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Measuring and analyzing the impact of international financing sources on the Iraqi balance of payments for the period (2004-2022)

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Abstract

This study investigates the influence of international financing sources on the balance of payments of Iraq over the period spanning from 2004 to 2022. Through rigorous empirical analysis, various forms of international financing, such as foreign aid, loans, and investments, are scrutinized to discern their impact on Iraq's balance of payments dynamics. By employing statistical and econometric methods, the study aims to provide insights into the extent to which international financing has contributed to shaping Iraq's economic stability and external financial position during the specified timeframe. Understanding these relationships is crucial for policymakers and international financial institutions seeking to devise effective strategies for promoting sustainable economic development in Iraq.

Keywords: Iraq, balance of payments, international financing, foreign aid, loans, investments, economic stability, empirical analysis, econometric methods, sustainable development

Introduction

The study aims to analyze and measure the impact of international financing sources, represented by foreign direct investment and external loans, on the Iraqi balance of payments during the period (2004-2022). The study also started from the hypothesis that there is a direct impact of international financing sources on the Iraqi balance of payments during the period of the study, but this the impact varies from one source to another according to the nature and type of each source. To achieve the goal of the study and prove its hypothesis, the analytical method was relied upon to analyze the trends of the study variables and the relationship between them, as well as the quantitative method to determine the type and size of the effect between each of the independent variables and the dependent variable.

We relied on time series data for the period (2004-2022), which was divided into semiannuals, and after conducting a stability test by Phelps-Perron, it was found that all variables became stationary after the first difference. Accordingly, an (ARDL) model was built and estimated. In addition, a group was conducted Diagnostic tests proved that the model was free of standard problems. The study reached a set of conclusions. On the analytical side, it was found that foreign direct investment declined during the study period, while foreign loans took an increasing trend in general, despite their fluctuation in some years. As for the balance of payments, it formed a surplus for most of the study period. As for the results of the standard side, there was a positive and significant relationship between foreign direct investment and foreign loans and the balance of payments in the short and long terms. The study also proposed a set of proposals, the most prominent of which is for the Iraqi government to evaluate the interest from international financing sources and develop future and programs for how to maximize the benefits and reduce the losses associated with international financing sources.

The study Problem

International finance is the focus of great interest by countries, companies, and investors from an economic standpoint when it comes to its feasibility in addressing the imbalance in the balance of payments and achieving economic stability. Since Iraq suffers from a shortage in its domestic savings because of economic isolation before 2003, it turned to external

sources of financing after Economic openness with the aim of financing development and addressing the imbalance in the balance of payments. As a result, continuous discussions have emerged regarding the motives, determinants, and social, economic and political impacts of external financing. From this standpoint, the problem of the study can be formulated with the following question: Are there positive effects of the sources of external financing (foreign investment and external loans) In improving the situation of the Iraqi balance of payments?

Study hypothesis

The study is based on the hypothesis that: There is a direct impact of international funding sources on the Iraqi balance of payments, but the size of this impact varies according to the nature and type of each funding source.

The importance of studying

The importance of the study comes from shedding light on an important and vital topic, which is the sources of international financing that Iraq resorted to after 2003 and the extent of Iraq's ability to benefit from these sources in achieving stability and improving the balance of payments.

Study objective

The study aims to identify the sources of international financing and the balance of payments and the relationship between them from a theoretical and analytical perspective, then quantitatively to know and determine the type and size of the impact of international financing sources on the Iraqi balance of payments.

The limits of the study

- 1. Spatial borders: Iraq.
- 2. Time limits: Duration (2004 2022).

Study variables

- 1. Dependent variable: Balance of Payments.
- 2. Independent variable: sources of international financing (foreign investment and external loans).

Study methodology

The deductive approach was used, which goes from the general to the specific, that is, from the overall framework to the partial framework, and diagnosing the reasons leading to this, then relying on the analytical and then the standard method through the use of standard tests that are appropriate to the nature of the variables and data studied in order to reach the impact of international financing sources. In the Iraqi balance of payments.

Conceptual framework

1. Concept International Finance

Refers to the concept of international finance to Transmission of heads All the money Its shapes Among the countries of the world Different, and done this Move across group from Brokers Millions whether He was That's in Bank form Insurance companies or Savings funds or Money markets to not That's from Institutions Mediation Finance, As well as Transmission of heads Money with a purpose Getting The biggest return maybe, As he points out term International finance to The adjective that Control practical Financing from where Being Internationally, and this is Means that Head move Money in this The framework will be outside the political borders of the countries of the world. As promised Finance prop It is essential for achieving economic development, as economic institutions resort to it To provide Production supplies And pay the dues and expenses, And it varies Concepts Finance Depending on the sources, it refers to the sum of cash and non-cash funds obtained by a country In order to operate these sources in different fields (Othman, 2022: 4-5) ^[2].

knowing that nature International For financing it turns out How different countries are Surplus area And disability in an item head the money, It is the decisive factor in Determine the direction that He takes it head Money from nation to Other Or from one market to another The form of the relationship between saving And investment In the country.

It is not intended With movements Heads Money transfer heads In-kind funds either in Form machines And equipment or different origins, This enters into Trade field International for goods, but What is meant by moves is the movement of heads Money in Operations form Lending And borrow between countries, And divided Moves International capital As General To movements Official And moves especially, Where the movements are Official loans that Its complexity Governments And bodies With international institutions, which take Sunday The following images: Loans Governmental Bilateral, multilateral regional loans, Loans External Multiple the parties.

It is defined as a group Institutions And markets Finance, which Complete from During it transition Money from Savers to Investors or From donors to recipients during All mechanisms, which Include exchange And possession Assets And tools Finance different (Al-Bayani, 2020: 4).

International finance can also be defined on that it Providing the necessary funds to carry out and develop economic projects in times of need, as it concerns cash amounts, not goods and services, and it must be of the required value at the required time. (Othman, 2022: 5) ^[2].

The above can be defined International finance is a matter of resources the support Necessary To implement Programs And projects Private that Contribute in Achieving common goals and objectives between donor and institutions To achieve requirements development, Which may be Be In the form of donations or Donations or Grant Cash Or in kind.

2. Importance International Finance

Every country in the world has an economic and development policy that it follows or works to achieve in order to achieve well-being for members of society, and that policy requires setting plans and policies and taking them into account. Financing capabilities, knowing that no matter how diverse the projects are, they need financing, as financing is the lifeline for these projects, and countries and institutions resort to it when there is a lack of local savings. whether in Disability condition Cash or Pay Its obligations (Al-Jabbari, 2009: 4, 8)^[12].

The importance of international financing for recipient and donor countries can be determined as follows:

1. Importance Finance International For countries Recipient

They often target countries receiving funding sources Programs And plans economical development and social, And raise level livelihood of community members, And confront Impotence In balance payments, And block Gap between Investments required And savings The investigator, as maybe be borrowing from the outside To support Domestic consumption And the province On the level My living specific.

It may also be financing External in Form of foreign investments directly, Where these investments are distinguished With technology Advanced And experiences Administrative, in addition to project interaction Funded from During investments Foreign Direct with international markets, Which leads to more Production from Goods The midwife for export, It also works to provide... Employment opportunities, quality improvement Production (Adhir, 2015: 23)^[1].

2. Importance Finance International countries Donor

From Destination consideration Donors, there are sovereignty For goals and motives Political with regards For funding flowing from official sources Duality And multiple Parties, noting that political factors play a prominent role in Determine the cost And size flows money, Where donor countries try to provide funding For countries Other To achieve several goals, including: Surplus discharge Commodity she has, and more Exports (Abdul Ghani, 2021: 7-8)^[15].

It can be said, that the importance of flows Heads Money varies between Countries of the world Depending on the destinations look between Recipient countries and the state donor capital, It also varies in quality Flowing capital, where it has become International finance Sunday Most important Mechanisms Globalism Which is formed in Its framework relations international, Which Spins Turn it around An ongoing debate among specialists About Mada necessity Accreditation on International finance As one Most important Mechanisms Achieving development Within countries, the importance of financing can Divide it According to Recipients and donors.

3. Concept Balance Payments

Incarnated Transactions And capital flows between countries Balance Payments, which constitute Labneh the basic that get up on her analysis the situation external to any country with the outside world, Considering Balance Payments Women who reflect the national economy with the outside world.

And longer Balance Record payments Complete in it registration Rights And debts Emerging Between any country and the outside world, It also reflects the components of the balance of payments degree Industrial progress In any state, It can also Determine the financial position of any country with the world External through the balance of payments, as it is known On it An organized accounting record of all economic exchanges that took place between... between Residents of a country and non-residents in Period of time Certain usually what It will be one year (Jamiat, 2019: 7)^[13].

It is also known as an accounting document that shows the situation resulting from the operations taking place within a year between the economic institutions of residents in the national sphere and all other institutions in the outside world (Jamiat, 2019: 7)^[13].

From the point of view of the International Monetary Fund, the balance of payments is defined as a record He depends on Constraint Double, eats statistics Duration Temporal specific for to the changes in ingredients or value Origins Economics nation what because of Treat her with Rest countries (Jean & Louis, 2005:219)^[16].

From the above definitions, the balance of payments can be defined as a statement statistical comprehensive Summarizes And in a systematic way Transactions economic that Done between Residents In a particular country And residents in Countries the other, And that's during Duration Temporal Certain usually what Be general.

4. Ingredients Balance Payments

He swears Balance Payments to Accounts And scales Secondary, in which Includes all A group of them from Financial transactions And economic identical from where nature, And that Accounts are in condition inability or Surplus according to transactions, unless that all of them submit Theoretically the principle Constraint double, Where international transactions are recorded in sides (debtor and creditor) The balance of payments is divided vertically to Two parts essential, They are : (Ben Taria, 2017: 4-5)^[10].

- 1. Debit side: All transactions that occur are recorded in it Any consequences commitment By paying For countries The other.
- 2. Credit side: recorded in it all Transactions that It entails any rights of the state towards other countries.

As for horizontally, in section Balance Payments to accounts or Scales The following

- **1.** Account Processes The slave girl: Includes Transactions The perspective (Balance commercial) And transactions not The perspective (Balance services), as well account Transfers from side One, and this can be explained as follows:
- a) Libra Commercial: Pass on Net externality, meaning it expresses the gap Among exports And imports.
- b) Balance Services: Which includes all Services Mutual between Countries, including the income of workers abroad And transportation Tourism, insurance and revenue Heads Money.
- c) Account Transfers from side One: Which includes Payments Converted from side One, that be in general For a purpose Help, including Giveaways gifts and subsidies, Note that aid may Be from Individuals or Countries Or organizations International.
- 2. Account head the money: This is the account you register with Movements Heads Money between Country And the rest Countries The world, he swears To several scales as follows : (PSDAT, 2019: 244-245)^[7]
- a) Account head the money long Term: And he means with it Movements Heads Money from State to the outside and vice versa, which increases on general, Such as Investment The foreigner Direct And loans External.
- b) Account head the money short Term: And he means with it Movements Heads Money from Country to the outside And vice versa, Which is less on General, note that Moves Heads Money short Term It is done as Automatically, for several reasons, including speculation, as well as achieving a greater profit, as this money is looking for quick profit, and also capital flight as a result of circumstances. not Especially appropriate from developing countries to developed countries.

3. Account Omission And the error: He praises Balance Payments As identical Accounting because all A transaction is recorded twice Theoretically, it should be the total Total equal, but may be The sides are unequal, Because of multiple sources the information, And the difference Between the two sides he scores In an account Omission And the error (Bakri, 2002: 298-299) ^[9].

5. The concept of foreign direct investment

Foreign direct investment is one of Most important sources Financing for countries, especially developing countries, that seek to achieve economic development, It is a tool of tools development means production, Highlights Role those investments As a source of financing for developing countries due to weakness Savings patriotism, And a connection Grants And loans Foreign Conditionally Political And economical May be not Appropriate, as developing countries lack the management and technical expertise that is available in foreign direct investments, in addition to the technological development that characterizes these investments. (Omar, 2017: 7) ^[4].

can be defined Investments Foreign direct it those investments that He owns it foreigners, And they manage it inside Country stewardess, whether She was Private property or Shared in which He is for them right Administration In which, As for Box criticism Internationally, these investments are defined as: investment external reflects desire Investor person And the resident in nation Concerned in Get on benefits Always in institution present in nation other, And it is for him In which influence big on level Administration (IMF, 2003: 2) ^[17].

that Investments Foreign Direct is Projects that He evaluates it Investor The foreigner And he manages it As for because of Full ownership For the project, or Participation result in head Money to be for him right Management, even in that that He is Investor The foreigner Individually or a company Foreign or A branch For one of the companies Foreign, it was mentioned Box criticism International that it He should that Increase a class Investors Aliens on 50% of head money The project, or Owns 1.0% or more Of the project shares, which It follows on him that Be an investor the control the Actual on Policies and project decisions.

6. The concept of external loans

External loans are bonds you sign People Natural or Legal interest for the benefit of others who are outside Domain Country The recipient, and it is in accordance with the rules Business and foundations Finance Prevailing According to Due to circumstances market, with Pledge Refund the principal of the loan And he paid the benefits about her According to conditions certain, Note that whenever He was Domestic saving is limited in comparison Size Required investments increased the need to Finance The foreigner LSD Gap Financing in Resources Custom local For investment. External loans are also a good way to increase savings and then invest and influence the current account of the balance of payments for the purpose of correcting it according to economic programs (Aday, 2016: 12)^[3].

Practical framework

First: Study variables

1. Dependent variable - Balance of Payments (Y): An accounting record in which all economic exchanges

between residents at home and residents abroad are included during a specific period of time estimated at a year, and in which all goods, services, foreign aid, donations, and the movement of capital and gold entering and entering the country during a year are recorded (Gopal, 2016: 48)^[6].

- 2. Independent variables (international finance): It consists of the following variables:
- a) Foreign investment (X 1): A group of foreign companies, international companies, or multinational companies that are headquartered within the country and conduct their business outside the borders of the country in which they reside. Or a group of companies that want to work outside the country's borders and manage their business in the host country of the home country to achieve economic and financial goals. And long-term or short- term political (Al-Batani, 2015: 123).
- b) External loans (X 2): These are amounts borrowed by a country. The duration of the loan due to the party granting the loan is more than one year and is paid in foreign currency. The loan is paid through the national government or official public bodies affiliated with it. The borrowing country is obligated to repay it with interest during the agreed upon period. Between the two parties (Issa and Majeed, 2021: 314)^[5].

Second: Mathematical formulas of the standard model

Y=B 0 + B 1 (X 1) + B 2 (X 2) + U i

Third: Study data

| Table 1: Study variables in Iraq for the period (2004-2022) (billion |
|---|
| dollars) |

| Balance of payments (Y) | External loans (X2) | Foreign direct investment (X1) | The years |
|-------------------------|------------------------|-----------------------------------|-----------|
| (0,63) | 10,87 | 0,3 | 2004 |
| 41,16 | 78,83 | 0,52 | 2005 |
| 10,3 | 61,13 | 0,38 | 2006 |
| 22,69 | 50,20 | 0.97 | 2007 |
| 24,39 | 51,52 | 1,86 | 2008 |
| 2,97 | 41,21 | 1,60 | 2009 |
| 1,08 | 57,03 | 1,40 | 2010 |
| 34,05 | 61,27 | 2,08 | 2011 |
| 32,03 | 57,71 | 3,40 | 2012 |
| 32,25 | 58,72 | (2,34) | 2013 |
| (14,55) | 57,35 | (10,18) | 2014 |
| (17,83) | 19,14 | (7,57) | 2015 |
| (3,33) | 23,37 | (6,26) | 2016 |
| 5,35 | 28,11 | (5,03) | 2017 |
| 29,9 | 27,84 | (4,89) | 2018 |
| 3,38 | 27,54 | (3,08) | 2019 |
| (17,43) | 26,39 | (2,86) | 2020 |
| 23,23 | 135,59 | (2,64) | 2021 |
| 27,729 | 130,21 | (2,09) | 2022 |

Source: Prepared by the researcher

Fourth: Drawing the study variables: It is clear from the graph of the study variables that they are not static and indicate the instability or stability of the time series as a result of the continuous rises, falls, and fluctuations in the series for the independent variables and the dependent variable, see Figure (1).

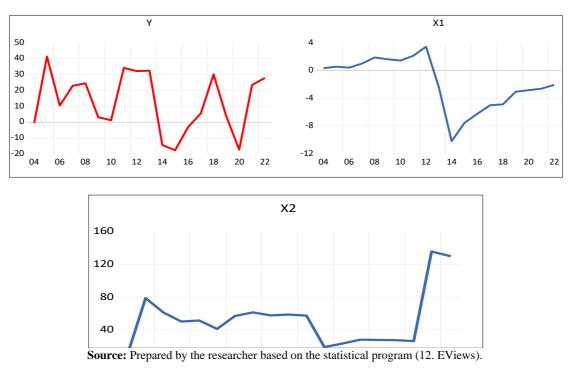


Fig 1: Drawing of the study variables.

Third: Testing the stability of time series: Through the results of the Phillips-Perron test and to ensure that there is no spurious regression, it is noted that the independent variables (international finance) are not stationary in the level, whether there is a constant or a constant and a trend, while the dependent variable (the Iraqi balance of payments) is stationary. When there is a constant and without a

directional constant, but when there is a constant and a direction, it is not stationary. After taking the first difference, it is noted that all the independent and dependent variables are stationary, whether with a constant or a constant and a direction or without them, at a significance level (5%). See Table (2).

Table 2: Phillips-Perron test

| Null hyp | othesis: the variable has a | unit root | | |
|--------------------------|-----------------------------|-----------|---------|---------|
| | At Level | | | |
| | | Y | X1 | X2 |
| | t-Statistic | -3.0138 | -1.7126 | -1.8884 |
| With Constant | Prob. | 0.0428 | 0.4168 | 0.3339 |
| | | ** | n0 | n0 |
| With Constant & Trend | t-Statistic | -3.0538 | -1.9279 | -1.9496 |
| | Prob. | 0.1321 | 0.62 | 0.6087 |
| | | nO | n0 | nO |
| | t-Statistic | -2.2648 | -1.4493 | -0.064 |
| | Prob. | 0.0245 | 0.1352 | 0.6547 |
| Without Constant & Trend | | ** | n0 | n0 |
| | At first difference | | | |
| | | d(Y) | d(X1) | d(X2) |
| | t-Statistic | -5.9411 | -5.8634 | -5.9653 |
| With Constant | Prob. | 0.000 | 0.000 | 0.000 |
| | | *** | *** | *** |
| | t-Statistic | -5.8353 | -5.7984 | -5.9322 |
| With Constant & Trend | Prob. | 0.0001 | 0.0002 | 0.0001 |
| | | *** | *** | *** |
| | t-Statistic | -6.0343 | -5.9354 | -5.916 |
| Without Constant & Trend | Prob. | 0.000 | 0.000 | 0.000 |
| | | *** | *** | *** |

Source: Prepared by the researcher based on the statistical program (12. EViews)

(*) Significant at (10%); (**) Significant at 5%; (***) is significant at (1%) and (no) is not significant.

Source: Prepared by the researcher based on the statistical program (12. EViews)

Relying on the theoretical aspect and considering the stillness and stability of the time series at the first

difference, an autoregressive model with slow gaps can be used after converting the data to semi-annual to become (38)

Fourthly: Standard analysis results

1. Initial estimation: Based on the estimated model, the explanatory power through the coefficient of determination reached (0.57), which means that changes in international financing sources explained (57%) of the change in the Iraqi

balance of payments (Y1), while the variables explained Others that are outside the standard model (43%). As for the corrected coefficient of determination, it also reached (0.50), and through statistical analysis (F), it was found to be significant at the level of (1%), and therefore, the model is considered valid for forecasting and planning, see Table (3).

| | Dependent V | ariable: Y | | |
|--------------------|-----------------------------|--------------------|-------------|----------|
| | Method: | ARDL | | |
| S | ample (adjusted): 2004S2 20 | 02282 | | |
| (| Selected Model: ARDL (1, 0, | , 0, 0) | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
| Y(-1) | 0.339159 | 0.13353 | 2.53995 | 0.0163 |
| X1 | 1.750364 | 0.802568 | 2.180955 | 0.0369 |
| X2 | 0.199549 | 0.080817 | 2.46915 | 0.0193 |
| С | 2.608498 | 6.369498 | 0.40953 | 0.685 |
| R-squared | 0.571033 | Mean dependent var | | 12.81373 |
| Adjusted R-squared | 0.501844 | SD dependent var | | 18.55182 |
| F-statistic | 8.253318 | Durbin-Watson stat | | 1.477561 |
| Prob(F-statistic) | | | 0.000 | 0048 |

Table (3): Initial estimation of the model.

Source: Prepared by the researcher based on the statistical program (12. EViews)

2. Cointegration test: To test Existence Relationship Homeostasis long Term between (International financing sources) as a variable independent and balance of payments As a variable continued, using a test the border And statistics (F-Bounds Test), which is a statistical tool for examining the relationship between two or more variables as independent variables, a dependent variable, and from results the test, It becomes clear that value Statistics is (5.798), Which Excellence Its value limit Supreme when level indication (5%), Therefore, we reject the null hypothesis (H0) and this is Indicates clearly to Existence relationship Integration subscriber long term between Sources of international financing and the balance of payments in Iraq.

3. Short-term relationship: The results showed the following

- a) There is a direct relationship between foreign investment and the balance Payments, and increasing foreign investment by one unit leads to a surplus in the balance of payments of (1.75%) at a significance level of (5%). This is consistent with the hypothesis of the study and the economic logic that confirms that increasing the flow of foreign direct investment leads to increased employment, technology transfer, and increased exports. Improving the balance of payments.
- b) There is a direct relationship between external loans and the balance of payments, and if external loans are one unit, this leads to a surplus in the balance of payments of (0.199%) at a significant level (5%). This is consistent with the hypothesis of the study and the

economic opinion that emphasizes the importance of loans in improving the position of the balance of payments when used. In building infrastructure such as roads and bridges, which increases trade and investment opportunities and achieves positive growth rates, which reflects positively on the balance of payments.

T. The results showed the value of the error correction parameter ECM = (-0.660) and is negative and significant at the level of significance (5%). Thus, it fulfills the necessary condition for the long-term relationship between the variables, and that the short-term imbalance in the balance of payments will take a year and a half to return to its equilibrium value in the long term as a result of fluctuations in the balance of payments. International finance variables because 1/(0.660)=1.51 year.

4. Long-term relationship: The results showed the following

- a) There is a direct relationship between foreign investment and the balance Payments, and increasing foreign investment by one unit leads to a surplus in the balance of payments of (2.64%) at a significance level of (5%). This result is consistent with the hypothesis of the study.
- b) The relationship between external loans and the balance of payments is direct, and if external loans are one unit, this leads to a surplus in the balance of payments of (0.301%) at a significant level (5%), and this is consistent with the hypothesis of the study. Look Table (4).

| Table 4: | Short- | and | long-term | results. |
|----------|--------|-----|-----------|----------|
|----------|--------|-----|-----------|----------|

| | ARDL Long Run Form | n and Bounds Test | | |
|----------|----------------------------------|-----------------------------------|-------------|--------|
| | Dependent Variable: D(Y) | | | |
| | Selected Model: ARDL (1, 0, 0, 0 |)) | | |
| | Case 4: Unrestrict | ed Constant and Restricted Tre | nd | |
| | The | effect is short-term | | |
| | Conditional Error Cor | rection Regression | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| С | 2.608498 | 6.369498 | 0.40953 | 0.685 |
| Y(-1)* | -0.66084 | 0.13353 | -4.94901 | 0.0000 |
| X1** | 1.750364 | 0.802568 | 2.180955 | 0.0369 |
| X2** | 0.199549 | 0.080817 | 2.46915 | 0.0193 |
| | * p-value incompa | atible with t-Bounds distribution | on. | |
| | ** Variable interpreted | as $Z = Z(-1) + D(Z)$. | | |
| | Ι | long-term effect | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| X1 | 2.648693 | 1.192568 | 2.220999 | 0.0338 |
| X2 | 0.301962 | 0.123357 | 2.447861 | 0.0202 |

Source: Prepared by the researcher based on the statistical program (12. EViews)

5. Standard problem tests

- a) Autocorrelation test: from results Breusch: Pagan LM test during value Probability that It reached (0.0742). notice that This is amazing the value higher than Its value when level Significant (5%). And so Acceptance hypothesis Nothingness (H0), which indicate to non-Existence The autocorrelation problem in form Standard Estimated and rejected the alternative hypothesis (H1).
- **b)** Error variance heterogeneity test: Results a test (Breusch-Pagan-Godfrey) and through the probability of the statistic for this test (0.5300), which is higher than its value at the level of significance (5%), this Means that it maybe Acceptance hypothesis Nothingness (H0) Which denies the existence of the problem in the estimated standard model and rejects the alternative hypothesis (H1), see Table (5).

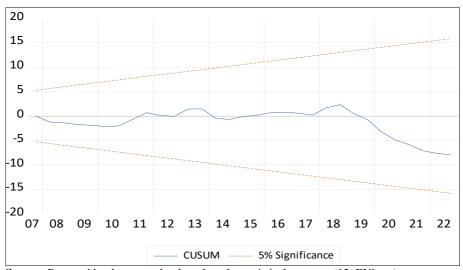
Table 5: Diagnostic tests for the model.

| | Breusch-Godfrey Serial | Correlation LM Test: | |
|---------------|------------------------------|-----------------------------|--------|
| | Null hypothesis: No serial c | correlation at up to 4 lags | |
| F-statistic | 2.406346 | Prob. F(4,27) | 0.0742 |
| Obs*R-squared | 9.723835 | Prob. Chi-Square (4) | 0.0453 |
| | Heteroskedasticit | y Test: ARCH | · |
| F-statistic | 0.402595 | Prob. F (1,34) | 0.5300 |
| Obs*R-squared | 0.421289 | Prob. Chi-Square (1) | 0.5163 |

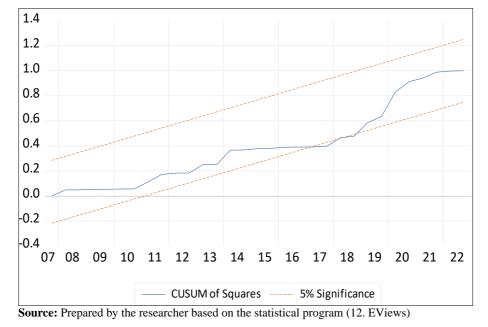
Source: Prepared by the researcher based on the statistical program (12. EViews)

T. Structural tests: The two tests (CUSUM) and (Squares CUSUM) were used to ensure that there were no structural changes in the data used and to determine the extent to which the long-term coefficients match the estimates of the short-term coefficients. The results were shown in the two

tests (CUSUM) and (Squares CUSUM) by examining the graph lines. For these two tests, it is clear It appears within the critical limits (upper and lower limits) at the significance level (5%), see Figures (2) and (3).



Source: Prepared by the researcher based on the statistical program (12. EViews)





Conclusions and suggestions

First - Conclusions

- 1. Foreign direct investment took two trends during the first study period, from 2004 to 2012, as it recorded positive values and an increasing trend during this period. The other trend was during the period 2013 to 2022, as it recorded negative values as a result of the foreign investor's reluctance to come to Iraq, as well as the departure of old investments.
- 2. Foreign loans tended to increase in general during the study period and reached their peak in 2021 when they reached (\$135.59) billion due to the decline in oil prices as they were affected by the Corona crisis.
- 3. The results of the standard aspect proved the existence of a cointegration relationship between international financing sources and the Iraqi balance of payments.
- 4. The short-term results showed that there is a significant and positive relationship between foreign direct investment and external loans and the balance of payments, and that increasing them by one unit leads to achieving a surplus in the balance of payments by (1.75%) and (0.199%), respectively, and this is consistent with the hypothesis of the study.
- 5. The results of the long term did not differ from the short term. There was also a positive and significant relationship between foreign direct investment and external loans and the balance of payments, and increasing them by one unit leads to achieving a surplus in the balance of payments by (2.64) and (0.301%), respectively. This result is consistent with the hypothesis. The study, as for international aid and grants, did not have an impact on the balance of payments, which is contrary to the hypothesis of the study.
- 6. Imbalances in the balance of payments take a year and a half to return to the equilibrium position in the long run, as shown by the error correction parameter, whose value was ECM = (-0.660). It is negative and significant at the level of significance (5%), as it thus fulfills the necessary condition for the long-term relationship between the variables.

Second: Proposals

- 1. The Iraqi government must evaluate the benefit from international financing sources and develop future plans and programs on how to maximize the benefits and reduce the losses associated with international financing sources.
- 2. It is necessary to work on developing local savings and reducing dependence on external sources of financing to reduce pressure on the balance of payments by increasing the volume of local savings and benefiting from them to finance economic activity instead of relying on external sources of financing. This is one way to achieve financial self-sufficiency and reduce dependency on aid. and external loans, increases the independence of the state and its institutions, and maintains its financial sovereignty.
- 3. Working to update laws and legislation to encourage foreign direct investment in accordance with the circumstances and changes occurring in the world in order to increase competition and reduce red tape.
- 4. Increase support for foreign investment in Iraq for the purpose of reducing the technological gaps that Iraq suffers from, due to the acute lack of technical, administrative, and technological knowledge that requires the involvement of foreign companies to fill this gap.
- 5. Working to reduce dependence on external loans because they represent a burden on the state and bearing responsibility for future generations, and trying to focus on attracting foreign investments, for the purpose of building infrastructure and contributing to economic development.

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