AMERICAN JOURNALS
Open Access, Peer Reviewed Journals

American Journal of Business Management, Economics and Banking
**ISSN (E): 2832-8078** Volume 20, | January, 2024

# EXCHANGE RATES AND THEIR IMPACT ON ECONOMIC GROWTH IN IRAQ FOR THE PERIOD 2004 – 2022

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**A B S T R A C T**

The research aims to clarify the effects that exchange rate fluctuations can have on economic growth in Iraq. One of the most prominent results that the research reached is that exchange rates explain 90% of the changes occurring in the gross domestic product, and the results of the Bound Test showed the co-integration between the variables of the study. If the calculated ( F ) is ( 6.79058 and is greater than the tabulated value, as it reached (4.6 6 ), at a significance level (5%), that is, the existence of a cointegration relationship between some variables , it showed results Impact in The term The short one that Fluctuations Prices Exchange ,as a variable independent may be I passed in Proof Its effect And the positive And Moral in Indicator Economic Growth (GDP) And at level Moral less From (0.05), i.e when the increase in Prices Exchange By 100% van Economic growth (GDP) rises By an amount 19 % , it showed results Impact in The term the long if that Fluctuations Prices Exchange ,as a variable independent did not succeed in Proof Its effect in Indicator Economic Growth (GDP) Because the probability exceeds the 5% barrier, the research is recommended to be important activation Role the bank Central In a way Larger from Okay monitoring the changes in Prices Exchange And strive the permanent to discount price Cashing Dinar Opposite Currencies The other and interest By factors Influential in price Exchange because Its effect Reflected In a way big on Prices Exchange.

**K E Y W O R D S**

Exchange rate, gross domestic product.

**Introduction**

Many changes occurred in the Iraqi economy after 2003, the most important of which was the start of the process of rehabilitating the Iraqi economy. There are several factors that contributed to the improvement and stability of the exchange rate, including the issuance of Central Bank Law No. 56 of 2004, and what it allowed for achieving complete independence for the Central Bank in formulating and implementing its policy. monetary policy and its resort to adopting indirect means of monetary policy, the most prominent of which is the Central Bank organizing an auction for foreign currency with the aim of achieving stability and improvement in the exchange rate of the Iraqi dinar against the dollar, and thus there has become a clearer policy for the Central Bank that has allowed it to enjoy new independence to stabilize the exchange rate of the Iraqi dinar and follow up Its movements were made within certain limits through foreign currency auctions that were approved since 2003. This auction contributed to achieving the objectives required of it to a good extent as it was one of the indirect means that the bank adopted in formulating and implementing its new monetary policy. The Iraqi budget also witnessed a continuous financial surplus after 2003.

**Research Problem**

The essence of the problem addressed by the research lies in the impact of exchange rate fluctuations on economic growth , and the main problem of the research revolves around the positive repercussions of the exchange rate on economic growth.

**Research Importance**

The importance of the research is highlighted by the contribution of the exchange rate through its contribution to achieving macroeconomic goals, which are represented by internal and external economic balance, as the internal balance is represented by the stability of local prices, in addition to achieving a level of economic growth, while the external balance is represented by the balance of payments balance. Which shows the country's various trade exchanges.

**Search goal:**

The research aims to achieve the following:

1- Explaining the effects that exchange rate fluctuations can have on economic growth
2- Identify the relationship between the exchange rate and economic growth
3- .

**Search structure:**

To achieve the research objectives, the research was divided into three sections. The first section dealt with the theoretical framework of the exchange rate and economic growth . The second section included an analysis of the reality of exchange rate indicators and economic growth (Gross Domestic Product) in Iraq for the period (2004 - 2022 ). As for the third section touched upon The impact of exchange rate fluctuations on economic growth.

**Research hypothesis**

The research is based on the hypothesis that exchange rate fluctuations have positive repercussions on economic growth

**Spatial and temporal boundaries:**

Spatial boundaries were represented in Iraq, and the temporal boundaries were represented by the period 2004-2022.

**Research Methodology:**

and quantitative analytical approach in analyzing the exchange rate and economic growth (Gross Domestic Product) and determining the relationship between them.

**The first topic**

**The theoretical framework of the exchange rate and economic growth.**

**The first requirement : The theoretical framework of the exchange rate.**

**1- The concept of exchange rate**

There is more than one concept of the exchange rate, all of which agree on the elements and aspects that distinguish it. We will discuss some of the concepts mentioned that highlight the most important aspects of the exchange rate or give it a comprehensive concept, including the following:

The exchange rate is known as the ratio on the basis of which a number of local monetary units are exchanged for foreign monetary units (Issa, 2016, 247). It is also known as the number of units of foreign currency that are exchanged for one unit. one of the national currency and vice versa. It is defined as the price of the foreign currency expressed in local national money. It is defined as the price that is determined by the force of supply and demand in the free market at which the currency can be bought and sold. It is defined as a set of units of a particular currency that must be paid in exchange for obtaining it. on one unit of another currency (Al-Baldawi, 2022, 11), or it is the price of a country's currency expressed in other countries' currencies (Al-Zoubi, 2020, 19.(

Several characteristics of the exchange rate can be deduced, as follows (Al-Baldawi, 2022, 11)

- **a-** The process of exchanging foreign currency for the national currency and vice versa.
- **b-** The exchange process takes place according to a certain price.
- **c-** The swap process takes place in the foreign exchange market.
- **d-** The exchange rate binds the economies of the open world together.
- **e-** An increase in the exchange rate leads to a reduction in economic growth by reducing exports, which leads to a decline in production and employment of the workforce, and vice versa with a decrease in the exchange rate.

**2- The importance of the exchange rate.**

The importance of the exchange rate lies in the way in which the exchange rate is determined in light of future changes by knowing the reasons for its change, whether in the short or long term. As is known, the exchange rate seeks to achieve macroeconomic goals by achieving internal and external balance, so internal balance is The path to stability in prices and wages and full employment. As for the external balance, it is represented by the balance of the trade balance in the balance between exports and imports. That is, the exchange rate links the prices of goods in the local economy to their prices in the global market, and thus it measures the ability to compete. The importance of the exchange rate also appears in Achieving stability in the exchange rate of a currency against other currencies (Awad, 2022, 217).

**3- Functions of the exchange rate:**

The exchange rate has several functions, the most important of which are summarized as follows: ( Hussein, 2008, 21).

a- Standard function: The exchange rate is a tool for linking local prices to international prices. The exchange rate is used as a measure to compare the prices of local commodities and the prices of the same commodity in the global market, which gives producers a standard idea of the general level of prices.

b- Development function: The exchange rate is used to develop exports of a particular commodity, as reducing the exchange rate of the national currency leads to an increase in exports That is, the relationship will be inverse between the exchange rate and exports , and by raising the exchange rate of the national currency, imports of foreign goods will increase, meaning the relationship will be direct between the exchange rate and imports. We conclude from this that the growth of foreign trade requires stability of the exchange rate.

c- The distributive function: It results from its connection with foreign trade, which redistributes national income and global national wealth among the countries of the world. The exchange rate links the local and global economies, as it represents a link between local prices and international prices through the three markets (the labor market, the market for goods and services). , financial asset market).

**4- -Forms of exchange rate.**

The exchange rate acquires many forms and forms , each of which has its own meaning and, consequently, its own use. Based on this, the forms of exchange can be determined as follows:

**a- Nominal exchange rate**

The nominal exchange rate is defined as the price of a foreign currency in terms of a local currency, and this definition can be reflected in calculating the local currency in terms of foreign currency units. Therefore, an increase in the price of the local currency in relation to the foreign currency is considered an improvement in the nominal exchange rate and vice versa (Muhammad, 2017: 505).

It can also be defined as a measure of the value of a particular country's currency that can be exchanged for another country's currency. Thus, the nominal exchange rate is determined as the price of a currency under the influence of the force of supply and demand for it at a specific moment in time in the foreign exchange rate market. The nominal exchange rate is also divided into two types: The first type that is used in current transactions is the official exchange rate, and the second type that is used in parallel markets is the parallel exchange rate ( Al-Mayahi and Shindi, 2022: 33-34). A definition can be given for each of the official and parallel prices as follows:

-The official exchange rate (window rate): It is known as the central price that evaluates government transactions and all imports of the state's public treasury (Shendi, 2006: 53). It is also known as the price specified by the central bank that is traded in the currency selling window, which is one of the methods. Direct and influential measures that can be used to intervene in the exchange market in order to maintain the stability of exchange rates and the general level of prices (Reda and Jawad, 2022: 218)

-Parallel exchange rate: It is a price that is determined on a daily basis and based on market strength. It is also used by the private sector. The range of the parallel exchange rate is wide locally and

externally. The parallel exchange rate is located between two types of exchange rates: the equilibrium exchange rate and the nominal exchange rate (Al-Mashhadani). and Abdullah, 2020: 417).

**b- The real exchange rate**

It is the price that gives the local currency its real value, as it expresses the units of foreign goods needed to purchase one unit of local goods (Salma, 2014, 9).

**5- Factors affecting exchange rates:**

There are a group of factors affecting the determination of the exchange rate, the most important of which are as follows: (Issa, 2016, 250).

A- Money supply: It is one of the important factors that affect the exchange rate, as the sharp increase in the local money supply with the aim of financing the growing government deficit leads to an increase in the amount of money in circulation and thus an increase in the value of goods and services, which leads to an increase in the level of local prices, which makes the country's goods Less competitive ability, thus increasing the quantity of imports and decreasing the quantity of exports, which is reflected negatively on the trade balance, and then the demand for foreign currencies increases, which is negatively reflected in a decrease in demand for the local currency, and thus a decrease in the exchange rate of the local currency against other currencies.

B- Balance of Payments: The balance of payments is the window through which the national economy views the global economy and vice versa, and it is one of the factors affecting the exchange rate. The effect of the balance of payments on the exchange rate is evident through the states of surplus and deficit in the trade balance. When it is in a state of surplus, the demand for The local currency is greater than the demand for foreign currency, which leads to an increase in the value of the local currency, so the relationship is direct. However, if the balance is in a deficit, the demand for foreign currency is greater than the demand for the local currency, which means that the value of the currency decreases when A persistent deficit in the balance of payments causes an increase in the supply of the local currency on the global market and, over time, leads to a decrease in the value of the local currency. (Awad, 2022, 218).

C- Interest rate changes: Interest rates affect exchange rates by attracting foreign capital, because the capital prepared for lending is sensitive to changes that occur in exchange rates. Interest, as it is known that the interest rate rises in capital-short countries and decreases in capital-intensive countries, and on this basis, the capital prepared for lending will move from capital-short countries because interest rates in these countries are high, as the money supply of a country decreases. Which leads to an increase in the interest rate, and this means the transfer of capital from the second country with a low interest rate to the first country with a high interest rate and an increase in demand for the first country's currency compared to the supply of the same currency , and therefore any increase that occurs in real interest rates clearly contributes. In the transfer of capital from abroad to inside, which leads to an increase in the exchange rate of the local currency. . (Al-Zoubi, 2020, 21).

D- Inflation rate: Inflation is an economic phenomenon that is not desired by most economies, as the rise in the general level of prices in national economies leads to a decrease in the value of the national currency against foreign currencies, and thus the exchange rate is affected, which leads to an increase in the number of units of the national currency that are exchanged for one unit. One

of its corresponding foreign currency, so the rise in the general level of local prices compared to international prices works to increase imports, and thus the demand for foreign currency increases, which works to reduce exports, as well as a decrease in the supply of foreign exchange, which pushes the exchange rate to rise, and consequently Therefore, imports increase and exports decrease (the state's trade balance deficit), and from this it can be considered that the general level of prices is one of the most important factors influencing the determination of the exchange rate and its fluctuations (Al-Zoubi, 2020, 21).

E- Trade balance: Exports and imports affect the exchange rate, through changes in the value of exports and imports. If exports increase, they lead to an increase in the value of the currency, but if they decrease, they do not affect the increase in the value of the currency, meaning that the relationship between the value of exports and the value of the currency is inverse. On the other hand, if imports increase, they reduce the value of the currency, but if they decrease, this does not affect the devaluation of the currency, but in most cases, when exports increase, imports decrease, and vice versa, and therefore the relationship between imports and the value of the currency is positive ( Al-Barwari , 2011, 27. )

**The second requirement : The theoretical framework of the gross domestic product.**

**First: - What is the gross domestic product?**

Gross Domestic Product is defined as all goods and services that are finally produced in a particular country during a specific period of time, usually a year. Gross Domestic Product is one of the geographical or regional concepts related to productive activities that take place within the political borders of that country, regardless of who owns those services. Whether they are local citizens or foreigners as any good or service produced outside the borders of the country is not included in the calculations of the GDP, and there are several ways to measure the GDP, including:

**1- -Final product method.**

This method measures the domestic product at the source, i.e. at the stage of its creation during the production process. The process of adding all the final goods and services that were produced using the available elements of production in society during a certain period of time (year) is done, where the value of the domestic product is estimated at current prices, i.e. Based on the prevailing market prices for all final goods and services in the estimation period (Al-Khatib, Diab, 34, 2013).

**2- Earned entry method.**

This method includes all incomes earned by the factors of production participating in the production process during a year, such as labor, land, capital, and organization. Therefore, the domestic product within this method is all incomes earned from the factors of production of goods and services (wages, rent, interest, Profit) (Architecture, 315, 2016).

**3- Final spending method.**

It is one of the main methods for estimating the gross domestic product. According to this theory, domestic income is viewed from the aspect of final spending on all goods and services that are produced in a specific period of time, usually a year (Ali, 1984).

**The second topic**

**Analysis of the reality of exchange rate indicators and economic growth (Gross Domestic Product) in Iraq for the period (2004 - 2022)**

**The first requirement: exchange rate trends:**

The exchange rate index is one of the important tools in monetary policy, and it is also one of the economic indicators that the investor relies on in directing his investments, especially the foreign investor. The more stable the exchange rate is, it reassures and encourages investors to invest. When the value of the local currency decreases, this leads to a decrease in the exchange rate. The prices of goods exported by the state in the international market, which leads to losses incurred by the investor that were not expected when carrying out investment activity in the country hosting the investment (Al-Samarrai, 2006 , 134) By following Table ( 1 ), it is clear that the Central Bank, through its monetary policy, raised the value of the dinar against the dollar during the period (2004-2020 ) . After it was (1453) dinars in (2004), it became (1166) dinars during the years ( (2012, 2013, and 2014) after which it stabilized at (1190) until the year (2020 ) , and thus we find that monetary policy has achieved a kind of stability in the exchange rate rate, as confidence began to return in the value of the Iraqi dinar and its ability to be a store of value, and this encourages To attract the investor inside Iraq and be one of the positive determinants in creating the appropriate investment environment (Central Bank Economic Report, 2020 , 71) , after which the exchange rate returned to rise significantly to reach ( 1482 ) until the year (2022 ) due to the policy it followed. Monetary policy.

**Table ( 1 ) official exchange rate in Iraq for the period (2004- 2022)**

| Official exchange rate (dinar) | the years | Official exchange rate (dinar/dollar) | the years |
|---|---|---|---|
| 1166 | 2014 | 1453 | 2004 |
| 1190 | 2015 | 1469 | 2005 |
| 1190 | 2016 | 1467 | 2006 |
| 1190 | 2017 | 1255 | 2007 |
| 1190 | 2018 | 1193 | 2008 |
| 1190 | 2019 | 1173 | 2009 |
| 1190 | 2020 | 1170 | 2010 |
| 1474 | 2021 | 1170 | 2011 |
| 1482 | 2022 | 1166 | 2012 |
| | | 1166 | 2013 |

Source : Central Bank of Iraq, General Directorate of Corporate Statistics, statistical bulletins for various years and for the period 2004-2022

**The second requirement: trends in economic growth (Gross Domestic Product**.

Economic growth (Gross Domestic Product) is considered one of the most important macroeconomic variables because it includes all macroeconomic sectors and components of a country, as its data are of great importance in measuring overall economic performance, and are also used to predict future macroeconomic trends as well as making economic policy decisions. Also, economic growth (Gross Domestic Product) represents a reflection of the imbalance occurring in the economy on the one hand, in addition to its expression of the growth occurring in the overall economy, which it highlights when

studying any economy on the other hand, and since the Iraqi economy is a rentier economy that depends primarily on oil production , As the oil sector constitutes the largest part in the formation of the gross domestic product, we find that an increase in economic growth (gross domestic product) is always accompanied by an increase in oil production and its prices in the global market. The development of this output and during the period of the study can be clarified in the following table.

**Table (2) Gross domestic product in Iraq for the period 2004-2022**

| Annual growth rate of GDP * % | (GDP) .(output) Gross domestic prices Current (dollars) | the year |
|---|---|---|
| ------- | 36 .627901762 | 2004 |
| 36.4 | 49.954890353 | 2005 |
| 30.4 | 65.140147197 | 2006 |
| 36.3 | 88.837055195 | 2007 |
| 48.1 | 131.614433712 | 2008 |
| -15 | 111.657581662 | 2009 |
| 24 | 138.516722649 | 2010 |
| 34 | 185.749664444 | 2011 |
| 17.4 | 218.002481737 | 2012 |
| 7.6 | 234.637675128 | 2013 |
| -2.6 | 228.415656174 | 2014 |
| -27 | 166.774109673 | 2015 |
| -0.05 | 166.602488747 | 2016 |
| 12.3 | 187.217660050 | 2017 |
| 21.4 | 227.367469034 | 2018 |
| 2.7 | 233.636097800 | 2019 |
| -21 | 184.369797315 | 2020 |
| 12.7 | 207.889333724 | 2021 |
| 27.2 | 264.182173793 | 2022 |

Source: Prepared by the researcher based on data:

*Reports published in the World Bank, 2022. https://data.albankaldawli.org

The gross domestic product shows the extent of the economic strength or weakness of the state in any country. In Iraq, for example, where there is no thoughtful economic planning that can direct the existing capabilities and resources towards developing the infrastructure for investment in various sectors to raise the level of economic development and increase the welfare of society.

The production of the crude oil sector constitutes the largest contributor to the formation of the gross domestic product in Iraq after 2003, since Iraq depends primarily on exporting oil and obtaining oil revenues in foreign currency, which is considered the basis for the development and renaissance of the Iraqi economy, as it is considered the main feeder for all aspects of the economy . In the country, despite the large production of crude oil, its production has declined , due to the security conditions to which the country has been exposed, and the exposure of oil production companies and oil transport pipelines to significant damage as a result of wars. There remains significant reliance on the oil sector in generating output. Gross Domestic Product (Allawi, 2019, 174) , it is clear from Table ( 2 ) that

the GDP in 2004 reached ( 36,627,901,762 ) dollars, and continued to rise until it reached ( 131,614,433,712 ) dollars in 2008, and reached Growth rate of ( 48.1 % ) , due to the end of the war on Iraq and the lifting of the sanctions that were imposed on the country before that period, as well as the rise in crude oil prices. In 2009, the gross domestic product decreased , reaching ( 111.657581662 ) dollars, with a growth rate that was negative, amounting to -15 % , as a result of the Iraqi economy being affected by the global financial crisis that occurred in 2008, and the decline in oil prices worldwide. After that period, oil prices began to improve gradually in subsequent years, leading to an increase in the gross domestic product (GDP) amounting to ( 234.637675128 ) in 2013, with a growth rate of ( 7.6) . % ) , in which the GDP was at its highest level in that year , and in 2014 the GDP decreased to ( 228.415656174 ) dollars, and the growth was negative, represented by ( 2.6 %) , due to the control of terrorism over the western regions of Iraq and the disruption of sectors The economic decline in those areas and their out of service, as well as the decline in oil prices, continued until 2017, when the gross domestic product reached ( 187.217660050 ) dollars, with an annual growth of ( 12.3 % ) . However, in 2018, the rate of gross domestic product increased to ( 227.367469034 ) dollars, The annual growth was ( 21.4 % ) , as a result of the improvement in the country's economic situation and the return of oil prices to the rise . The domestic product continued to improve until 2020, as it decreased to ( 184.369797315 ) dollars and the annual growth was negative and valued at ( 21- % ) , due to the Corona pandemic that swept the world, which led to the disruption of economic sectors and trade exchange between countries of the world, and in 2021, the gross domestic product returned to the rise, reaching ( 207.889333724 ) dollars, The annual growth rate increased to ( 12.7 % ), and prices rose again to reach (264.182173793) dollars. Annual growth rate to ( 27.2. ( %

**The third topic:**

**The impact of exchange rate fluctuations on gross domestic product.**

**First: Study variables:**

The study relied on the exchange rate index as an explanatory variable and the economic growth index (Gross Domestic Product) for the period 2004 - 2022 and the (13 Eviews ) methodology was used.

**Table ( 3 )Study variables**

| His description | Variable name | Variable symbol |
|---|---|---|
| Explanated variable exchange rate | exchange rate | RE |
| Dependent variable | gross domestic product | GDP |

Source: Table based on the model description.

**Second: Test Phelps Perron Phillips-Perron test**

Before proceeding with the estimation, the order of integration of the time series must also be studied, the ARDL estimate is invalid in the presence of variables at the second difference I (2) , but it needs a combination of variables I(0) and I(1). To specify integration orders, as in the following tables:

**1- Unit root test for levels.**

**Table ( 4 ) Experiments of Jazar al-Wahda at the equator**

| | | | |
|---|---|---|---|
| Null Hypothesis: Unit root (individual unit root process) | | | |
| Series: GDP, ER | | | |
| Date: 09/15/23 Time: 01:16 | | | |
| Sample: 2004S1 2022S2 | | | |
| Exogenous variables: None | | | |
| Newey-West automatic bandwidth selection and Bartlett kernel | | | |
| Total (balanced) observations: 72 | | | |
| Cross-sections included: | | | |
| | | | |
| Method | | Statistics | Prob.** |
| PP - Fisher Chi-square | | 0.990719 | 0.91119 |
| PP - Choi Z-state | | 1.319587 | 0.906513 |
| | | | |
| ** Probabilities for Fisher tests are computed using an | | | |
| asymptotic Chi-square distribution. All other tests | | | |
| assume asymptotic normality. | | | |
| Intermediate Phillips-Perron test results UNTITLED | | | |
| | | | |
| Series | Prob. | Bandwidth | Obs |
| GDP | 0.928342 | 1 | 36 |
| ER | 0.656386 | 2 | 36 |

Table: Outputs of the statistical program (. Eviews 13).

We note from the table above that the unit root tests for the data Not stationary at level Therefore, we will move to the first difference in order to stabilize all study variables.

**2- Unit root test at the first difference.**

**Table ( 5 ) Unit root tests after taking the first differences.**

| | | | |
|---|---|---|---|
| Null Hypothesis: Unit root (individual unit root process) | | | |
| Series: GDP, ER | | | |
| Date: 09/15/23 Time: 01:22 | | | |
| Sample: 2004S1 2022S2 | | | |
| Exogenous variables: None | | | |
| Newey-West automatic bandwidth selection and Bartlett kernel | | | |
| Total (balanced) observations: 70 | | | |
| Cross-sections included: 2 | | | |
| | | | |
| | | | |
| Method | | Statistic | Prob.** |
| PP - Fisher Chi-square | | 11.34018 | 0.02299 |
| PP - Choi Z-stat | | -2.205004 | 0.013726 |
| | | | |
| | | | |
| ** Probabilities for Fisher tests are computed using an | | | |
| asymptotic Chi-square distribution. All other tests | | | |
| assume asymptotic normality. | | | |
| | | | |
| Intermediate Phillips-Perron test results D(UNTITLED) | | | |
| | | | |
| | | | |
| Series | Prob. | Bandwidth | Obs |
| D(GDP) | 0.0 02945 | 6 | 35 |
| D(ER) | 0.041564 | 17 | 35 |
| | | | |
| | | | |

Table: Outputs of the statistical program (. Eviews 13).

We note from the table above that unit root tests are all for the data Integrated at the first difference, and therefore no variable was determined at the second difference, so we have the right to apply the ARDL model test.

**Third : Estimating and analyzing exchange rate fluctuations on gross domestic results.**

**1- Initial estimation of the ( ARDL ) model.**

**Table ( 6 ) Results of the initial estimation of the model ARDL**

| | | | |
|---|---|---|---|
| **Dependent Variable: GDP** | | | |
| **Method: ARDL** | | | |
| **Date: 09/15/23 Time: 01:26** | | | |
| **R-squared** | **0.922045** | **Mean dependent var** | **179.1210** |
| **Adjusted R-squared** | **0.904055** | **SD dependent var** | **52.58231** |
| **F-statistic** | **372.7177** | **Durbin-Watson stat** | **1.731591** |
| **Prob(F-statistic)** | **2.988741** | | |

Table: Outputs of the statistical program (. Eviews 13).

The data in the table above regarding the results of the initial estimation of the ARDL model indicate the relationship between (exchange rate fluctuations) as an independent variable and (Gross Domestic Product) as a dependent variable.

The value of ( R 2 = 0.904055 ) , which shows the ability of the independent variable to influence the dependent variable, and the value of ( DW) reached ( 1.731591 ), meaning there is no correlation in the model. As for the Fisher statistic ( F ), it is less than (5%), meaning that the model is statistically valid. moral.

**2- Bound Test**

**Table7 Bound Test results**

| | | |
|---|---|---|
| **Null hypothesis: No relationship levels** | | |
| **Number of cointegrating variables: 1** | | |
| **Trend type: Rest. constant (Case 2)** | | |
| **Sample size: 33** | | |
| **TestStatistic** | | **Value** |
| **F-statistic** | | **6.79058** |

| | **10%** | | **5%** | | **1%** | |
|---|---|---|---|---|---|---|
| **Sample Size** | **I(0)** | **I(1)** | **I(0)** | **I(1)** | **I(0)** | **I(1)** |
| **30** | **3.303** | **3.797** | **4.09** | **4.66** | **6.027** | **6.76** |
| **35** | **3.223** | **3.757** | **3.957** | **4.53** | **5.763** | **6.48** |
| **Asymptotic** | **3.02** | **3.50999** | **3.62** | **4.16** | **4.94** | **5.58** |
| *** I(0) and I(1) are respectively the stationary and non-stationary bounds.** | | | | | | |

Table: Outputs of the statistical program (. Eviews 13).

The table above shows the results of the Bound Test for cointegration between the study variables if the calculated ( F ) is ( 6.79058 ) and is greater than the tabulated value, as they reached (4.6 6 ), at a significance level (5%), that is, the presence of a cointegration relationship between the variables . Variables.

**3- The short-term impact between exchange rate fluctuations and gross domestic product.**

**Table ( 8)**

**The short-term impact and error correction of exchange rate fluctuations and economic growth (GDP)**

| **Dependent Variable: D(GDP)** | | | | |
|---|---|---|---|---|
| **Method: ARDL** | | | | |
| **Variable** | **Coefficient** | **Std. Error** | **t-Statistic** | **Prob.** |
| **COINTEQ*** | **-0.126217** | **0.026867** | **-4.697807** | **7.463069** |
| **D(ER)** | **0.191147** | **0.046949** | **4.0713872** | **0.000388** |

Table: Outputs of the statistical program (. Eviews 13).

The table above shows the results of the impact in the short term if exchange rate fluctuations, as an independent variable, have succeeded in proving their positive and significant impact on the economic growth index (Gross Domestic Product) at a significance level less than (0.05), that is, when the exchange rates increase by 100 %, economic growth (gross domestic product) increases by 19.%

As for the correction factor ( 0.126217 ), this value is significant and negative, meaning that 12 % of short-term errors can be corrected in a unit of time, represented here by the year, in order to return to the equilibrium situation in the long-term.

**4- The long-term impact between exchange rate fluctuations and gross domestic product.**

**Table ( 9)**

**Results of the long-term impact between exchange rate fluctuations and gross domestic product**

| **Variable *** | **Coefficient** | **Std. Error** | **t-Statistic** | **Prob.** |
|---|---|---|---|---|
| **ER(-1)** | **-0.13846** | **0.109874** | **-1.260189** | **0.2170** |
| **C** | **351.824** | **133.6429** | **2.632570** | **0.0130** |

Table: Outputs of the statistical program (. Eviews 13).

The table above shows the results of the impact in the long term if exchange rate fluctuations, as an independent variable, did not It succeeds in proving its impact on the economic growth indicator (Gross Domestic Product) Because the probability exceeds 5%.

**5- Long-run cointegration equation.**

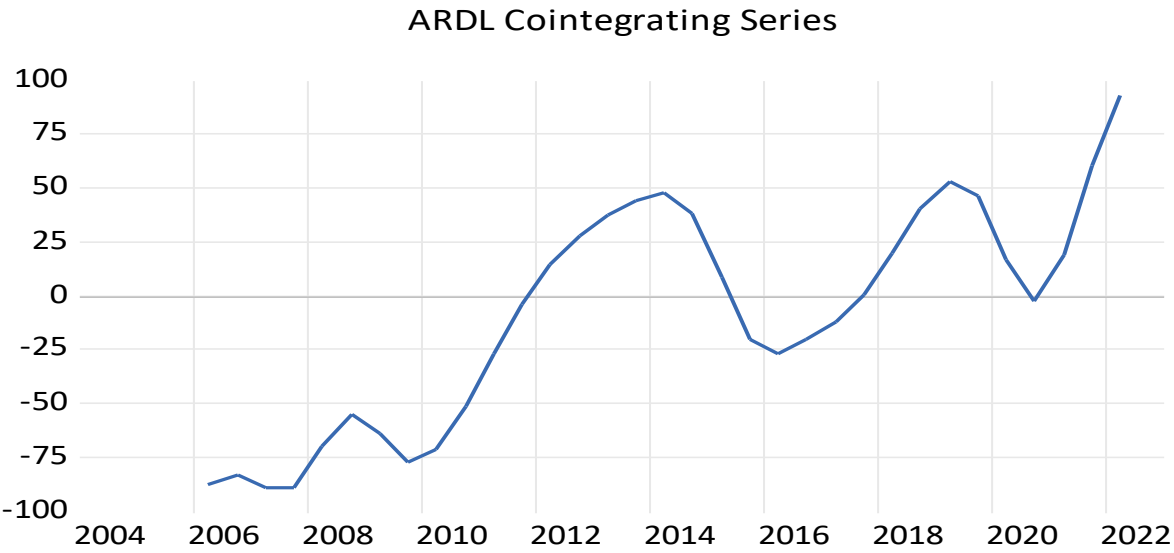
**Table ( 10) Cointegration equation**

| Deterministic: Rest. constant (Case 2) |
|---|
| CE = GDP(-1) - (-0.138462*ER(-1) + 351.824479) |

Table: Outputs of the statistical program (. Eviews 13).

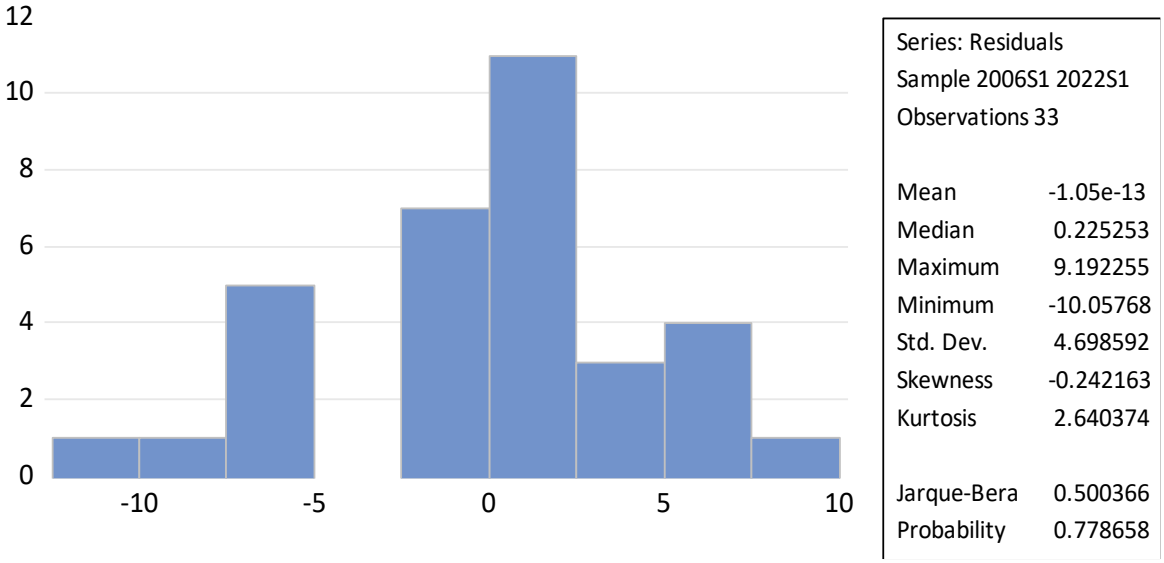
**6- Cointegration series.**

Figure (1) Co-integration series




Source: Figure Output (Eviews 13 ).

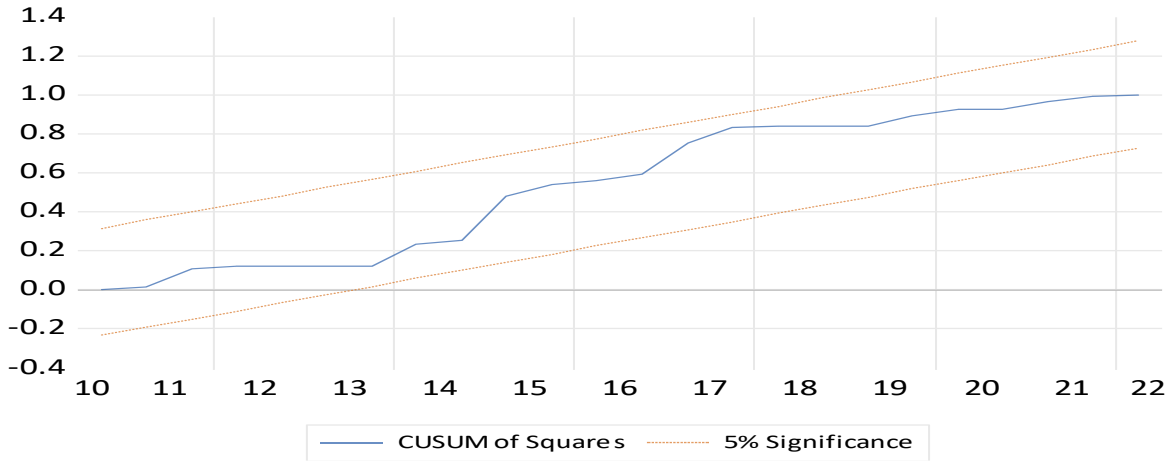
7- **The problem of normal distribution:** The results showed that the estimated model does not suffer from the problem of normal distribution of the residuals, as follows - :




Source: Figure Output (Eviews 13.)

Figure ( 2 ) normal distribution

8- **Structural stability test:** The results of the structural stability of the data showed that it is within the limits of critical values at a significance level (5%). This indicates the stability of the estimated model in the short term and the long term.




**Source: Figure Output (Eviews 13 ).**

**Figure ( 3 ): Results of the structural stability test of the model**

**Conclusions and Recommendations**

**First: conclusions.**

1- We note through the value of ( R 2 = 0.904055 ) that it shows the ability of the independent variable, the exchange rate, to influence the dependent variable , meaning that exchange rates explain 90% of the changes occurring in the gross domestic product.
2- DW was ( 1.731591 ), meaning there is no relationship in the model between the study variables.
3- The Fisher statistic ( F ) is less than (5%), meaning that the model is statistically significant.
4- The results of the Bound Test for co-integration between the study variables showed that the calculated ( F ) was ( 6.79058 ), which is greater than the tabular value, as they reached (4.6 6 ), at a significance level (5%), meaning the existence of a co-integration relationship between some variables.
5- I showed results Impact in The term The short one that Fluctuations Prices Exchange ,as a variable independent may be I passed in Proof Its effect And the positive And Moral in Indicator Economic Growth (GDP) ( Y ) And at level Moral less From (0.05), i.e when the increase in Prices Exchange By 100% van Economic growth (GDP) rises By an amount 19.%
6- I showed results Impact in The term the long if that Fluctuations Prices Exchange ,as a variable independent did not succeed in Proof Its effect in Indicator Economic Growth (GDP) ( Y ) Because the probability exceeds 5%.

**Second: Recommendations.**

1- Importance activation Role the bank Central In a way Larger from Okay monitoring the changes in Prices Exchange And strive the permanent to discount price Cashing Dinar Opposite Currencies The other.
2- interest By factors Influential in price Exchange because Its effect Reflected In a way big on Prices Exchange.

3- Pursuit to Governorate on Independence the bank Central from Okay Governorate on value the currency And even no It is repeated what It happened in a contract The eighties And the middle The nineties
4- Pursuit to Use Systems Exchange Most Relevance for economics The Iraqi With what It fits And circumstances Economic that passes With it.

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