AMERICAN JOURNALS
Open Access, Peer Reviewed Journals

American Journal of Business Management, Economics and Banking
ISSN (E): 2832-8078 Volume 22, | March - 2024

THE IMPACT OF INTEREST RATE AND FOREIGN EXCHANGE CHANGES ON PUBLIC DEBT IN IRAQ

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A B S T R A C T

The study analyzed the reciprocal relationship between changes in interest and foreign exchange rates and public debt in Iraq during the period from 2004 to 2023. The research included the concept of public debt, the interest rate and the factors affecting it, the concept of the exchange rate and the factors affecting it, as well as the concept and importance of public debt.

Data were used from the Central Bank of Iraq for the period (2004-2023). The study found that there was a relationship between the independent variables represented by the interest rate and the exchange rate on public debt in the short term and the long term. The cointegration program was used, and an autoregressive study of distributed time gaps using ARDL test.

K E Y W O R D S

Publicc debt, exchange rate, inflation, ARDL.

Introduction

According to the government, the outstanding Iraqi public debt amounts to $76 billion, of which $55 billion is domestic debt and $21 billion is foreign debt.

The Iraqi government said that the public debt will be paid through federal government appropriations and the issuance of government bonds and treasury bonds.

As oil prices fell repeatedly after 2014, the government needed domestic debt to finance public expenditures.

The Central Bank of Iraq owns 63% of the local debt in the form of government bonds and treasury transfers, while the remaining 37% is held by 3 government banks: Al-Rafidain, Al-Rasheed, and Al-Iraqi Trade, on the one hand, and the role of the exchange rate and interest rates in moving Iraqi economic activity, on the other hand. Assuming there is a sound policy in the Iraqi economy.

1.1. the study Problem:

Given the mutual influence between fiscal policy and monetary policy and the inevitability of coordination between them, especially in light of domestic consumption pressures, difficulties in

developing and exploiting potential savings, and the decline in foreign investment flows, especially after problems emerged due to concerns about the currency, insufficient control over inflationary trends, rising prices, and increasing public debt. It can have numerous economic consequences, which may lead to an imbalance in the effective distribution of available resources to different sectors of the economy.

1. 2. Study hypothesis:

The study aimed to test a basic hypothesis:

There are direct and indirect relationships between changes in interest rates, foreign currencies, and domestic and foreign public debt) and the basic hypothesis leads to a number of sub-hypotheses:

Higher domestic interest rates increase domestic public debt.

High foreign exchange rates lead to an increase in external public debt.

1 .3. Objectives of the study:

In addition to testing the basic hypothesis, the study aimed to:

Determine the theoretical framework for studying the main variables, where interest rates and foreign currencies are considered independent variables and public debt is the dependent variable.

Estimating the quantitative relationship between interest rates and foreign currency changes in public debt, as well as identifying general trends for each of the main study variables and some macroeconomic variables such as (GDP growth, saving,...).

2. Previous studies:

- Faraj Abdel Rahman, Hosni Mahran, 2020, The impact of interest rate and foreign exchange changes on public debt in Egypt. The study reached a set of results, most notably the presence of an indirect effect of the decline in economic growth on the development of public debt through the decline of the tax revenue channel in the general budget, With the existence of a reciprocal relationship, as interest rate increases lead to an increase in public debt through the general budget deficit variable as an intermediary variable, and it was also shown that the impact of the exchange rate on foreign public debt in the short term is weak, compared to the high impact of the interest rate on the development of domestic public debt from Through the channel of public debt burdens as one of the items of public spending, it was also observed that there is an indirect effect of gross domestic saving on public debt through the channel of interest rates on the one hand, and the decline in gross domestic product on the other hand, which indicates that the impact of changes in interest rates is more The effectiveness of the impact of changes in exchange rates on public debt, both domestic and foreign.
- Bidaa Jawad Kazem, Alaa Jassim Muhammad, measuring the impact of public debt on the exchange rate in Iraq, for the period (2004-2022). The study reached a number of conclusions, perhaps the most prominent of which is the existence of a direct relationship between government debt, both parts (internal and external), on the parallel exchange rate. in Iraq .
- Maryam William Barsoum, 2022, study of some economic variables and their impact on the size of the local public debt in Egypt during the period from, it was found that the size of the local public debt is greatly affected by some economic variables that were used in the statistical model and that there is a very strong correlation with the tax revenue, as it represents one of The most important

sources of revenues and the extent of their contribution to financing public debt, both domestic and external, which leads to a decrease in the deficit in the state's general budget.

3. The theoretical framework of public debt, exchange rate, interest rate.

3. 1. The concept of public debt

The exacerbation of the debt problem has emerged as one of the most prominent problems faced by countries, especially developing countries, including Iraq. It has transformed from a mere problem into a chronic crisis, especially after the crises that the country has been exposed to, which resulted in a tendency towards excessive domestic borrowing, in addition to external debt, (Badr, Majid Farhan, 88, 2007).

Public debt refers to everything that public entities in the country borrow from others, whether locally or externally. To finance its business; Due to the inability of its own resources to meet the expenses required by these works, public debt is a global phenomenon that is acceptable to a certain extent according to certain controls, but if the debt exceeds this limit and deviates from these controls, it becomes a problem, and the matter may even escalate into a crisis that leads to... There are bad effects and great risks on public funds and on the national economy as a whole. Intellectual trends differed regarding the limit of public debt to GDP, but there are some studies that indicate that the acceptable limits of debt do not exceed 70% of GDP (Zardag, 2009).

Therefore, local public debt represents the financial burdens that the government is committed to before national economic units operating in the local market. Here, the government means the central government, local units, and economic and service bodies. Local public debt is often the result of government borrowing from the local market and in the national currency in accordance with national legislation. Therefore, we find that the state is the one that imposes the conditions it desires, and is not subject to external influences when issuing these loans, (Sattar Jabbar Al-Bayati, Diana Hashem Jassim, 208, 2022).

As for external public debt, the Central Bank of Iraq indicates that it is the current, actual discounted amount based on residents in an economy at a certain time, for non-residents, which requires making payments on the part of the debtor to pay interest or principal amounts at points of time in the future (Abdul Latif Iman Muhammad, 77, 2017).

It can be said that the public debt in Iraq has reached a stage that requires study, as a result of what Iraq, like other developing countries, suffers from a deficit in its public budget, where the side of public expenditures exceeds the side of public revenues, and this is either due to misuse of public revenues or due to a significant increase in the growth in public expenditures. far exceeds the growth in public revenues; Due to the presence of a continuing deficit in the state's general budget, the matter requires resources; To finance this deficit so that the state can carry out its work according to established development plans and programmes. Most of this deficit was financed through domestic public debt to a greater extent than external public debt (Muhammad, Muhammad Mustafa Al-Banna, 132, 1980).

3. 2. Interest rate

It is the price that the central bank pays on commercial bank deposits, whether they are an investment for one night or for a month or more.[1][2][3] This price is an indicator of the interest rates of commercial banks, which should not be less than the central bank rate. The interest rate also helps

the central bank control the supply of money in circulation by changing this price up and down in the medium term. Raising interest means curbing borrowing operations and thus reducing the liquidity ratio in the market, which leads to a reduction in the inflation rate (Nima, Samir Fakhri, 66, 2018).
The interest rate is defined as the return on the investor's capital through the price that a person obtains as a result of waiving the disposal of his money that he lends for a specific period of time. This price varies according to the period, whether monthly or yearly, and according to the amount borrowed. The longer the borrowing period, the greater the risk potential. Accordingly, the interest rate is determined by the agreement of the lender and the borrower and based on supply and demand, because increasing the supply of capital will reduce the interest rate and vice versa. Accordingly, the quantity of money and its turnover rate have a role in the quantity of money supplied, and the financing, precautionary and speculation motives also have a role in determining demand. On money. The bottom line is that interest rates are the return on investing money for a specific period of time in exchange for the lender's waiver of disposing of his money throughout the period of calculating the return, which is often annual (Ahmed, D. A., 20, 2012). .

3. 2. 1. Factors that determine the interest rate:

Interest rates are determined based on the forces of supply and demand. If demand rates for the money on offer rise, it will lead to higher interest rates and at the same time will reduce lending rates in the economic circle. Interest rates are affected by the size of their rise and fall within the various financial markets, as the financial markets are interconnected as a result of the movement of funds within these markets. The financial market, which is characterized by high interest rates, attracts capital to it in search of higher profitability, so the supply of these funds increases, and this in turn leads to a reduction in the price, i.e. The interest rate responds to the forces of supply and demand. At the same time, low-interest markets expel capital, resulting in a decrease in its supply, which is a factor in the interest rate rising. The prosperity of the economic situation also results in a rise in interest rates, as interest rates tend to rise in every period in which economic institutions need financing in response to the increase in production required by the economic recovery, so the demand for capital increases, which works to raise the price (DIOP, Ndiame; GHALI 23, 2012)..

3. 3. exchange rate :

In order to define the exchange rate, we must know that there are two types of exchange rates. There is a fixed exchange rate, which is determined by the state and does not change with changing economic conditions. The government determines the value of its own currency and these prices are not affected by any other factors. It is considered one of the most important... The countries that set a fixed exchange rate for the currency are the oil-exporting countries of the Arabian Gulf, as these countries set a fixed exchange rate on their own local currencies (Hanan Hassan Mustafa, Hajir Adnan Zaki, 126, 2023), but what makes the local currency Strong in this case is that they have an economy that depends on natural resources that make their local currency strong. On the other hand, industrialized countries liberalize the exchange rate in order to compete with other industrialized countries, as the exchange rate affects the prices of products, which greatly affects the export of products abroad. Therefore, it is better for countries that liberalize exchange rates for the price of the currency to be compatible with the value of the product and provide the global consumer with value for price (TOMOVA, Mariana, 125, 2013).

3. 3. 1. Factors affecting the exchange rate:

The reasons for the rise and fall of the currency price are due to the expected strength of the country's economy, as the exchange rate in industrialized countries is determined based on the concept of supply and demand, where an increase in supply leads to a decrease in the value of the exchange rate and demand leads to an increase in the value of the currency at the exchange rate, and therefore central banks It monitors the volume of liquidity offered in the local currency and increases the supply of the local currency or withdraws it from banks according to the need to determine a high or low exchange rate. Some countries also set a fixed exchange rate that is determined in advance by the central bank and change it as needed through The Central Bank's vision of the value of the currency (Ibrahim, Nevin Farag, 90, 2015).

There are many factors that determine the exchange rate, all of which are related to the trade relationship between two countries. Remember, exchange rates are relative and are expressed as a comparison between the currencies of two countries. Below are some initial determinants of currency exchange rates between two countries. Note that these factors are not in any particular order, and as with many economic principles, the relative importance of these factors requires much debate (DORNBUSCH, Rudiger, 1984).

4 Statistical analysis

4.1. Data examination: Data can be examined, using measures of central tendency, measures of dispersion, a normal distribution test, and graphs. All of these statistical operations are considered part of data examination. Descriptive statistics can be clarified for the dependent variable represented by public debt, and the independent variables represented by the exchange rate and the interest rate.

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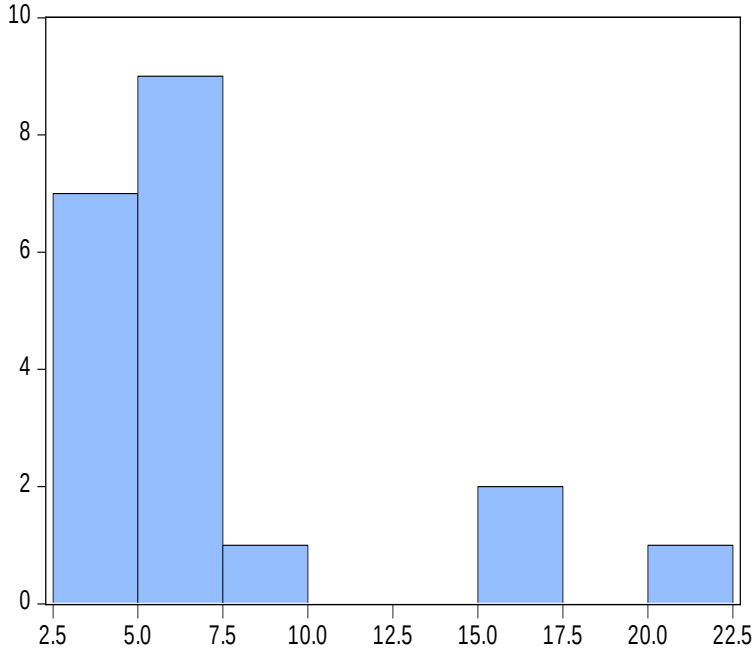
4. 1. 1. Table No. (1), normal distribution of the independent variables (ER, I), and the dependent variable (PB).

	ER	I	PD
Mean	124.7500	7.125000	27710358
Median	117.5000	6.000000	9350413.
Maximum	147.0000	20.00000	69912394
Minimum	116.0000	4.000000	4255549.
Std. Dev.	12.24691	4.495246	25813404
Skewness	0.994699	1.841709	0.587017
Kurtosis	2.176448	5.183845	1.717921
Jarque-Bera	3.863288	15.28062	2.518400
Probability	0.144910	0.000481	0.283881
Sum	2495.000	142.5000	5.54E+08
Sum Sq. Dev.	2849.750	383.9375	1.27E+16
Observations	20	20	20

From the table above, it is shown that the exchange rate and public debt follow a normal distribution, with Probability being greater than 1% and greater than 5%, while the interest rate variable does not follow the distribution, being Probability is less than 5%, and therefore we accept the alternative hypothesis and reject the null hypothesis. .

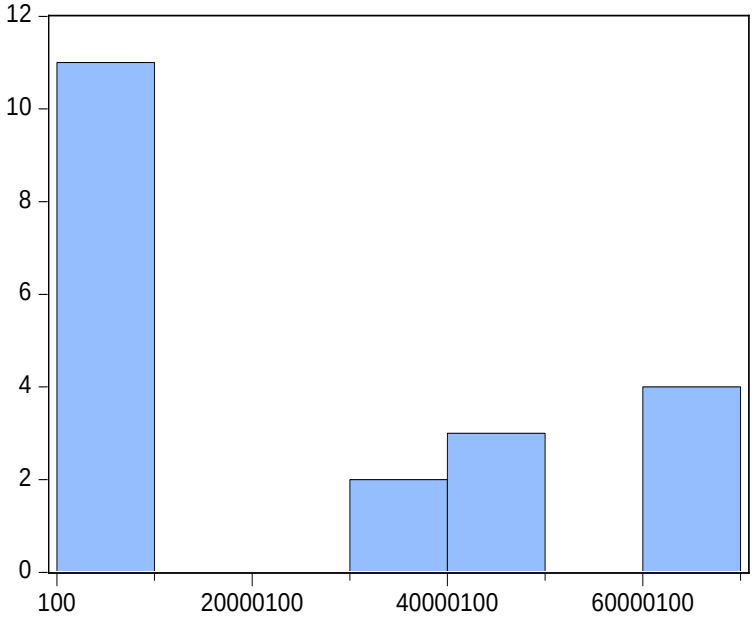
4. 1. 2. Table No. (2) Normal distribution of the interest rate variable.



Series: I	
Sample 2004 2023	
Observations 20	
Mean	7.125000
Median	6.000000
Maximum	20.00000
Minimum	4.000000
Std. Dev.	4.495246
Skewness	1.841709
Kurtosis	5.183845
Jarque-Bera	15.28062
Probability	0.000481

The interest rate does not follow a normal distribution, since Probability (0.000481) is less than 5%, and therefore we accept the alternative hypothesis, and reject the null hypothesis.

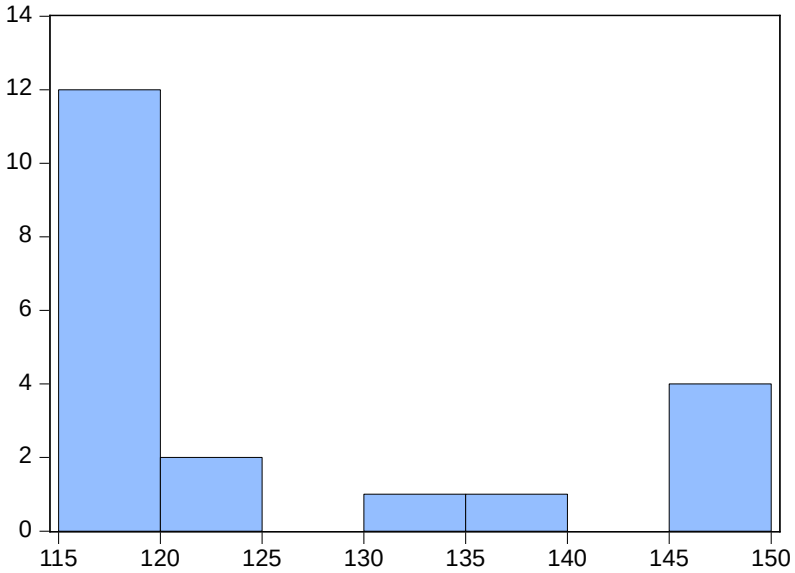
4. 1. 2. Table No. (2) Normal distribution of the public debt variable.



Series: PD	
Sample 2004 2023	
Observations 20	
Mean	27710358
Median	9350413.
Maximum	69912394
Minimum	4255549.
Std. Dev.	25813404
Skewness	0.587017
Kurtosis	1.717921
Jarque-Bera	2.518400
Probability	0.283881

Public debt follows a normal distribution, with Probability (0.283881) being greater than 5%, and therefore we accept the null hypothesis and reject the alternative hypothesis.

4. 1. 2. Table No. (3) Normal distribution of the exchange rate variable.



Series: ER	
Sample 2004 2023	
Observations 20	
Mean	124.7500
Median	117.5000
Maximum	147.0000
Minimum	116.0000
Std. Dev.	12.24691
Skewness	0.994699
Kurtosis	2.176448
Jarque-Bera	3.863288
Probability	0.144910

The exchange rate follows a normal distribution, with Probability (0.144910) being greater than 5%, and therefore we accept the null hypothesis and reject the alternative hypothesis.

4. 2. Unit root test

4. 2 .1 . Table No. (4) Interest rate static test

Null Hypothesis: I has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 1 (Automatic - based on SIC, maxlag=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.620279	0.0091
Test critical values:	1% level	-4.571559	
	5% level	-3.690814	
	10% level	-3.286909	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 18

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(I)
Method: Least Squares
Date: 01/12/24 Time: 21:40
Sample (adjusted): 2006 2023
Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
I(-1)	-0.812524	0.175860	-4.620279	0.0004
D(I(-1))	0.711969	0.176509	4.033617	0.0012
C	10.66520	2.653346	4.019531	0.0013
@TREND("2004")	-0.450975	0.146405	-3.080329	0.0081

R-squared	0.659275	Mean dependent var	0.027778
Adjusted R-squared	0.586262	S.D. dependent var	3.457610
S.E. of regression	2.224020	Akaike info criterion	4.629640
Sum squared resid	69.24771	Schwarz criterion	4.827500
Log likelihood	-37.66676	Hannan-Quinn criter.	4.656922
F-statistic	9.029602	Durbin-Watson stat	0.947072
Prob(F-statistic)	0.001403		

From the table above it is clear that the interest rate is static at the original level and at the longest model (Constant, Linear Trend), and a slowdown rate of 1,The interest rate, Probability (0.0091), will remain at 1%.

4. 2 .2 . Table No. (5) Exchange rate static test.

Null Hypothesis: ER has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.193285	0.0374
Test critical values:	1% level	-3.857386	
	5% level	-3.040391	
	10% level	-2.660551	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 18

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(ER)
Method: Least Squares
Date: 01/12/24 Time: 21:43
Sample (adjusted): 2006 2023
Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ER(-1)	-0.471040	0.147509	-3.193285	0.0060
D(ER(-1))	0.472934	0.219500	2.154594	0.0479
C	57.20933	18.24065	3.136365	0.0068

R-squared	0.436417	Mean dependent var	-0.833333
Adjusted R-squared	0.361273	S.D. dependent var	8.382405
S.E. of regression	6.699254	Akaike info criterion	6.792881
Sum squared resid	673.2000	Schwarz criterion	6.941276
Log likelihood	-58.13593	Hannan-Quinn criter.	6.813343
F-statistic	5.807710	Durbin-Watson stat	2.004516
Prob(F-statistic)	0.013558		

From the table above it is clear that the exchange rate is stationary at the original level (Constant), and it slows down by 1, The exchange rate, Probability (0.0374), remains at 5%.

4. 2 .3 . Table No. (6) Stagnancy test of public debt

Public debt remains at the first level and in the broad model (without trend and intersection)

Null Hypothesis: D(PD) has a unit root
Exogenous: None
Lag Length: 0 (Automatic - based on SIC, maxlag=1)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.884185	0.0065
Test critical values:	1% level	-2.699769	
	5% level	-1.961409	
	10% level	-1.606610	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
and may not be accurate for a sample size of 18

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(PD,2)
Method: Least Squares
Date: 01/12/24 Time: 21:49
Sample (adjusted): 2006 2023
Included observations: 18 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(PD(-1))	-0.657066	0.227817	-2.884185	0.0103

R-squared	0.328554	Mean dependent var	-8276.167
Adjusted R-squared	0.328554	S.D. dependent var	10942116
S.E. of regression	8966166.	Akaike info criterion	34.90977
Sum squared resid	1.37E+15	Schwarz criterion	34.95923
Log likelihood	-313.1879	Hannan-Quinn criter.	34.91659
Durbin-Watson stat	1.783489		

From the table above it is clear that the public debt is stationary at the original level and at None, that is, without (Constant, Linear Trend), and a slowdown of 1, since it is stationary at the first level and not at the original level. The public debt is stationary (Probability 0.0065), at the level of 1. %.

4.3: Cointegration test

4. 3. 1 . Table No. (7), Johansen model test between the independent variables and the dependent variable.

Date: 01/12/24 Time: 22:02
Sample (adjusted): 2006 2023
Included observations: 18 after adjustments
Trend assumption: Linear deterministic trend
Series: PD ER I
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.925202	53.64477	29.79707	0.0000
At most 1	0.307878	6.971354	15.49471	0.5810
At most 2	0.019119	0.347474	3.841466	0.5555

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.925202	46.67342	21.13162	0.0000
At most 1	0.307878	6.623880	14.26460	0.5345
At most 2	0.019119	0.347474	3.841466	0.5555

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Through the table above, the results appear, and it has two parts, the first is Statistic Trace and the second part is Statistic Max-Eigen. In the first part, one cointegration vector appears, which is None * and it is significant (0.0000 Probability), and it was confirmed through Statistic Trace (53.64477). It is greater than (29.79707Critical Value), and therefore we judge that the model is significant

regardless of the second and third vectors, and therefore we reject the null hypothesis and accept the alternative hypothesis.

4. 3 .2 . Table No. (8) Autoregressive test for distributed time lags using test ARDL.

Dependent Variable: PD
Method: ARDL
Date: 01/12/24 Time: 22:18
Sample (adjusted): 2005 2023
Included observations: 19 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (0 lag, automatic): ER I
Fixed regressors: C

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
PD(-1)	0.970499	0.113339	8.562779	0.0000
ER	-66684.51	213992.8	-0.311620	0.7596
I	-500741.7	552263.8	-0.906708	0.3789
C	15952558	24504571	0.651003	0.5249

R-squared	0.898508	Mean dependent var	28849762
Adjusted R-squared	0.878209	S.D. dependent var	25998902
S.E. of regression	9073239.	Akaike info criterion	35.06422
Sum squared resid	1.23E+15	Schwarz criterion	35.26305
Log likelihood	-329.1101	Hannan-Quinn criter.	35.09787
F-statistic	44.26478	Durbin-Watson stat	1.566162
Prob (F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model selection.

Through the table above, we see the significance of the model through (0.0000 Probability), public debt regardless of the lack of significance of the two independent variables, the interest rate and the exchange rate, in addition to that choosing the calculated F of 44.26478, (Prob F-statistic)

5. Results and recommendations

5.1. Results

1- There is a relationship between public debt and interest rate changes with respect to domestic public debt, and foreign exchange rate changes, and with respect to foreign public debt.

2- It has also been shown that the rise in local interest rates contributes to the rise in local public debt directly in the short term, while the impact of changes in foreign exchange diminishes.

3- While it has been shown that there is an indirect relationship between the foreign exchange rate and the local interest rate, as the rise in interest rates is characterized by flows of foreign investments in debt instruments, thus affecting reserves and then stabilizing the exchange rate in the short term.

5-2 Recommendations:

1- Searching for non-traditional resources to strengthen the state's financial resources to prevent resorting to domestic or foreign debt.

2- Attracting the informal sector may accelerate the reduction of the financial resources gap in the long term, which requires serious support and incentives in the short term.

3- The state can launch projects and re-offer them to the private sector after achieving financial stability for these projects, which allows new financing opportunities that do not generate debt.

4- Continuing to support and launch sovereign investment funds contributes to generating relatively sustainable resources, which allows for the expansion of spending.

5- Expanding the tax base, not the tax bases, by targeting reform of the tax system on the one hand, setting spending ceilings for some general budget items, and activating the program and performance budgeting mechanism. This can be achieved by generalizing digitization processes for the economy as a whole, taking into account the smooth transition according to the nature of the demographic distribution of the population.

- Ibrahim, Nevin Farag (2015) The relationship between the external public debt and the public budget deficit in Egypt (1982 - 2013) Arab Economic Research Journal, No. 51/2015.

- Badr, Majid Farhan (2007) The impact of the double deficit on the size of Jordan's foreign debt during the period (1977 - 2004), Scientific Journal of Administrative Sciences, Scientific Publishing Council, University of Kuwait.

- Al-Hajj, Hassan (2007): Budget Deficit: Problems and Solutions, Development Bridge, Arab Planning Institute.

- Khalil, Sami (1994) Modern Macroeconomic Theories, Kuwait.

- Khalil, Sami (2005), International Economics, Arab Renaissance House for Printing and Publishing, Cairo.

(6) Zardak, Ahmed Abdel Rahim (2009): Public Debt and the Public Budget Deficit in Egypt, Dar Al Nahda Al Arabiya for Publishing and Distribution, Cairo.

-Abdul Khader, Issam (2015): The role of the general budget in achieving sustainable development in Arab countries, Journal of the Baghdad College of Economic Sciences, No. 45, Al-Mustansiriya University, Iraq.

- Abdel Latif, Iman Muhammad (2017) The impact of domestic and external public debt on the Egyptian public budget deficit during the period (2000 - 2013), Journal of the Faculty of Economics and Political Science, Cairo University.

- Al-Adl, Muhammad Reda (2003): Public debt and public financial capacity, Center for Information, Support and Decision-Making, Council of Ministers.

- Qabbal, Ashraf Al-Sayyid Hamed (2018) The effectiveness of financial and economic policies in controlling the public budget deficit in light of the evolution of the size of public debt, Saleh Abdullah Kamel Center for Islamic Economics, Al-Azhar University.

- Mohamed, Farag (2018) The relationship between political stability and economic growth in Egypt, Master's thesis, Banha Commerce.

- Muhammad, Muhammad Mustafa Al-Banna (1980): Fiscal policy and internal public debt in Egypt during the period 1965-1980, PhD thesis, Faculty of Politics and Economics, Cairo University.
- Nehme, Samir Fakhry (2018) The bond denominated in foreign currency and the issues of achieving stability in the general level of prices and foreign exchange: Iraq is a case study, Arab Journal of Management, Arab Organization for Administrative Development, Egypt.
- Younis, Muhammad Ihab (2012), Towards a vision for diagnosing and treating the public budget in Egypt, Journal of the Faculty of Economics and Political Science, Cairo University.
- Sattar Jabbar Al-Bayati, Diana Hashem Jassim, the Iraqi banking sector: its economic importance and its relationship to financing the budget deficit, Al-Nahrain University, College of Business Economics, Journal of Finance and Business Entrepreneurship, Volume 3, Issue Two, Apr. 2023.
- Ahmed, D. A. (2012). An Operational Framework for Inflation Targeting in Egypt, PhD thesis University of Leicester
- BLAVY, Rodolphe. Public debt and productivity: the difficult quest for growth in Jamaica. International Monetary Fund, 2006.
-BUITER, Willem H. Joys and pains of public debt. In: Multidisciplinary Economics. Springer, Boston, MA, 2005. P. 209-224.
- DI BARTOLOMEO, Giovanni; DI GIOACCHINO, Debora. Fiscal-monetary policy coordination and debt management: a two-stage analysis. Empirica, 2008, 35.4: 433-448.
-DIOP, Ndiame; GHALI, Sofiane. Are Jordan and Tunisia's Exports Becoming More Technologically Sophisticated? Analysis Using Highly Disaggregated Export Databases. World Bank, 2012.
- DORNBUSCH, Rudiger. External debt, budget deficits and disequilibrium exchange rates. 1984.
- EMIR, Olcay Y.; ÖZATAY, Fatih; ŞAHINBEYOĞLU, Gülbin. High public debt and effects of news on interest rates. Central Bank of the Republic of Turkey Research Department, Working Paper, 2004, 04/03.
- Greiner, Alfred (2008)," Human capital formation, public debt and economic growth ' Journal of Macroeconomics, Elsevier, vol. t*, No.u pages lo-ltv, Match.
- HABER, Gottfried; NECK, Reinhard. Sustainability of Austrian public debt: a political economy perspective. Empirica, 2006, 33.2-3: 141-154.
- HAUNER, David. Public debt and financial development. Journal of development economics, 2009, 88.1: 171-183.
-LORA, Eduardo; OLIVERA, Mauricio. Public debt and social expenditure: Friends or foes?. Emerging Markets Review, 2007, 8.4: 299-310.
- MANDILARAS, Alexandros; LEVINE, Paul. Public Debt and Inflation: the Role of Inflation-Sensitive Instruments. The Manchester School, 2001, 69: 1-21.
- NEAIME, Simon. Financial market integration and macroeconomic volatility in the MENA region: an empirical investigation. Review of Middle East Economics and Finance, 2005, 3.3: 231-255.
-NEAIME, Simon. Financial market integration and macroeconomic volatility in the MENA region: an empirical investigation. Review of Middle East Economics and Finance, 2005, 3.3: 231-255.
-TOMOVA, Mariana, et al. EUROPEAN ECONOMY. 2013.
-VAN DER PLOEG, Frederick. Macroeconomics of fiscal policy and government debt. In: Multidisciplinary Economics. Springer, Boston, MA, 2005. p. 187-208.
- Hanan Hassan Mustafa , Hajir Adnan Zaki , The window for selling foreign currency and its role in influencing the exchange rate of the Iraqi dinar (An analytical study for the period 2003-2021), , Al-

Reyadah Journal of Finance and Business, Al-Nahrain University, College of Business Economics, Vol 4, No 4, Dec. , 2023.
- Salam Adel Al-Nasrawi, Salah Mahdi Al-Kawaz ,The role of time-oriented activity-based budgeting technique in reducing costs: an applied study, , Al-Reyadah Journal of Finance and Business, Al-Nahrain University, College of Business Economics, Vol 4, No 2, Apr., 2023.