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ABSTRACT

This study aims to analyze the development of the parallel exchange rate and the real economic factors for the period 2004-2019. The study concluded that the real factors have a tangible impact on the exchange rate movement through a decrease in the gross domestic product due to the decrease in oil revenues as a result of the decrease in oil prices and the occurrence of a deficit in the public budget as a result of the increase in the value of imports over the value of exports and thus the increase in demand for the dollar more than its offer to cover imports in the currency. This deficit in demand is financed by the foreign reserves of the Central Bank, which leads to a decrease in those reserves, and since the exchange rate is subject to supply and demand factors, when the demand for the dollar increases more than its supply, it leads to fluctuation in the exchange rate and its instability in light of the weak and insufficiency of the economy’s structure. About meeting the need of local demand. The study recommended rationalizing spending in all its forms and imposing a tax on the profitability of activities that have negative effects on the Iraqi economy, that is, unproductive activities.

Keywords: nominal exchange rate, parallel exchange rate, real economic factors, gross domestic product, budget deficit and surplus, rentier economy.

INTRODUCTION

Developed or emerging countries alike seek to achieve stability in the exchange rate of their currency by adopting policies aimed at stability to avoid extreme fluctuations in their currencies from time to time, in addition to the fact that the stability of the currency exchange rate is one of the first concerns of monetary policy, especially in developing countries due to its lack of funding resources subjectivity.

It is known that the foreign exchange rate is one of the most important variables that reflect the nature of domestic and external economic activity, and this topic has received a great deal of discussion. For example, the owners of the Keynesian theory believe that the real factors and government intervention in the economy is the one that affects all economic activities, on the one hand, and on the other hand, the money. They see the issue from another angle and consider that the cause of the imbalance in economic activities is due to irrational monetary policy decisions that cause imbalance in economic performance, and as a distinction of the ideas of these schools towards the effects of the exchange rate on macroeconomic variables, on monetary variables.

The focus has been on Iraq as one of the countries that control those factors affecting the exchange rate of its currency to serve its economic activities and attention to these factors to control them as much as possible to direct its exchange rate to serve its economy, because the most
important tasks of monetary policy in Iraq is to achieve economic stability by strengthening the exchange rate The Iraqi dinar against other foreign currencies and reduce the growth of unwanted inflation rates.

THE FIRST SECTION: METHODOLOGY OF RESEARCH AND PREVIOUS STUDIES

Methodology of Research

- **Research problem:**
The problem of the research revolves around the following question: "What is the impact of changes in the exchange rates in the parallel market on some macroeconomic variables in Iraq"?

- **Research importance:**
The importance of the research comes from the fact that exchange rate fluctuations have an impact on the real value of the national currency, which is reflected on the overall performance of the Iraqi economy at the internal and external levels, as it benefits many parties, such as investors and shareholders, or as institutions or individuals.

- **Research goal:**
The research seeks to achieve the following main objectives:
1. Shedding light on the reality of exchange rates and their impact on real factors in the economy.
2. The possibility of identifying the nature and direction of the relationship between fluctuations in the exchange rates of the Iraqi dinar against the US dollar and its reflection on the reality of real economic activity in the country.
3. Analyzing the development of these factors and determining their effects in order to reach the most important means and measures that can contribute to treating their negative aspects and working to strengthen them.

- **Research Hypothesis:**
From the research problem, the research hypothesis can be formulated: "There are no effects of the independent variable represented by the parallel exchange rate on the dependent variables represented by some real economic factors in the Iraqi economy for the period 2004-2019."

- **Research Methodology:**
The researcher relied on the descriptive-analytical approach as it is the most appropriate approach to the phenomenon in question, and the approach was represented by a method of reliance on theoretical foundations that directly addressed the topic of research, as well as the annual bulletins and reports of the Central Bank of Iraq and the Ministries of...
Finance and Planning to cover the applied aspect of the research.

- **Time and place limits for research:**
  - Spatial boundaries: some real factors in the Iraqi economy.

- **Search structure:**
  To investigate the hypothesis and reach the objectives of the research, we divided the research into an introduction and three Section. The first section focused on the research methodology and previous studies. The second Section, dealt with the concept of the exchange rate and some real economic factors that are affected by exchange rate fluctuations and reviewing its theoretical aspects according to different schools. Focus on the third Section, The analytical aspect of the impact of the exchange rate on these factors, and the research concluded with the most important conclusions and recommendations.

- **Previous studies**
  A study by (Abbas, 2003) tagged with exchange rate policies and their impact on economic stability in Sudan for the period 1990-2001. Exchange rate policies have become the focus of attention of all countries due to their important role in addressing the problems of balance of payments through their impact on important economic indicators and then on the economy as a whole. This study focused on the exchange rate policies, an attempt to clarify the importance of this policy and the effectiveness of the exchange rate policies, trying to answer the following questions 1. To what extent are the exchange rate policies implemented in the period 1990-2001 having an impact on important economic indicators such as GDP, inflation rates, money supply The trade balance and thus economic stability 2. What are the appropriate policies for the Sudanese economy? The study applied the statistical analysis method to determine the relationship between the exchange rate and the rest of the economic indicators. The study also analyzed the period before and during the liberalization period to test the effectiveness of the exchange rate policy during the study period and to determine the appropriate policies. The study reached the following results: 1. Exchange rate policies play an important and appreciated role in the economy 2. Arbitration policies hinder growth because they restrict the economy, while liberalization policies help investment and the flow of foreign capital, which helps the flow of foreign exchange and thus the stability of the exchange rate 3. The study concluded that the application of the liberalization policy leads to the
unification and stability of the exchange rate, which reflects positive results on the economy. Study 1. The government must maintain the stability of the exchange rate.
2. Comprehensive and coherent strategies must be developed to address economic problems. 3. Continuing the liberalization policy that helped increase local investment and opened the economy to the outside world.

- A study conducted by (Mohammad, 2002: 170-183) tagged "The Impact of Inflation and Interest Rates on Exchange Rates", as the bank's parallel rates to the official exchange rates are one of the economic and financial indicators that express the strength of the economy of any country, whether it is a developed or developing country Exchange rates are affected by multiple political and economic factors, and among these economic factors are inflation and interest rates prevailing in the market, which reflect their impact on the exchange rate of the national currency in the parallel market to the official national exchange rate. This research focuses on the impact of inflation and interest rates on parallel exchange rates for the period 1992-2001. The study covers the economy of Iraq, Syria and Jordan. The study concluded that the rise or fall of the inflation rate will lead to higher interest rates and stable exchange rates in some countries, and this is not consistent with the changing economic conditions. The study recommended reducing government spending in all its forms and raising the tax rate on the profitability of activities that do not reflect positive effects on the national economy.

- A study carried out by (CHIPETA, MEYER, MUZINDUTSI, 2017: 20-35), tagged with “The Impact of Exchange Rate Movements and Economic Growth on Job Creation.” Job creation is the focus of economic development and remains a source of and the strength of social and human relations. Job creation creates job opportunities An environment necessary to enhance social and economic cohesion in the macroeconomic and microeconomic environment is far from shocks to the economy, especially those exchange rate shocks and changes in economic growth may negatively affect employment and job opportunities. The study benefited from the quarterly observations from the first quarter of 1995 to the fourth quarter of 2015 to examine the effect of the real exchange rate and economic growth on the employment situation in South Africa. It was selected as a case study due to the high unemployment rates in it and used the (VAR) model and multivariate co-integration The techniques were used in evaluating the impact and response of
employment to the real exchange rate and real economic growth and concluded that employment responds positively to economic growth and negatively to the exchange rate in the long run, and the short term presents a positive relationship between real economic growth and employment, while the relationship between employment and the real exchange rate is also negative. However, the impact of economic growth on job creation is not significant enough to stimulate job creation in South Africa, as it is clear that movements in the exchange rate largely exert negative short- and long-term impact on employment dynamics, which means a decrease in total employment and therefore exchange rate stability. Important to economic growth and job creation in South Africa and other developing countries.

A study by (Monfared, and another, 2017) tagged with the relationship between the exchange rate and inflation, a case study of Iran. “Iran is a country that experienced a period of high and chronic inflation and fluctuations in exchange rates during the past decades after the Iranian revolution in 1979, followed by the Iran-Iraq war that it lasted eight years and the global oil crisis, where high inflation was one of the most important problems of Iran, especially during the past years with the imposition of the trade boycott that caused the instability of exchange rates and high inflation in Iran. These issues concern the economists towards this subject, so the aim of this study is to analyze the relationship between the exchange rate and inflation based on time series data using Hendry’s general method to the special modeling method and the vector automatic regression model (var) and in the end we used the annual data for the period 1976-2012 for Hendry’s method as the researcher used the quarterly data between 1997: 3-2011: 4.

To estimate the var model. Because of the economic instability in recent years and the lack of correct data, he estimated the model until 2012 and as a result of the var model, the effects of money supply and exchange rate on inflation were investigated. According to the results, money supply and exchange rate affect inflation in a positive direction and that the money supply’s contribution to inflation greater than the exchange rate.

A study carried out by PURVIS (1982), tagged “Exchange Rates: Monetary and Real Factors.” This study explores many alternative models of the exchange rate that shed light on the role played by real and monetary factors in determining the exchange rate in the short and long term to the effects of exchange rate changes on the real output in the first
model, where attention is focused on the role of purchasing power parity at flexible prices and a real variable exchange rate, the second model provides us with the model at fixed prices and replaces purchasing power parity with interest rates parity as the main link in the short term to the international economy, while the third model introduces us to a multi-sector production structure and explores the implications of Marshall dynamics as equity capital slowly adjusts. The third model presents a cross-sectoral production structure and explores the implications of Marshall dynamics where equity capital adjusts only slowly. The study concluded that an economic recession may occur in the event of a decline in manufacturing due to the combination of fixed prices and flexible exchange rates, and it is possible to use an appropriate monetary policy to rationalize the current price level to spare the overall economy a state of economic stagnation.

What distinguishes our current research from the reference studies is the difference in place and time. The analysis has dealt with the real economic factors, and the analysis has been done for a rentier economy that depends on points in a large percentage.

THE SECOND SECTION: THE THEORETICAL FRAMEWORK OF THE EXCHANGE RATE AND ITS DIMENSIONS IN SOME REAL ECONOMIC FACTORS

The concept of exchange rate:
The exchange rate of any country is the price of one currency for another, or the ratio of the exchange of two currencies. One of the two currencies is a commodity and the other currency is a price for it. It is also known as the rate at which the currency of a country is exchanged for the rest of the currencies of the world (Bukhari 2010, p. 120).

The functions of money are represented as a measure of values, as a medium of exchange and as a store of value, and these functions apply to all countries or monetary regions that deal in one legal currency and payments are made from the debtor to the creditor using the local currency, but the interaction between countries varies, we find that this mechanism stops working and is replaced by a system that by converting the national currency into other currencies, and thus the problem of calculating the exchange value appears, then the problem of paying that value, or the money payable when trade takes place between countries using their local currency, but it entails a new economic factor, which is the
exchange rate. And he defines it (Al-Ghaliby 2010, p. 21) that: It is the number of monetary units of the local currency that is equivalent to one unit of foreign currency, or vice versa. Meaning that it is the number of monetary units of the local currency that must be paid to obtain one unit of foreign currency, i.e. the price of the local currency is denominated in the form of units of foreign currency, and this price is determined depending on supply and demand in the currency market.

**Exchange rate fluctuations in the balance of payments:**

In 1973, the collapse of the Burton Woods system, and countries were transformed by adopting not a flexible exchange rate system, which allowed for wider fluctuations in the exchange rates of the currencies of many countries, especially the developing ones. The aspect related to the trade balance, and to a lesser extent foreign capital flows, and in order to properly analyze the impact of exchange rate fluctuations, it is necessary to analyze its impact on the most prominent items of the balance of payments, namely trade and the capital account.

**Impact of exchange rate fluctuations on trade:**

The issue of the impact of exchange rate fluctuations on the volume of trade exchange has sparked widespread controversy among economic decision-makers, and this controversy has resulted in two main directions in analyzing this relationship, each of which took a different path in the analysis. The first trend adopts the method of total analysis and the opinion presented by this trend is that Exchange rate fluctuations reduce the volume of trade, as it creates a state of uncertainty for exporters as well as importers, as the increase in exchange rate fluctuations means increased risks, and the second trend adopts the method of partial analysis, and this trend does not conflict with the method of macro analysis but is a complementary aspect and not an independent trend Or in opposition to it, the ideas of the micro-analysis method were nominated by several models, foremost of which is the classic model of (Clark), who developed the model of the export company that produces a homogeneous commodity and faces a market dominated by complete competition and sells its products entirely in the foreign market, and the model assumes that the company does not use imported inputs. The prices of the exported commodity are denominated in foreign currency and it is an external variable and that production is fixed, and exchange rate fluctuations create uncertainty about export earnings received in the currency. The company must limit the level of
exports, taking into account the risks arising from exchange rate fluctuations, which it bears due to production and its entry into trade. If the company avoids the risks of exchange rate fluctuations, the volume of production and trade will witness a significant decrease. Assuming that the inputs to the production process are imported, the decrease in the supply of exported goods will be less because part of the risks will be borne by importers and not only exporters. Then the production costs and the returns become unknown as well. The company may want to avoid the risk, but the effect of prices in each case is different. If the company prepares a list of its payments and revenues in foreign currency, the increase in risk (increased risk of exchange rate fluctuations) leads to an increase in prices. A higher price would reduce the expected profits (as demand decreases when prices increase), while if the company prepares this list in the local currency, the effect of exchange rate fluctuations will depend on the characteristics of the demand function for exports in the market to which the commodity belongs, as he sees (Barron) that prices decrease when exchange rate fluctuations increase, and this leads to an increase in demand for the exported commodity, but the economic profits disappear and this makes the expected profits equal to the normal profits.

In fact, exporters and importers may compare the costs of exchange rate fluctuations (risks) and the expected profits from trade. Commodity as an indicator that exporters prefer risk when they expect profits that exceed the costs of exchange rate fluctuations, and under these assumptions, both (Akhtar and Hilton) concluded that there is a negative impact of exchange rate fluctuations on the trade volume of industrialized countries such as (Germany, the United States, France, Japan and England) and this reinforces the view that exchange rate fluctuations have a negative impact on trade (Tariq, 2009). While this model is not suitable for many developing countries in which the contributions of industrial exports to their total exports are low, and the contributions of primary exports are high.

**Exchange rate fluctuations and private capital flows:**
The literature that discussed the relationship between exchange rate fluctuations and capital flows is limited and takes one analytical path, which is that higher interest rates would attract foreign capital inflows into the country and thus the supply of foreign currency will increase in proportion to the supply of the local currency and this increases the real value of the latter against its foreign counterpart, and thus it is the capital flows that affect the exchange rates through the
interest rate, which is a major link to this relationship (Brahmiat, Uri Dadush and Milan, 1995, 3-5).

Here, another point of view can be presented that excessive exchange rate fluctuations create high risks that may push the owners of capital to avoid directing their investments towards the country whose exchange rates suffer from excessive fluctuations, and here capital flows as well as interest rates will be affected by exchange rate fluctuations as the latter will affect the real money supply, which will certainly affect interest rates, the higher the fluctuations in exchange rates, the lower the foreign capital flows, and this reduces the real money supply and raises interest rates.

The recent literature calls the costs of exchange rate fluctuations the cost of traffic. The greater the fluctuations in exchange rates, the higher the costs of the investors’ passage to the concerned country, as well as the costs of exporters and importers. However, we cannot ignore that such an analysis requires the availability of detailed information on the total investment opportunities in different countries, while those developing countries often suffer from a lack of data and information, so this analysis is strong in theory, but weak in practice.

(Brahmiat, 1995) discussed the relationship between capital flows and exchange rates, and they based their analyzes on the theory of Dutch disease, as they believe that excessive capital flows push exchange rates to reach its equilibrium level by influencing the traded and non-traded goods sector, as They emphasized that the degree of impact strongly depends on the speed of capital flow (reversibility), stressing that many studies have collected capital flows in its various forms, and this led to the release of generalized results about this relationship.

Supporters of the view that emphasizes that the exchange rate affects capital flows have built their analyzes on strong foundations that when the owner of capital decides to direct his capital to any country, he first faces the exchange rates of the currency of that country and not any other variable, while the variables come The other supporters of this view believe that the stability of exchange rates would attract foreign capital if profitable investment opportunities are available, while exchange rate fluctuations create high risks for the owners of capital, and it is not necessary that Fluctuations in exchange rates lead to the reluctance of investors to direct their investments to countries that are characterized by fluctuations in the exchange rates of their currencies. The cost of exchange rate fluctuations (the cost of risk).
Fluctuations in exchange rates and economic performance indicators:

Fluctuations in exchange rates and economic growth:
The relationship between the exchange rate system and economic performance indicators (especially growth and inflation) is one of the controversial topics in the economic community. Researchers in the economic field have asked a question that does economic growth as one of the most important indicators of economic performance vary under different exchange rate systems? This question opened the door to many studies, and these studies resulted in three trends that were considered the main pillars to answer this question. Supporters of the fixed exchange rate stressed the close relationship between high and stable economic growth and the fixed exchange rate system, strengthening their point of view with an analysis that confirms this relationship, as they believe that the stability of exchange rates would create a sense of security for the foreign and local investor alike, and this contributes to increasing the volume of capital inflow into the country, which enhances economic growth, while supporters of flexible exchange rates see that exchange rate movements are not always a bad thing as some are trying to portray it on the contrary, as these movements would restore balance to the balance of payments when exposed to external shocks, as the exchange rate movement ensures this, in addition to this, the flexible exchange rate allows the reallocation of resources towards their alternative uses in a way that achieves the highest marginal return for the resource and this it can eliminate price distortions, which increases economic growth rates, and this is rejected by the proponents of fixed exchange rates, who assert that excessive exchange rate fluctuations would lead to an increase in the rate of exchange rates. Increased risks for foreign investors, which leads them to avoid investing in countries that are characterized by excessive fluctuations in the exchange rates of their currencies, and this reduces economic growth rates (Al-Nashashibi, 1983).

A number of writers have noted that the resources in a number of developing countries do not respond to the movements of the exchange rates of their currencies, as well as the conflict between the exchange rate policy (as an auxiliary tool) and the macroeconomic policies, and this leads to distortion of relative prices and obstruction of efforts to increase the rate of economic growth and here the exchange rate loses its role in stimulating growth and restoring balance in the balance of payments, in light of the weak flexibility of the production system and backward means of
production, it is logical that decreasing the exchange rate does not stimulate exports, as well as economic growth.

The modern classic school propositions adopted by the International Monetary Fund calling for building a market economy in developing countries, which is known in the literature of economic development as economic stabilization programs. Contributes to reducing costs on the shoulders of countries, in addition to this unifying exchange rate systems, as many developing countries have more than one exchange rate system, as these countries have taken it as a selective measure to stimulate some sectors that the state considers important for economic activity, and despite the benefits that achieved in the short term, but its negative effects outweighed its positive effects in the long run. The first of these negatives is the distortion of relative prices and the reduction of economic growth. In the past decade, there was the insistence of many developing countries to unify their exchange rate systems as a necessary condition for obtaining the assistance provided by the International Monetary Fund, if The programs advocated by the International Monetary Fund aim to reallocate resources in a manner that achieves the highest marginal return for each resource and these are followed by programs sponsored by the World Bank It is based on the ideas of the updated Keynesian school, which is known as structural adjustment programs and concerns the supply side. These programs complement each other and aim to increase production and raise economic growth rates.

**The effect of exchange rate fluctuations on inflation.**

The vicious circle theory focused on the close interrelationship between exchange rates, money supply and inflation, and the summary of this theory, that changes in exchange rates or money supply directly affect the rate of inflation, just as inflation affects the exchange rates of the local currency and the real money supply. The hypothesis on which the theory is based is Flexibility of internal prices in the short and long term, which allows the inflation rate to move as a result of any change in exchange rates or money supply, as supporters of this theory believe that this relationship is characterized by degrees of intertwining and complexity so that it is not possible to be certain about the knowledge of the main variable that governs this relationship, in other words The vicious circle theory admitted its inability for the main variable that affects the rest of the variables (Querk, 1996).

The problem of inflation has occupied a large space in the debate that has arisen in the last three decades, about choosing the
appropriate exchange rate system in developing countries. Supporters of the fixed exchange rate system, stressed that the adoption of this system contributes to getting rid of the inflation problem once and for all by restricting monetary policy with a system of rates. The fixed exchange rate necessitates monetary control, and this forces the monetary policy makers to fulfill their promises by providing a low inflation rate. This belief has prevailed for many years, as the adoption of the fixed exchange rate system is the main measure to avoid high inflation rates, and the excessive depletion of reserves has led to maintaining exchange rates. The local currency was fixed to the collapse of the fixed exchange rate system (the collapse of the Byron Woods system in 1973). This created political costs that exceeded expectations. The developed countries abandoned this system in 1973 and switched to floating exchange rates for their currencies. The developing countries followed, at the end of the seventies and early eighties, which contributed to increased exchange rate fluctuations and high inflation rates, in both developed and developing countries.

Many researchers have expressed their interest in the policy of directing inflation as a new method of monetary policy, which means achieving price stability as a main official objective of monetary policy within a target inflation rate determined by the state individually or in cooperation with the Central Bank, and one of the most important features of this policy is its abandonment of intermediate goals (display Money and exchange rates), as the central bank’s prediction of the inflation rate is an intermediate goal in itself. Despite the successes achieved by this policy in reducing the inflation rate in Spain, Sweden, New Zealand and other developed countries, it did not receive much attention in developing countries for many reasons, including the decline in the importance of the inflation problem in the nineties in the face of other problems such as unemployment and currency crises, while countries found others, such as Argentina and Nicaragua, sought to get rid of the inflation problem by moving to the dollarization system (which is the highest stage of exchange rate stabilization), and Querk, 1996) stresses that the shift to the dollarization system was a major reason for the decline in inflation rates in Latin American countries, as it is believed that the inflationary waves The rampant in these countries made the dollar a preferred means of saving for individuals, despite his belief that dollarization is a major sign of failed monetary policy.

Factors determining the exchange rate

The real factors of the exchange rate will be discussed:
Real factors: (Schlemon, 2017):

Real factors play an important role in influencing the value of countries' local currencies, including:

1- Inflation: Inflation is one of the real factors that affect the exchange rate of the currency, whether this currency is a dollar or any other currency, against the supply, which pushes the exchange rate to rise (depreciation of the local currency).

2- Gross domestic product at constant prices (GDP): Gross domestic product is the best variable that expresses the amount of economic growth for any country. Growth in the output generates additional demand for the country’s currency and improves the current account and thus reduces the value of the foreign exchange rate against the local currency (high value local currency), that is, the relationship between GDP at constant prices and the foreign exchange rate is an inverse relationship, and in Iraq GDP is used with oil at constant prices as it is considered almost the only source of reserves that plays an important role in the government budget and a major role in the balance of payments and its paragraphs. These are all variables that affect the exchange rate. As the increase in the value of petroleum exports supports the process of forming foreign exchange reserves to meet imports and thus maintain the stability of the exchange rate.

3- Government budget surplus and deficit (GB): The government budget is closely related to the foreign exchange rate, whether in the form of a deficit or a surplus. The budget deficit leads to a decrease in the value of the local currency and an increase in the foreign exchange rate. As for the budget surplus, it supports the value of the local currency and reduces the price of the local currency. foreign exchange. In other words, reducing government spending leads to a decrease in demand, a decrease in imports, an increase in exports, and an improvement in the current account, which leads to an increase in the value of the currency and a decrease in the value of the foreign exchange rate.

4- Imports of foreign goods (IMP): The entry of goods and commodities from outside the country requires an increase in the demand for foreign currencies, for the purpose of covering the need for domestic demand for goods and services in light of the low relative importance of the output of the economic sectors, which leads to a significant decrease in the demand for exchange Domestic, as the increase in imports means a widening of the gap between the supply of foreign currency and the demand for it in the market, and as a result an increase in the difference between the official price and the parallel market price.

Trend of Exchange Rate Evolution:

A- The exchange rate in the official and parallel markets in the Iraqi economy for the period 2004-2019

The gradual improvement in the exchange rate of the Iraqi dinar against the US dollar in the official market for the period from 2004-2019 is clear from Table (1), as it decreased from (1453) dinars / dollar in 2004 to (1190) dinars / dollar in 2019, according to the exchange rate system. The fixed, especially that the window for selling foreign currency as an organized exchange market allows the Central Bank to intervene in a manner that ensures the stability of exchange rates and influences the levels of local liquidity, as well as the exchange rate in the parallel market decreased from (1453) dinars / dollar to (1214) dinars / dollar for the period from 2004-2014 in a row, then increased in 2015 to (1247) dinars / dollar. Then it fell again to 1196 in 2019. Figure (1) shows the exchange rate paths in the official and parallel markets and the annual growth rates for each.

<table>
<thead>
<tr>
<th>The growth rate of the exchange rate in the parallel market</th>
<th>EX Parallel market exchange rate dinars/dollars</th>
<th>The annual exchange rate growth rate in the official market</th>
<th>The exchange rate in the official market is dinars / dollars</th>
<th>years</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1453</td>
<td>2004</td>
</tr>
<tr>
<td>-</td>
<td>1453</td>
<td>-</td>
<td>1453</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>1472</td>
<td>1.1</td>
<td>1469</td>
<td>2005</td>
</tr>
<tr>
<td>0.2</td>
<td>1475</td>
<td>0.5</td>
<td>1476</td>
<td>2006</td>
</tr>
<tr>
<td>14.1</td>
<td>1267</td>
<td>15.2</td>
<td>1255</td>
<td>2007</td>
</tr>
<tr>
<td>5.1</td>
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<td>2</td>
<td>1170</td>
<td>2009</td>
</tr>
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<td>0.3</td>
<td>1185</td>
<td>0</td>
<td>1170</td>
<td>2010</td>
</tr>
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</tr>
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<td>1247</td>
<td>0.1</td>
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<td>2015</td>
</tr>
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<td>1190</td>
<td>2016</td>
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<td>1258</td>
<td>0</td>
<td>1190</td>
<td>2017</td>
</tr>
<tr>
<td>-3.9</td>
<td>1209</td>
<td>0</td>
<td>1190</td>
<td>2018</td>
</tr>
<tr>
<td>-1.1</td>
<td>1196</td>
<td>0</td>
<td>1190</td>
<td>2019</td>
</tr>
</tbody>
</table>

Source: Prepared by the researcher based on the data of the Central Bank of Iraq for the years 2004-2019
Figure 1: Trends in the exchange rate of the dinar against the dollar in the official and parallel markets for the period 2004-2019

Source: From the researcher’s work based on the data in Table (1).

Analysis of the impact of the exchange rate in the parallel market on the real factors for the period 2004-2019 real factors

Table (2) shows the analysis of the development in the Iraqi dinar exchange rate against the US dollar in the parallel market and the changes of some real factors for the period 2004-2019, coupled with simple annual growth rates (GR) and compound annual growth rates (CGR) for the variables, which the researcher calculated based on the following two formulas:

\[ GR = \left( \frac{V_{\text{present}}}{V_{\text{past}}} \right) x 100 \] ......... (3)

\[ CGR = V_{\text{past}} \times (1 + GR)^n \] ......... (4)

Where:

GR: Annual Growth Rate
CGR : compound growth rate
\( V_{\text{present}} \): The value of the current year.
\( V_{\text{past}} \) : value of the previous year.
n : number of years.
Table (2): The Iraqi dinar exchange rate in the parallel market and the real factors

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP Gross domestic product at constant prices in millions of 2007 = 100 dinars</th>
<th>Annual growth rate of inflation 2007 = 100</th>
<th>INF% inflation based on 2007 = 100</th>
<th>Annual growth rate surplus and deficit million dinars</th>
<th>GB Budget surplus and deficit million dinars</th>
<th>Annual growth rate of imports</th>
<th>IMP imports million dollars</th>
<th>The annual growth rate of the exchange rate in the parallel market</th>
<th>FX Exchange rate in the parallel market dollar / dinar</th>
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Source: Prepared by the researcher based on the data of the Central Bank for the years (2004-2019)

1- Inflation (Inf.):
The years 2004-2013 suffered from continuous fluctuation in inflation rates compared to consumer prices and with a compound growth rate of (-3.8%) for reasons due to the Central Bank’s work to control inflation rates and the elimination of inflationary pressures through the exchange rate instrument, as it is noted from Table (2) the decrease Exchange rate rates in the parallel market for the period from 2004-2013 with a compound growth rate of (-1.8%) and this shows the close relationship between inflation and the exchange rate of the Iraqi dinar against the US dollar, and despite the drop in international oil prices in mid-2014, the Central Bank of Iraq maintained On acceptable inflation rates and a decrease in the exchange rate in the parallel market to (1214) after it was (1232) dinars / dollar in 2013, with a decrease of (-1.5%), except for the year 2015 when the inflation path was linked to an inverse relationship with the exchange rate, and that Due to the global decline in the prices of basic commodities included in the components of the consumer price index, especially the prices of food commodities, which decreased by (19%) in 2015, according to the Food and Agriculture Organization of the United Nations (FAO), against the background of an abundance of supply, a decrease in global demand, and a high price The dollar, as the annual growth rate of inflation and the exchange rate reached
(-36.3%) and (2.7%) respectively in 2015, and from a follow-up to Table (2) it can be seen the decline in the inflation rate and Figure (2) shows the path of inflation and the exchange rate in the parallel market in Iraqi economy.

Figure 2: Exchange rate trends and inflation rates for the period 2004-2019

![Figure 2: Exchange rate trends and inflation rates for the period 2004-2019](image)

Source: Prepared by the researcher based on the data in Table (2).

2- Gross Domestic Product (GDP)
The GDP grew during the period 2004-2013 positively with a compound growth rate of (6.2%) according to the data in Table (2), which is a slight increase despite the increase in oil revenues and the increase in its contribution to the GDP due to the boom in the oil market. While the compound growth rate of the exchange rate in the parallel market was (-1.8%) for the same period. The reason for the improvement in the growth of the GDP at constant prices and the decline in the growth rate of the exchange rate for the period 2004-2013 is due to the increase in the average price of a barrel of crude oil in the world market and the quantity of the product from it. As for the years 2014 and 2015, the GDP witnessed a decrease of (-0.6%) and (-2.4%) respectively due to the decline in international oil prices, as the price of a barrel of oil decreased from (102.26) dollars in 2013 to (91.63) dollars in 2014. It reached (44.70) dollars in 2015 with an annual decline rate of (-10.4%) and (-51.2%), respectively for the years 2014 and 2015, and despite the increase in the amount of oil production and export to (3.482) million barrels per day in 2015, but The exchange rate of the Iraqi dinar against the US dollar rose by (2.7%) for the same year, and this confirms that the increase in foreign currency revenues supports the process of forming foreign exchange reserves to meet imports and thus maintain the stability of the exchange rate in light of a rentier economy that depends on oil as a major source of revenue with the decline of energy The local productivity represented by the
decline of industrial and agricultural activities. We note that the Iraqi economy witnessed a gradual development for the year 2019 despite the drop in oil prices by (-8.5%) and the reason for the recovery in the non-oil sectors, especially the agricultural sector, although the economy depends on one commodity, which is oil, which is a factor of non-oil stabilization for Economic growth due to the instability of the oil market and therefore vulnerable to external shocks. Figure (3) shows the evolution of the GDP rates and the Iraqi dinar exchange rate in the parallel market in the Iraqi economy, as follows:

*Figure 3: Exchange rate trends and GDP for the period 2004-2019*

Source: Prepared by the researcher based on the data in Table (2).

3- Government budget surplus and deficit:
From Table (2) we note that the period 2004-2012 witnessed a surplus in the public budget amounted to (865248) million dinars and (14677648) million dinars, respectively, with a compound growth rate of (42.5%), in order to increase public revenues over public expenditures after Iraq’s return to the market Oil, as the Iraqi budget depends for its revenues on oil by (95%), which led to an improvement in the exchange rate of the Iraqi dinar against the US dollar at a compound growth rate of (-2%) for the same period, and this explains the direct relationship between the budget surplus and deficit and the The exchange rate, as the surplus showed support for the local currency and a decrease in the number of local units paid against the US dinar, while the Iraqi budget for the years 2013-2015 witnessed a compound deficit of (13.8%) and a high compound growth rate of the exchange rate by (1%), which was the cause of the deficit. In 2013, the slight decrease in oil prices compared to 2012, as it was 107 dollars per barrel, in addition to the increase in public (investment) expenditures by 18% over 2012 (according
to the economic report of the Central Bank of Iraq (2013), as for the years 2014 and 2015, the deficit was due to the significant drop in international oil prices and the situation continued for the rest of the subsequent years until 2019 with the increase in the deficit in the general budget, which has negative effects on the exchange rate and then the value of the currency, as shown in Figure (4).

**Figure 4: Exchange rate trends and their impact on the budget surplus and deficit for the period 2004-2019**

![Figure 4: Exchange rate trends and their impact on the budget surplus and deficit for the period 2004-2019](image)

*Source: Prepared by the researcher based on the data in Table (2).*

4- **Imports (IMP):**

The Iraqi market was flooded with goods and merchandise imported from various international origins after the policy of economic openness after the events of 2003, and after allowing the import of all kinds of goods without tariffs as a meadow, as the value of imports increased from (21302) million dollars in 2004 to (59349) million dollars in 2013 with a growth rate A compound of 12%, while the local currency maintained its value through a decrease in the exchange rate for the same period, and the reason for this is that the reserves of the Central Bank of Iraq undertake in one of its functions the financing of foreign trade for the private sector by fulfilling the banks’ requests for it through the foreign currency sale window. Thus, it is an important tool in achieving stability in the exchange rate and controlling local liquidity levels, meaning that dollar sales cover imports, while imports witnessed a decline in 2014 and 2015 to (39045) million dollars at a rate of (-10.4%) and (-26.6%) respectively, but the exchange rate of the Iraqi dinar in the parallel market maintained its stability in 2014 due to the Central Bank of Iraq issuing new instructions for buying and selling foreign currency by imposing new restrictions on banks in response to concerns about money laundering and illegal activities.
outflows of foreign exchange linked to the increased demand for foreign currency, while the exchange rate of the Iraqi dinar in the parallel market witnessed an increase in 2015 due to the lack of supply of the dollar and a significant decrease in the Central Bank’s dollar sales, which led to an increase in the value of the dollar against The Iraqi dinar, until the year 2019 due to the foreign currency sale window, which negatively affected the volume of foreign reserves with the Central Bank and in general, it is noted that the value of imports is constantly increasing and the value of oil-dependent exports has decreased, which increased the levels of deficit, which negatively affected the exchange rate as shown Figure (5).

**Figure (5): Exchange rate trends and its impact on imports for the period 2004-2019**

Source: Prepared by the researcher based on the data in Table (2).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

1- The Iraqi economy suffers from a structural imbalance in its various economic facilities resulting from the dominance of the oil sector over a large area of economic activity, in contrast to the failure of the main productive sectors (agriculture, industry) to contribute to the growth of economic activity (GDP), which made the Iraqi economy subject to fluctuation. It is caused by the change in oil prices.

2- The real factors had a tangible impact on the exchange rate movement through a decrease in GDP due to low oil prices and consequently a decrease in oil revenues and a deficit in the general budget, which led to a decrease in the central bank’s sales of dollars, and thus increased demand for the dollar more than its supply. To cover imports in foreign currency, and this demand deficit is financed by the foreign
reserves of the Central Bank, which leads to a decrease in those reserves, and since the exchange rate is subject to supply and demand factors, when the demand for the dollar increases more than its supply, it leads to fluctuation and instability in the exchange rate in light of weakness. The structure of the economy and its failure to meet the needs of the local market.

3- Increasing government spending will lead to harmful effects on the economy unless there is a flexible production system that meets the increasing components of aggregate demand.

4. It is clear that the determining factors of the Iraqi dinar exchange rate are a combination of real, monetary and political factors in addition to expectations, and the actions taken by the monetary authorities of the Central Bank regarding the exchange rate system and the window for buying and selling foreign currencies.

**Recommendations:**

1- Adopting a flexible managed exchange rate policy that allows the exchange rate to be adjusted based on some economic indicators that affect its movement, such as constantly adjusting exchange rates on the basis of estimating the position of reserves and balance of payments in addition to other indicators, and introducing a forecasting mechanism in the short and medium term, as well as The flexible managed system is the best buffer for external shocks to the local economy.

2- Work to increase the production capacity of the national economy to meet the needs of the local market and focus on projects specialized in the production of non-oil exports, which leads to a reduction in the demand for the dollar.

3- Activating the developmental role of small and medium enterprises, which constitute between (30% - 40%) of the total number of enterprises in the formal sector, and they may be owned by the public, private or mixed sectors.

4 - Rationalizing spending in all its forms and imposing a tax on the profitability of activities that have negative effects on the Iraqi economy.
REFERENCES


