (2005-2020). *Journal of Business Economics*, 2(1).
5. Alwan, A. (2019). The Health Situation in Iraq - Challenges and Priorities," Ministry of Health and Environment.
6. Budget Law. (2019).

7. Central Bank of Iraq. (2020). Statement issued by the Central Bank of Iraq on the adjustment of the exchange rate. https://cbi.iq/currency_auction
8. Central Bureau of Statistics. (2021). Iraqi Ministry of Planning, annual reports on consumer price indices for the years 2018-2021. .
9. Central Bureau of Statistics, D. o. S. (2020). Annual Import Report.
10. Federal Budget Laws. (2021). Federal Budget Laws of the Federal Republic of Iraq for the years (2007-2021). *Iraqi Gazette*.
11. Geek, H. A., & Muhammad, B. Q. (2020). "Iraqi Dinar: 1200 dinars / dollar". Iraqi Economists Network. <http://iraqieconomists.net/ar>
12. Hassan, A. A. A., & Ayoub, A. F. E.-D. (2021). The Impact of Some Monetary Policy Variables on Inflation. *Tikrit Journal of Administrative and Economic Sciences*, 17(56).
13. Reuters. (2020). Healthcare in Iraq has declined significantly <https://www.reuters.com/investigates/special-report/Iraq>
14. The Central Bank of Iraq. (2021). A set of economic reports of the Central Bank of Iraq for the years 2018-2020 and the General Budget Law of the Federal Republic of Iraq for the year 2021. .
15. The Government of Iraq. (2020). The Crisis Cell extends the curfew in Iraq and announces a series of additional measures to limit the spread of the Corona virus. <https://gds.gov.iq/iraqs-crisis-cell-extends-curfew>
16. Tohme, H. H. A. (2021). The Iraqi Economy - From a Financing Crisis to an Exchange Rate Crisis Article, Euphrates Center, Karbala.
17. [Record #277 is using a reference type undefined in this output style.]
18. World Bank Group data. (2023). Unemployment, total (% of total labor force) (modeled ILO estimate) - Iraq. <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS?locations=IQ>
19. World Health Organization. (2020). Shortage of personal protective equipment threatens health workers worldwide. <https://www.who.int/news/item/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers>
20. Zarocostas, J. (2007). Exodus of medical staff strains Iraq's health facilities. *BMJ: British Medical Journal*, 334(7599), 865.