THE IMPACT OF THE EXCHANGE RATE ON THE IRAQI GROSS DOMESTIC PRODUCT IN THE SHORT AND LONG TERM ANALYTICAL STUDY OF THE PERIOD (1990-2018)

MOHAMMED ABDULLAH SALEH

Department of Economics, Faculty of Economics and Management of Sfax (FSEGS), University of Sfax, Tunisia.
Email: mohammedsalh78@gmail.com

NIAZI KAMMOUN

Professor of Higher Education in Economic Sciences (University of Sfax), Tunisia.
Email: niazi.kammoun@gmail.com

Abstract

The research aimed to measure and analyze the exchange rate in Iraq and determine its impact on one of the macroeconomic indicators such as (gross domestic product) in the short and long term for the period (1990-2018), the standard model has been built according to semi-annual data using the (Eviews.12) program, and the research has found a common integration relationship between both the exchange rate and the variable (gross domestic product), and according to estimates of the relationship in the short term, it turned out that the relationship is direct between the exchange rate and GDP, but in the long-term relationship, it was also direct as for the recommendations, it is necessary to rely on the economic scheme on the exchange rate variable in drawing Economic policies, taking into account the flexibility of economic variables in the short and long term in order to make sound decisions in favor of the country in the long term, develop a strategy to diversify the structure of exports and imports by switching from the export of raw materials to the export of industrial and agricultural products, and here the development of production structures requires devaluation of the local currency against other currencies and the consequent increase in exports and reduce imports, and follow the method of managed floating of the local currency exchange rate, by subjecting it to market forces, allowing flexible intervention by the Monetary Authority in the market.

Keywords: Exchange Rate, Gross Domestic Product

JEL Classification:

FIRST: INTRODUCTION

Trends in demand for foreign currencies are an important topic, as the exchange rate is receiving increasing attention from specialists in all countries of the world, especially oil, due to the difficulties imposed by the International Monetary System, as the exchange rate plays an important role and affects any economy and is the basis through which the prices of domestic goods and services exported abroad as well as imported foreign goods and services are determined, so any change will be reflected on the level of prices and costs in the country concerned.

As for the Iraqi economy, it suffers from structural imbalances, including financial, monetary, commodity and agricultural aspects in particular, and others in the aspect of external imbalances (an imbalance in the trade balance and the balance of payments), despite being

considered one of the economies rich in primary resources, but its dependence on oil as an essential financial resource and source is almost alone, which led to the growth of exports of the oil resource with almost complete neglect of exports of the rest of the available productive resources such as agriculture, industry and others, and this led to a significant decline in economic activity, imposing a state of dependence on the oil sector the largest component of GDP, which is influenced by many factors, the most important of which are This in turn is reflected on oil revenues, and then the size of public revenues, the Iraqi economy as a whole, and exchange rates in particular, which are adversely affected by oil revenues, and this reality has imposed a state of vulnerability to risks that the economy may be exposed to.

Second: Research problem

The exchange rate has a direct and indirect impact on the economy and on its ability to stability, economic growth and regional and international competition, however, the state of the Iraqi economy was not on a single state of economic stability and therefore the problem of the study can be expressed in the following main question:

What is the impact of exchange rates on the Iraqi GDP during the period (1990-2018)?

Third: Research hypothesis

The research proceeds from the hypothesis that:

The existence of a relationship, impact and moral between exchange rates and Iraqi GDP in the short and long term

Fourth: Research objectives

The researcher aims in this study to achieve a number of objectives, the most important of which is to try to understand and realize the impact of the exchange rate on the gross domestic product in the short and long term in Iraq.

Fifth: Research structure

For a detailed briefing on the aspects of the research, it was divided into three sections and ended with a set of conclusions and recommendations, the first topic discussed the concept of the exchange rate and the main models for determining it, the second topic analyzed the developments of GDP in Iraq, and the third topic was concerned with measuring the impact of the exchange rate on GDP in Iraq.

THEORETICAL FRAMEWORK

Theoretical implications related to the exchange rate and how to determine it

First: The Concept of the Exchange Rate

The importance of studying the exchange rate stems from its obvious role in the foreign economic activities carried out by countries, where it occupies a central position in the monetary policies taken by each country, whether used as commercial or investment activities, and on the other hand, it is considered a central element in the economy of international finance,

because of its use as a tool or as an indicator of the competitiveness of that country through its impact on the components of economic growth, and the exchange rate is also considered a pole element in modern financial thought because of its great importance in settling the balance of payments for countries, especially developing ones, as a mirror that reflects the state's trade status with the outside world, and therefore the concept of the exchange rate the drainage in general is: (The national currency rate is denominated in units of foreign currency) (Hamilton, 2018).

Second: The main models for determining the exchange rate

Several models for determining the exchange rate have appeared which will be discussed in some detail, starting with the Keynesian model.

1. The Mondale - Flemish model (1961)

This model emphasizes the overlap between the exchange rate, the competitiveness of the state and macroeconomic activity, where it is often called (the backbone model), and it assumes the stability of commodity prices, and the model emphasizes that competitiveness depends mainly on the exchange rate, as with a decrease in the exchange rate of the local currency relative to its foreign counterpart, the competitiveness of the state's exports increases as they become cheaper and thus it will rise not only to increase exports but also to decrease the demand for imports as a result of higher local prices caused by a decrease in the local currency exchange rate (TICA et al.., 2019). On the other hand, the model emphasizes that fiscal and monetary policy have two different effects, the first is the short-term effect and the second is the long-term effect, and despite the theoretical coherence of the Mundell-Flemming model, it contains fundamental weaknesses, the first is its deliberate disregard for the inflationary effects of monetary policy, as it did not take into account expectations or the complications resulting from them, the second is that the analysis of the model is static analysis and this is caused by the stability of commodity prices, which made the model more theoretical than practical (Khadija, 2014).

2. The monetary model with a flexible price

The flexible monetary model relies on the combination of purchasing power parity (PPP) assumptions (which states that the prices of a basket of goods should be equal in different countries) and the stability of the money demand function at the domestic and international levels, as the model provides two equations for the demand for money, the first for domestic demand for money, while the second for international demand for money. This model gives a large role to the money demand function and assumes that prices are flexible and respond to changes in the money supply, as the domestic money supply affects the level of domestic prices, while the international money supply affects the level of international prices, in addition, the nominal exchange rate is determined by the ratio of the domestic money supply to the international money supply, and this model assumes that domestic goods and assets are full substitutes for foreign goods and assets. this model faced two main problems, the first related to the assumption of the model of price elasticity, the second related to the assumption of the second assumption of the model, which states that: local commodities and assets are complete

substitutes for commodities and assets Numerous economic studies, led by a study (Dornbusch, 1976), have proved that prices are rigid in the short term and flexible in the long term, and they have been avoided in practice to generate another generation of monetary models, namely the monetary model of rigid prices (Ali & Sabrina, 2017).

3. The monetary model with a fixed price

This model came in response to the failure of the modern classics to explain the changes in the exchange rate under the monetary model of the flexible price by introducing reforms to this model, namely the near-term price rigidity and its flexibility in the long term, and that the purchasing power parity law (PPP) works as long as there are differences between domestic and international inflation rates, and we must mention here that the method of purchasing power parity does not work in the short term under this model due to the near-term price rigidity, but it works well in the long term for price flexibility, and the model confirms that the nominal money supply and assuming near-term price stagnation will lead to The increase in the real money supply and since prices are static in the near term, the real exchange rate will rise, other adjustments were made to this model by (Piotr and Miller, 1981), who took into account the issue of inflation and the impact of the discovery of new natural resources on the level of production and the exchange rate, and (Frankl, 1979) Discussed the monetary model with a fixed price and noted that it failed to clarify the role of differences in domestic inflation rates from its international counterpart, although this point has been there are differences between domestic and international inflation) however, it is theoretically unable to clarify the role of inflation differences (Dahou, 2017).

The monetary model with a fixed price is more acceptable in practice than the monetary model with a flexible price, and this is due to modifying the hypothesis of price elasticity and making a number of other adjustments to it, however, criticism can be directed to that hypothesis, which he quoted from the monetary model with a flexible price, which states that domestic goods and assets are full substitutes for foreign goods and assets, and this restriction is eased in the balanced portfolio model, which is more advanced than monetary models.

4. Balanced portfolio model (Portfolio Model)

This model assumed that domestic goods and assets are incomplete substitutes for foreign goods and assets, on the other hand, wealth was taken into account as one of the determinants of the money demand function, which was neglected in the Keynesian and monetary models, and therefore the model is often called the (flow model- The balanced portfolio model is similar to the monetary model with a fixed price, as it distinguishes between the short-term balance (equal supply and demand for assets) and long-term adjustments (a constant level of wealth), as well as the fact that the system is static and does not tend to move with time, while it contradicts it by introducing wealth into the money demand function and emphasizing the interaction between the exchange rate, the balance of payments and the level of wealth (J.kouri, 1976) .The model explains the role of wealth as a wheel of balance, as it confirms (Tobin, 1969) that fiscal and monetary policy affects the exchange rate, monetary policy affects by reducing the money supply, while fiscal policy seems to have a more ambiguous effect by causing

changes in the volume of demand for domestic bonds and the degree of its impact on the exchange rate depends on the degree of substitution between domestic and foreign bonds, the greater the degree of substitution, the impact of fiscal policy is low, and fiscal policy affects the exchange rate through its impact on interest rates and spending (Macodonlad & P.Taylor, 1992), and stability is achieved in the model of a balanced portfolio is when the net domestic assets of foreign assets are negative and from On the other hand, the demand and supply of foreign currencies is derived from the demand and supply of domestic and foreign assets (not just money), so the exchange rate actually reflects the relative price of assets.

The main criticism that can be directed to this model lies in its adoption of static analysis, as it implicitly recognizes its inability to explain exchange rate changes when wealth levels change (since it assumes that there is a constant level of wealth) (Karim, 2010).

METHODOLOGY AND DATA

Gross domestic product in Iraq for the period (1990-2018)

First: The concept of gross domestic product

GDP expresses the extent of development and growth of the national economy, and is the most obvious indicator to express the level of economic activity of the country. The development of GDP is reflected in the development of national income, which leads to an improvement in the level of well-being of the individual (Taha, 2023).

Second: Descriptive analysis of the gross domestic product in Iraq for the period (1990-2018)

In order to clarify these developments during the study period, the gross domestic product was divided into two periods, as follows:

1. **Analysis of GDP for the period (1990-2002)**

According to Table (1), it is noted that the GDP at current prices reached in 1990 (55926.0) million dinars, falling to (42451.6) million dinars in 1991 with a negative growth rate (-24.1%), this decrease is due to the second Gulf War and its aftermath of the deterioration of various productive economic sectors (agricultural and industrial) and services, and the subsequent economic sanctions, the most important of which was to prevent the export of oil, which is the main resource of Iraq and the main component of GDP. As the years wore on (1992 – 1995) marked increase in GDP at current prices and at growth rates (171.2% ،179.4% ،415.6% ، 303.7%) this increase in output is due to high inflation levels, as well as an increase in the contribution of the agricultural sector besides the oil sector, and the increase in the agricultural sector is due to government support policies for the agricultural sector in order to provide basic agricultural crops and meet the people's need for food as a result of the suspension of imports due to the economic sanctions imposed on the country (Al-Jubouri, 2020), and it is observed through the data in Table (1) the decline in GDP at current prices in 1996 with a negative growth rate (-2.9%) and the GDP was recorded at prices Ongoing for the years 1997, 1998, 1999, 2000 improvement and with fluctuating growth rates (132.2% ،13.5% ،101.2% ،45.7%) in 2001 and

2002, the growth rates were negative (-17.7% and -0.7%), respectively. As for the GDP at constant prices, it decreased from (78617888.1) in 1990 to (28265405.2) in 1991, i.e. at a negative growth rate (- 64 %) this deterioration in output is a result of the outbreak of the second Gulf War and its impact on the destruction of infrastructure, the stoppage of productive institutions and factories, high unemployment rates, as well as the imposition of international economic sanctions on Iraq, which led to a near complete halt of exports, especially oil exports, reduced investment and capital accumulation, and reduced production of commodity sectors due to the import ban and the inability to import raw materials involved in production. annual growth rates have witnessed a slight improvement, they increased during the years 1992, 1993, 1994, 1995 and reached (32.6% ،30.3% ،3.9% ،2.1%) respectively, due to the result of the return of normal life after the war The growth rate of GDP at constant prices for the years (1996-2001) recorded positive growth rates reached their highest value (34.9%) for 1998 as a result of the approval of the Iraqi regime on the oil-for-Food Program in 1996 and oil exports began to flow abroad at the end of that year, and the Iraqi economy has achieved significant positive surges, thanks to therefore, the real growth is due to the return of oil production and oil exports to life and an increase in the pace Consumption as a result of the increases in the ration quota, as well as the overflow of some of these revenues to other economic sectors in the form of humanitarian imports and thus increasing their production, and due to the dependence of the domestic product on oil production mainly, that output began to decline with the decline in oil production (Al-Jubouri, 2020), while in 2002 witnessed a negative growth rate of -8.1%.

Table (1): GDP at current prices and fixed prices for the period (1990-2002) with annual growth rates in Iraq one million dinars

Growth rate %	Gross domestic product at constant prices 2007=100	Growth rate %	Gross domestic product at current prices	years
.....	78617888.1	.....	55926	1990
(64)	28265405.2	(24.1)	42451.6	1991
32.6	37477725.8	171.2	115108.4	1992
30.3	48829665	179.4	321646.9	1993
3.9	50711820.3	415.6	1658325.8	1994
2.1	51786921.8	303.7	6695482.9	1995
11	5749427.4	(2.9)	6500924.6	1996
21.2	69704838.9	132.2	15039144	1997
34.9	94001921	13.5	50125847	1998
17.6	110529589	101.2	34464012.6	1999
1.4	112084152	45.7	50213699.9	2000
1.8	114128642	(17.7)	41314568.5	2001
(8.1)	104917973	(0.7)	41022927.4	2002

Source:

- Central Bank of Iraq, General Directorate of Statistics and Research, special issue 2003.

- The growth rate calculated by the researcher.

- The numbers in parentheses represent negative values.

2. Analysis of GDP for the period (2003-2018)

It is noted from Table (2) that the gross domestic product witnessed a significant decrease in current and fixed prices in 2003, falling from (41022927) million dinars in 2002 to (29585788) in 2003 with a negative growth rate (-27.9%) at current prices and from (104917973) to (66335848) at fixed prices and a negative growth rate (-36.8%) as a result of the Third Gulf War the military operations and the resulting destruction and destruction of the infrastructure of Iraq, and the suspension of oil exports during this year due to the instability of the political situation of the country, but in 2004 the GDP witnessed a noticeable improvement, reaching (53235358.7) million dinars at current prices with a positive growth rate of (79.9) and reached (101845262.4) million dinars at constant prices and with a growth rate of (53.4) the positive growth of GDP at current prices continued during the period (2005-2008) at growth rates (38.1% ،30% ،16.6% ،34.1%) respectively، The gross product at current prices decreased to (130642187.0) million dinars by a negative growth of (16.2%) in 2009 as a result of the decline in world oil prices following the repercussions of the global financial crisis that began in the United States of America leading to a decline in various economic activities (Central Bank of Iraq, 2009), and the GDP at current prices began to grow at slight rates during the period 2010 - 2013, recording the highest growth rate in 2011 with a value of (39.1%), then the output decreased in 2014 with a negative growth rate (-3.9%) from 2013, as 2014 was described as the worst in the history of the Iraqi economy because it witnessed the failure to approve the federal budget, in addition to the decline in oil prices in world markets to unprecedented levels as the price of a barrel reached below 50 dollars (Central Bank of Iraq, 2014), and the decline in output continued for the years (2015, 2016) with growth rates of negative values (-21.9%, -5.4%) respectively to settle at a negative growth rate of (2%) in 2018.

Table (2): GDP at current prices and fixed prices for the period (2003-2018) with annual growth rates in Iraq one million dinars

Growth rate %	Gross domestic product at constant prices 2007=100	Growth rate %	Gross domestic product at current prices	years
(36.8)	66335848	(27.9)	29585788.6	2003
53.4	101845262.4	79.9	53235358.7	2004
1.7	103551403.4	38.1	73533598.6	2005
5.6	109389941.3	30	95587954.8	2006
1.9	111455813.4	16.6	111455813.4	2007
7.5	120626517.1	34.1	157026061.6	2008
4.1	124702847.9	(16.2)	130642187	2009
6.5	132687028.6	24.1	162064565.5	2010
7.5	142700217	39.1	217327107.4	2011
13.9	162587533.1	17	254225490.7	2012
7.6	174990175	6.6	273587529.2	2013
0.1	175335399.6	(3.9)	266420384.5	2014
3.9	182331154.1	(21.9)	207876191.8	2015
6.2	193744445.6	(5.4)	196536350.8	2016
3.7	201059363.1	14.8	225722375.5	2017
(0.9)	199129298.5	(2)	251064479.9	2018

Source:

- The Central Bank of Iraq, the General Directorate of Statistics and research, separate annual numbers for the years (2003 – 2018).

- The growth rate calculated by the researcher.

- The numbers in parentheses represent negative values.

RESULT AND DISSECTION

First: Description and formulation of the relationship between the exchange rate and GDP in Iraq

1. Formulation of the standard model

The formulation of a standard economic model requires identifying the economic variables included in the model as the first step of characterizing and formulating the standard model (Said & Helmy, 2016), and as the second step, the process of linking the variables in a mathematical formula is carried out according to the logic of economic theory (Abdul Zahra & Hassan, 2013), which results in the possibility of studying the model in an applied way.

In order to build a standard model to clarify the impact of the exchange rate on the gross domestic product in Iraq, the variables included in the model have been described as follows:

A-Independent variables (exchange rate) (independent variable), represented by:

X: exchange rate (PE).

B-Dependent variables (Dependent variables) represented by:

Y1: gross domestic product (GDP).

2. The mathematical form of the model

The researcher followed the standard economic method to measure and estimate the relationship between the independent variable and the dependent variable, expressing" it in the form of a mathematical function, as is known, the economic theory does not provide sufficient information about the nature of the function, therefore, reliance is placed on the form of diffusion and the method of experimentation for various mathematical forms and benefit from previous studies to choose a mathematical form that reflects the characterization of relationships closer to reality and more :

$$LOG\ (Y_1) = \beta O + \beta 1 LOG(X) + u$$

Econometric form Input

Years	Exchange rate	Gross domestic product
1990	4	55926
1991	10	42451.6
1992	21	115108.4
1993	74	321646.9
1994	456	1658325.8
1995	1674	6695482.9
1996	1170	6500924.6
1997	1471	15039144
1998	1620	50125847
1999	1972	34464012.6
2000	1930	50213699.9
2001	1929	41314568.5
2002	1957	41022927.4
2003	1936	29585788.6
2004	1453	53235358.7
2005	1472	73533598.6
2006	1475	95587954.8
2007	1267	111455813.4
2008	1203	157026061.6
2009	1182	130642187
2010	1186	162064565.5
2011	1196	217327107.4
2012	1233	254225490.7
2013	1232	273587529.2
2014	1214	266420384.5
2015	1247	207876191.8
2016	1275	196536350.8
2017	1258	225722375.5
2018	1208	251064479.9

Source:

- The Central Bank of Iraq, the General Directorate of Statistics and research, separate annual numbers for the years (2003 – 2018).

Second: Examination and evaluation of the study model

Through the results of unit root tests, its stability is observed in the first difference, as all dependent and independent variables were not static in the level, whether with a constant or a constant and a trend or without a constant and a trend at a significant level (5%), and after taking the first difference, it is noted that the data is stable, i.e. static, whether with a constant or a constant and a trend or without a constant and a trend at a significant level (1%), and therefore we can apply the self-regression model of decelerating gaps (ARDL) to the data after dividing them into semi-annual data and by the statistical program (12.Eviews) the results were as follows:

A-Determining the degree of slowdown: to determine the appropriate degree of slowdown for the standard model, the VAR model was used, as it showed that the best degree of slowdown is three degrees for the dependent variable and the independent variable.

B-the explanatory power of the model: based on the estimated model, the explanatory power of it through the determination coefficient has reached (0,99), that is, exchange rates explained (99%) of the change in GDP and (3%) for other variables outside the standard model, but the corrected determination coefficient has reached (0.99) as well, and through a statistic (F), the results showed its significance at the level of (1%), and therefore the model is valid for forecasting and Planning, see Table(3).

Table (3): Results of the Decelerating Gaps Model for Variable (Y1)

Dependent Variable: LOG(Y1)
Method: ARDL
Date: 04/16/23 **Time:** 00:26
Sample (adjusted): 1991S1 2018S2
Included observations: 56 after adjustments
Maximum dependent lags: 3 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (3 lags, automatic): LOG(X)
Fixed regressors: C
Number of models evaluated: 12
Selected Model: ARDL(2, 1)
Note: final equation sample is larger than selection sample

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG(Y1(-1))	0.792811	0.104909	7.557098	0.0000
LOG(Y1(-2))	0.136728	0.092221	1.48261	0.1443
LOG(X)	0.803746	0.110752	7.257156	0.0000
LOG(X(-1))	-0.66276	0.111523	-5.94283	0.0000
C	0.355625	0.308845	1.151468	0.2549
R-squared	0.990763	Mean dependent var		17.31192
Adjusted R-squared	0.990039	S.D. dependent var		2.370318
S.E. of regression	0.236574	Akaike info criterion		0.039937
Sum squared resid	2.854339	Schwarz criterion		0.220772
Log likelihood	3.881765	Hannan-Quinn criter.		0.110046
F-statistic	1367.573	Durbin-Watson stat		1.720077

Prob(F-statistic) 0.0000
*Note: p-values and any subsequent tests do not account for model selection.

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

C- Joint integration test: from the test results, it is noted that the statistical value (F) is (5.44), which is greater than the upper and lower value at a significant level (5%), so there is a long-term joint integration relationship between exchange rates and GDP, see Table (4).

Table (4): Testing the Cointegration Relationship of the Variable (Y1)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	5.443895	10%	4.04	4.78
k	1	5%	4.94	5.73
		2.50%	5.77	6.68
		1%	6.84	7.84
Actual Sample Size	56		Finite Sample: n=60	

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

D-The results of the assessment of the short-and long-term relationship:

1. The short-term relationship: the signal is positive, that is, the direct relationship between exchange rates and GDP, which is significant at the level of (1%), that is, the independent variable exchange rates affect the dependent variable GDP, and that an increase in exchange rates by one unit leads to an increase in GDP by (0.803 %) and vice versa, which corresponds to the content of the economic hypothesis.

2. Error correction parameter (ECM): the correction value was (0.070 -), which is negative and significant at the level of (5%), that is, short-term errors can be corrected to return to a long-term equilibrium situation in the event of a shock in exchange rates and within (7%) of a unit of time (year).

3. The long-term relationship: based on the t-statistical statistic, which is significant at the level of (1%), that is, the independent variable exchange rates affect the dependent variable GDP, and an increase in exchange rates by one unit leads to an increase in GDP by (2.00%).

Table (5): results of short-term and long-term assessment of the impact of exchange rates in gross domestic product (Y1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.355625	0.308845	1.151468	0.2549
LOG(Y1(-1))*	-0.07046	0.02658	-2.65095	0.0107
LOG(X(-1))	0.140985	0.042766	3.296667	0.0018
DLOG(Y1(-1))	-0.13673	0.092221	-1.48261	0.1443
DLOG(X)	0.803746	0.110752	7.257156	0.0000
* p-value incompatible with t-Bounds distribution.				
Levels Equation				
Case 3: Unrestricted Constant and No Trend				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
LOG(X)	2.000879	0.475292	4.209791	0.0001
EC = LOG(Y1) - (2.0009*LOG(X))				

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

E-Diagnostic tests :

1. Autocorrelation test: through the results of the probabilistic values of the autocorrelation test statistic (Breusch-Pagan LM), which amounted to (0.920), which is greater than its morale level at (5%), this indicates the acceptance of the hypothesis of nothingness, which states that there is no problem in the estimated standard model.

2. Heterogeneity of variation test: the probabilistic values of the heterogeneity of variation test statistic (Breusch-Pagan-Godfrey) reached (0.674), which is greater than its significance level at (5%), and this indicates the acceptance of the hypothesis of nothingness, which states that there is no problem in the estimated Standard Model, see Table (6).

Table (6): Diagnostic Tests of the First Model

Breusch-Godfrey Serial Correlation LM Test:				
Null hypothesis: No serial correlation at up to 2 lags				
F-statistic	0.08327	Prob. F	(2,49)	0.9202
Obs*R-squared	0.189688	Prob. Chi-Square	(2)	0.9095
Heteroskedasticity Test: ARCH				
F-statistic	0.178606	Prob. F	(1,53)	0.6743
Obs*R-squared	0.184724	Prob. Chi-Square	(1)	0.6673

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

RESULTS

Through the standard analysis the following is noted

- There is a significant correlation between the exchange rate and the Iraqi gross domestic product.
- The best model that represents the relationship between the variables (GDP) and the exchange rate over the period (1990-2018)is the ARDL time lag self-regression model.
- The existence of a long-term equilibrium relationship between both the exchange rate and (GDP), and this indicates the existence of a common integration between the variables.

RECOMMENDATIONS

1. the study recommends the need to rely on the economic plan on the exchange rate variable in the formulation of economic policies, taking into account the flexibility of economic variables in the short and long term in order to make sound decisions in favor of the country in the long term.

2. devaluation of the local currency against other currencies and the consequent increase in exports and the reduction of imports, and the adoption of the method of managed floating of the local currency exchange rate, by subjecting it to market forces, allowing flexible intervention by the Monetary Authority in the market .

3. develop a strategy to diversify the structure of exports and imports by switching from the export of raw materials to the export of industrial and agricultural products, and here requires the development of production structures.

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