

The Oil revenue and its impact on the structure of the general budget for the period (2004-2019)

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Abstract:

The problem that is facing the Iraqi economy is its dependence mainly on oil revenues to finance its general budget, as these revenues were characterized by fluctuations due to fluctuations in international oil prices, and the increase in the contribution of oil production to the gross domestic product is reflected in the decline in the contribution of other economic sectors (non-oil) in the gross domestic product, which made the Iraqi economy a rentier economy. The research aims to know the concept and types of oil rents and the reasons for the emergence of the oil economy, and to try to find possible solutions to confront dependence on oil rents by working to diversify the structure of the Iraqi economy. The research reached a number of conclusions, including the existence of a long-term equilibrium relationship between oil rents and the structure of the general budget, according to the border test for joint integration. Therefore, it is necessary to control and rationalize public spending and expand other (non-oil) revenues such as taxes, for example, to reduce the dependence of the general budget on oil revenues, and thus improve the budget structure. The state should benefit from foreign investment in order to enhance the strength of the economy and activate the role of national investment in a way that contributes to raising national competencies and expertise in the oil field.

An introduction:

The oil is a strategic international commodity that overlaps a set of international factors influencing its price, and since these factors, which are driven by the advanced industrial country, affect oil prices, which is reflected in the volume of oil revenues, and that Iraq is one of the countries that depend on oil revenues to finance the general budget, so the Fluctuations in world oil prices lead to fluctuations in oil revenues that lead to an imbalance in the structure of the state's general budget. Therefore, the global financial crisis in 2008 and mid-2014 affected the Iraqi economy significantly, so it is necessary to find other sources of funding instead of relying on oil revenues, by benefiting from the experiences of other countries in how to invest oil revenues in achieving economic diversification.

The research problem:

Does Iraq's dependence on oil revenues deepen the imbalance in the structure of the general budget in the Iraqi economy?

The research Hypothesis:

The instability in world oil prices negatively affects oil revenues and thus the structure of the general budget in Iraq.

The Research objective:

1. Verify the acceptance or rejection of the study hypothesis.
2. Measuring the impact of oil rents on the structure of the general budget in the Iraqi economy.

The first axis / What is the rentier economy?

First, the concept of rentier economy

There are many definitions that dealt with the concept of the rentier economy, but they have the same meaning, as the rentier economy was defined as “that economy that is fundamentally supported by spending from a rentier state, as the state becomes a mediator between the sector that generates income and other economic sectors”(1).

The rentier economy was also defined as “the economy that depends for its material income on the sale of a non-productive commodity in foreign markets such as oil, gold and copper, and this material income is called rent” (2).

The rentier economy is defined as the ratio of rentier revenues to the gross domestic product, and the ratio often exceeds more than 50% of the size of the gross domestic product (3)

From all of the above, the rentier economy can be defined as the economy that is mainly supported by the state, as the state becomes an intermediary between the rentier and other economic sectors, i.e. it receives revenues and then distributes them to other economic sectors through public spending programs.

Secondly, the effects of the rentier economy

The rentier economy has important economic effects, and the most important of these effects are(4)

1- **The competition and duplication in economic projects:** rent-dependent countries often lack the necessary elements that must be available for an economic union among themselves, because there is no difference in the relative advantages of the factors of production in them, and the small trade exchange between them, which greatly reduces the extent of The benefits that usually accrue to the economic union, as it is noted that some countries are rushing towards establishing similar industries, due to the similarity of their production structures, and the scarcity of other natural resources.

2 The distortion of economic indicators by diverting most investments towards the services and real estate sector and transforming society into a consumer society.

3- Contributing to the creation of a fragile economy, hitting the productive economy, in addition to the decline of the state within the productive industrial countries.

Third // Types of rentier economy

The great development in economic activity was accompanied by a development in the concept and importance of the concept of income and its types. Therefore, income was divided into several types, namely:

1. Depleted material income or extractive revenue :

Depleted natural resources are among the limited and non-renewable wealth such as oil, gas and minerals, but they generate an economic income for the countries that own them by exporting them abroad, because of the alternative cost, that is, the cost of the alternative source of depleted resources, which is embodied by the large difference between the cost of production needed to extract it and the selling price, as The extractive cost is low compared to the market price, and this income of depleted resources constitutes the bulk of the revenues of the countries that own them, and is considered the lifblood of the economies and societies of these countries (5).

And also, by depleted rent, we mean depleted resources, an idea that exists in nature in limited and non-renewable quantities as it works in the environment (6) and it represents fossil energy sources, rentier pastures, forests, agricultural lands and their renewable natural resources such as wind, sun and others.

2. Tourism revenue

Many countries have important and rare archaeological sites as a result of the establishment of civilizations on their lands in the past, such as the civilizations of Mesopotamia in Iraq, the civilization of the Nile Valley in Egypt, the Chinese civilization and many others, as well as the occurrence of some holy religious places in some countries such as Jerusalem in Palestine and the Kaaba in Saudi Arabia. In addition to the fact that some countries have distinct natural environments (such as their location on the sea or picturesque views and a temperate atmosphere), all of which enable the state to obtain high rent income as a result of the state's internal and external sovereignty over its cultural heritage and natural location, which enabled it to obtain its monopolistic position of income ⁽⁷⁾.

3. The incomes of financial speculation:

This type of rent appears in contemporary economies, due to the speculators' mentality, which always seeks to achieve quick profit without effort. This sector, as the financial system in general contributes to the dominance of speculative operations by supplying speculators with the necessary liquidity in return for low interests, in addition to the absence of control systems and government legislation⁽⁸⁾.

4- The incomes resulted from the strategic corridors and transportation lines

The incomes resulting from some sea lanes such as the Suez Canal and the oil and gas transmission lines, as well as the land transit, are considered rentier incomes because these lanes or lines are imperative to transit and there is no alternative to them for the countries benefiting from their services⁽⁹⁾. Also, flight fees are among the types of income.

5. The real estate income :

This is the basis from which the concept of rent was launched, and this type is divided into two types: absolute rent and differential rent, based on the degree of fertility of the land.

The degree of its fertility, as it results from the ownership of the most fertile lands. With the increase in the population and the increase in demand for food, it pushes to exploit the less fertile lands in order to satisfy the growing needs of the population. To the absolute rent on the differential or differential rent as an additional rent. This principle also applies to areas near and far from production sites, given the cost of transportation, which decreases in the first and increases in the second ⁽¹⁰⁾.

6- The permanent rent or life income :

It is the income he obtains either from a loan issued by the state in return for periodic payments (may be annual or monthly) that last for a lifetime, or a waiver from the disposal of specific property in return for regular payments for life ⁽¹¹⁾

Fourth, the reasons for the emergence of the rentier economy

There are a number of reasons that led to the emergence of the rentier economy, which is divided into internal and external, and as follows:

A- The internal reasons for the emergence of the rentier economy ⁽¹²⁾

1- Increasing population growth at a rate greater than the growth of GDP, i.e. an increase that is not balanced with the growth of GDP, and is not in line with the plans and programs set by the state, which leads to the emergence of unemployment or its high rates, especially in rentier developing countries, due to the weakness of their structures productivity and its inability to absorb the population increase within the country, the most important problem is the failure of the rentier model

2- The abundance of natural resources and strategic locations, which increases the financial flows resulting from them, and this explains the weak results of the economies in which these resources are located as a result of the embezzlement of their revenues, especially the Arab economies, compared to other countries, and developed economies such as Norway, the Netherlands and other countries that are not. It has similar rent resources and the existence of such resources is the starting point and necessary condition for the emergence of rent.

B - The external causes of the emergence of the rentier economy :

Although there are internal reasons for the emergence of the rentier economy, there are external reasons related to the nature of the global economy and the nature of the relationship that binds rentier economies to the global economy, and the most important of these reasons are:

1 The colonial state has the desire to control the oil wealth and the opportunities for its influence over the rentier state, whether its income is limited to what it has of natural resources and wealth, the most important of which is oil in front of the countries in which the rent is strategically high. Instead of making them industrialized nations, they put their wealth to good use.

2 - The economic and social dependence of the developed countries, where most rentier countries are characterized by weak production systems, weak infrastructure and the lack of economic, social and cultural development, which constitutes a factor that has a negative impact on these countries and their inability to continue the scientific and technical development of the developed countries, which strengthened the economic and social dependence and the continuation of the rentier economy.

The second axis / structural imbalances / concept and features

First // What is the structural imbalance?

Among the most important problems that developing countries suffer from are structural imbalances of various kinds, whether internal (productivity, financial, monetary) or external. In economic growth and its stability” (13) . The imbalance in general refers to moving away from the point of balance between the opposing forces, which is expressed by the variables of supply and demand or the variables of investment and saving, and therefore the imbalance appears in the form of An imbalance or inequality between a certain type of economic variables, taking into consideration the objectives that the national economy should achieve.

It is also defined as “the imbalance in the general equilibrium relations at the level of the national economy, which can affect the possibility of stability and growth and its sustainability, and which leads at a later stage to the emergence of many problems, bottlenecks and crises.”

In the Structure of the National Economy”(14) .

Second // The dialectical relationship between the rentier economy and the rentier states

An external income is the main determinant in explaining the relationship between the rentier state and the rentier economy, and for the purpose of understanding the relationship between these two concepts, it is necessary to know the reason for relying on external rent in defining the concept instead of internal rent, since internal rent is based on internal or local productive sectors. Internal rent is nothing but a type of financing source in the productive sectors for elements that enjoy some special advantages. As for the other type of rent, i.e. external rent, it refers to financing from the external economy without assuming the existence of local productive sectors. When external rent plays a vital and strategic role in the economy, this It reflects the rentier economy in which the ratio of external rentier revenues to the gross national product must be large, and the returns must also be external in addition to the contribution of a minority of the population in its generation. That is, the rentier state is

a special case of the rentier economy, a situation in which external rent or a large proportion of it devolves to a small group of the population.

Dr. Mahmoud Abdel-Fadil referred to the rentier economy as that economy supported by spending from a rentier state, as this state becomes a mediator between the rent-generating sector and other economic sectors. As for Luciani, he clarified that the rentier state is a sub-system related to the rentier economy, in which the rentier economy is that economy supported by expenditures spent by the state, while the state itself is supported by an external rent. The economist, Professor Michael Chatelius, also pointed out that the rentier economy is an ideal economy for the circulation economy (1).

Third / The features of the Iraqi economy

The Iraqi economy is characterized by a number of features, including:

1. The dominance of the oil sector over the entire economy: Iraq is one of the oil countries that depend mainly on this sector, as it constitutes a large proportion of the gross domestic product, estimated at (50%) in normal circumstances, as we note through Table (1) that the proportion of The contribution of oil production to the GDP at constant prices amounted to (57.9%) in 2004, and fluctuated between rise and fall until it reached (45.9%) in 2010. The reason for this is due to the decline in the exported quantities of oil, and the decline in oil prices, due to the crisis The global economy, in addition to the exposure of oil pipelines to terrorist operations, and this in turn contributed to the decline in oil exports. As for the subsequent years, it fluctuated between rise and fall until 2015. The contribution of oil production to the GDP increased in 2017, reaching (64%) and after that it decreased until it reached (62.2%) due to the decline in exported oil prices, which made Iraq is facing difficult challenges and a real crisis resulting from the rentier economy through its dependence on oil as a source of revenue, and this coincided with Iraq's inability to follow a policy of income diversification.

Table (1)
Gross domestic product with and without oil in Iraq for the period (2004-2019)

Year	current GDP(MD)	1% annual growth	GDP constant with oil base 2007 (MD)	2% annual growth	Oil output (MD)	Percentage of oil output from (fixed GDP %3)	Oil Fair Output (MD)
2004	5323559	-	101845262	-	85968406.7	57.9	42876855.3
2005	73533599	38.13	103551403	1.68	66169346.52	63.9	3738056.5
2006	95587955	29.99	109389941	5.64	60492637.37	55.3	48897303.6
2007	111455813	16.60	111455813	1.89	60074683.21	53.9	51381129.8
2008	157026062	40.89	120626517	8.23	66947716.94	55.5	53678800.07
2009	130643200	16.80-	124702075	3.38	5349190.18	42.9	71204884.83
2010	162064566	24.05	132687029	6.40	60903346.31	45.9	71783682.6
2011	217327107	34.10	142700217	7.55	78057018.7	54.7	64643198.3
2012	254225491	16398	162587533	13.94	81944116.63	50.4	80643416.37
2013	273587529	7.62	174990175	7.63	38820296.83	47.9	91169881.18
2014	266332655	2.65-	178951407	2.26	92517877.42	51.7	86433529.58
2015	194680972	26.90-	18361252	2.61	101172554.9	55.1	82443697.15
2016	196924142	1.15	208932110	13.79	126194994.4	60.4	837115.56
2017	221665710	12.56	205130067	1.82-	131283242.9	64	7346824.12
2018	268918874	21.22	210532887	2.63	131583054.4	62.5	78949832.63
2019	277884869	3.33	22307502	5.96	138752663	62.2	84322357.9

Source: Ministry of Planning, Central Agency for Statistics and Information Technology, Directorate of National Accounts, statistical totals for different years.

Fourth / Analysis of the path of imbalance in the structure of the public budget:

Iraq suffers from structural imbalances despite the presence of many economic resources, and this imbalance had repercussions on the economic and social conditions in it. There are a number of

reasons that led to the existence of these imbalances, including the economic and political conditions that Iraq went through, in addition to the wrong and unbalanced economic policies in the management of economic resources.

The imbalance in general refers to moving away from the point of balance between the opposing forces, which is expressed by the variables of supply and demand or the variables of investment and saving ⁽¹⁵⁾ .

From all of the above, we conclude that the structural imbalance refers to the imbalance in the general equilibrium relations at the level of the national economy, and this leads to the lack of stability in economic growth, which in turn leads to many problems and crises in the structure of the national economy and thus prevents the achievement of economic and social well-being.

From all of the above, we point out that the Iraqi economy still has a long way to go to be able to correct this imbalance in the absence of a clear and sound economic vision, and the lack of systematic and well-planned work mechanisms.

The public spending pursued by the Iraqi government is characterized by unwisdom, as the state follows an ill-considered policy of consumption, as operational spending takes up the largest proportion of the state's general budget. Therefore, spending was supposed to be directed towards public investment, which would work to achieve growth and development in the economy, as well as reduce the unemployment rate and thus effectively contribute to diversifying the Iraqi economy and improving its production structure.

This type of imbalance is due to the imbalance or equality between public revenues and public expenditures carried out by the state, which is reflected in the form of a continuous deficit called (structural deficit). Therefore, the fiscal deficit is the difference between the total public revenues and public expenditures, and this deficit is explained by the deficit of the state's general budget and the resulting external and internal debts, or both together.

Also, the availability of hard currency and financial resources is one of the most important factors that lead to the recovery of economic activity in general and investment in particular, and since Iraq is one of the unilateral countries, it depends mainly for its revenues on the oil sector and that it is affected by the global demand for oil or obstructing its passage to The global market, this led to a decrease in oil revenues, in addition to a decrease in other revenues derived from fees and taxes as a result of the decline in economic activity and low levels of financial management. All of these reasons contributed to the insufficiency of public revenues to cover public expenditures, which are in a state of constant increase ⁽¹⁶⁾.

We note through Table (2) that the Iraqi economy suffers from an imbalance in the structure of public spending, as current expenditures swallow the total public expenditures, as the proportion of the contribution of current expenditures to the total public expenditures in 2004 was (90.50%), compared to the contribution of investment expenditures to the total Public expenditures, which amounted to (9.50%) for the same year. The ratio of current expenditures to total expenditures continued to increase, reaching (66.10%) in 2013, compared to (33.90%) for investment expenditures. Fixed capital. The ratio of current expenditures to total expenditures in 2018 was (82.91%), while the ratio of operating expenditures to total expenditures amounted to (17.09%). Since oil revenues constitute a large proportion of total revenues, and that Iraq was and still depends on oil financial revenues In financing public spending, therefore, oil revenues must be directed to finance investment spending, as well as diversifying the sources of public revenue by increasing the proceeds of tax revenues. ⁽¹⁷⁾

From all of the above, we conclude that Iraq follows a wrong and ill-considered financial policy, which requires a structural change in the general budget that does not address oil revenues only, but revenues and expenditures in all their details, as well as expanding the scope of the tax without

increasing the tax burden, which in turn leads to impeding economic activity, through By adopting a high degree of tax revenue and accelerating the process of growth and improving the standard of living at the same time (Mahmoud Hussein, 2009, p. 38). Therefore, the Iraqi economy urgently needs to increase investment spending rates to achieve a state of economic stability represented by achieving a growth rate in the gross domestic product, reducing inflation rates, and achieving a state of economic and social well-being by fighting poverty and unemployment.⁽¹⁸⁾

table(2)
The structure of public expenditures in Iraq for the period (2004 - 2019) million dinars

Year	Public fund 1	Annual growth %2	investment expenses 3	relative contribution %3:1 4	Current expenses 5	relative contribution 6 % 5:1
2004	32117491	17.88-	3903526	14.80	2906629	90.50
2005	26375175	47.13	6209069	16.00	22471649	85.20
2006	38806679	0.58	9211371	23.60	32597610	84.00
2007	39031232	52.19	20315954	34.20	29819861	76.40
2008	59403372	6.42-	9648658	17.36	39087418	65.80
2009	55589721	26.16	15553341	22.18	45941063	82.64
2010	70134201	12.30	17832113	22.64	54580860	77.82
2011	7875660	33.50	29350952	27.92	60925547	77.36
2012	105139576	13.30	40380750	33.90	75788624	72.08
2013	119127556	5.82-	35450453	31.60	7846806	66.10
2014	112192126	37.25-	18564670	26.37	76741673	68.40
2015	703975515	4.73-	16464500	23.70	51832845	73.63
2016	67067400	12.56	15894000	21.81	51173400	76.30
2017	75490115	7.13	13820200	17.09	59025615	78.19
2018	80873189	38.15	24422600	21.86	6705289	82.19
2019	111723523	11.39		22.78	87300923	78.14
Average						77.22

Source / Central Bank of Iraq, Directorate General of Statistics and Research, Statistical Group of the Central Bank of Iraq for different years.

Column (2,4,6) was calculated by the researcher.

The third axis / measuring the impact of oil rents on the ratio of the contribution of current expenditures to the total public expenditures

Standard Model Variables/

It used a number of important economic variables that affect the oil rent in its time course, depending on what the economic theory came up with, in addition to the proposals of some schools of thought and what the modern theory used, and the following is a description of the model variables:

1. Independent Variables: These variables are called exogenous variables because they are determined by forces outside the model (Exogenous Variables) and can be obtained from the official statistics of the state and through the international publications of the relevant institutions and bodies, or through the used measurement methods. We note that the estimated model in this study includes one independent variable, which is the oil rent, which is symbolized by the symbol (RORE).

2. Dependent Variables: These variables are called endogenous variables because they are variables whose value is determined from within the model, and the dependent variables in this model can be included as follows:

A - The percentage of the contribution of current expenditures to the total public expenditures and is symbolized by the symbol

(CUEX), to show the effect of oil rent on the ratio of the contribution of current expenditures to the total public expenditures, with a rate of (60) views.

First / Estimation of the model: The estimated (ARDL) model is based on the basis that the dependent variable is the ratio of current expenditures to total expenditures (Cuex) and that the time lag period (2,2) is based on (Akaike) values, which gives the lowest value for this criterion and is determined Automatically by the program, as the duration of the time delay was determined to (2) two time lags for the variable (Cuex), (2) two time lags for the variable (Rore) according to the (Akaike) criterion, as shown in Table (3).

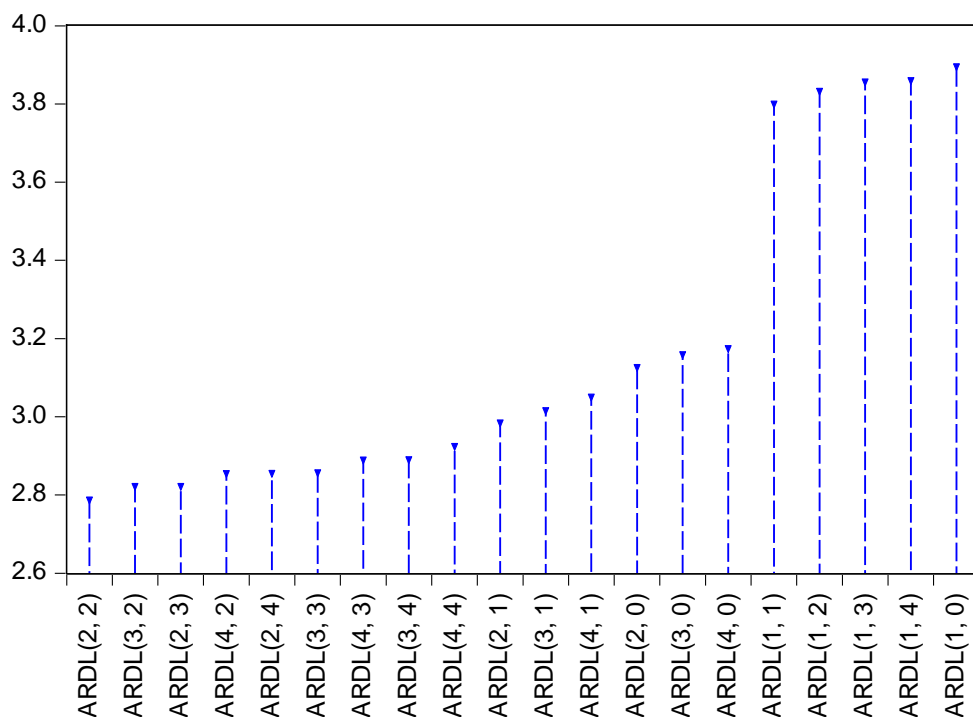
Table(3)
Autoregressive model estimation of distributed lag (ARDL).

Dependent Variable: CUEX				
Method: ARDL				
Date: 07/05/21 Time: 06:46				
Sample (adjusted): 2004Q3 2019Q1				
Included observations: 59 after adjustments				
Maximum dependent lags: 4 (Automatic selection)				
Model selection method: Akaike info criterion (AIC)				
Dynamic regressors (4 lags, automatic): RORE				
Fixed regressors: C				
Number of models evaluated: 20				
Selected Model: ARDL(2, 2)				
Note: final equation sample is larger than selection sample				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
CUEX(-1)	1.699816	0.082925	20.49813	0.0000
CUEX(-2)	-0.774323	0.077839	-9.947758	0.0000
RORE	-0.638719	0.136803	-4.668907	0.0000
RORE(-1)	1.200121	0.254887	4.708446	0.0000
RORE(-2)	-0.547627	0.144506	-3.789651	0.0004
C	4.901912	1.658217	2.956135	0.0046
R-squared	0.975664	Mean dependent var	76.42788	
Adjusted R-squared	0.973368	S.D. dependent var	5.657882	
S.E. of regression	0.923331	Akaike info criterion	2.774487	
Sum squared resid	45.18467	Schwarz criterion	2.985762	
Log likelihood	-75.84738	Hannan-Quinn criter.	2.856961	
F-statistic	424.9625	Durbin-Watson stat	2.006342	
Prob(F-statistic)	0.000000			

Source/ from the researcher's work based on the statistical program (Eviews).

Figure (1)

Akaike Information Criteria



Source/ from the researcher’s work based on the statistical program (Eviews)

It is clear from the statistical tests of the model the significance of these tests and the quality of the estimated model through the modified (R2), which amounted to (0.97), as well as the value of (F - Statistic) which amounted to (424.9625) and at the level of statistical significance (0.000000). Therefore, we accept the null hypothesis (H0), that is, there is no autocorrelation problem for the error limit in the estimated model.⁽¹⁹⁾ .

The boundary test for cointegration

After estimating the ARDL model, we perform the boundary test proposed by (Pesaran et al) in 2001, to ensure the presence or absence of co-integration (a long-term equilibrium relationship) between the variables. The null hypothesis or the alternative hypothesis is tested using the F test. - Statistical, after conducting a test (F) for the parameters of the levels of variables, if the calculated (F) is greater than the tabular, this indicates the existence of co-integration and vice versa. 4) ARDL model boundary test results.

Table (4)

ARDL model boundary test results.

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
Asymptotic: n=1000				
F-statistic	3.786311	10%	3.02	3.51
k	1	5%	3.62	4.16
		2.5%	4.18	4.79
		1%	4.94	5.58
Finite Sample: n=60				
Actual Sample Size	59	10%	3.127	3.65
		5%	3.803	4.363
		1%	5.383	6.033
Finite Sample: n=55				
		10%	3.143	3.67
		5%	3.79	4.393
		1%	5.377	6.047

Source/ from the researcher's work based on the statistical program (Eviews))

Table (4) shows the results of the co-integration test using the boundary test methodology, as it was found that the calculated values of the F-Statistic test amounting to 3.786311) are greater than the tabular upper bounds of the F-statistical values according to the sample size and the degree of freedom at the level of significance (10%). This indicates the existence of co-integration between the studied variables, i.e. we reject the null hypothesis and accept the alternative hypothesis that there is a long-term equilibrium relationship.

3- Error Correction Model (ECM) according to ARDL methodology.

Estimating the short-term relationship: The short-term relationship is represented by estimating the error correction model (ECM), which represents the expression of the variables used in the first difference formula with the addition of a decelerated error correction term for one period of time (ECMt-1) as an explanatory variable, and the error correction limit measures the speed of Adapting the short-term imbalance to the long-term equilibrium. If the error correction limit parameter is negative and significant, this indicates the existence of a long-term relationship between the two variables. Table (5) shows the results of estimating the impact of oil rents on the ratio of current expenditures to total expenditures in the short term.

Table (5)
Estimation of the short-term relationship

ARDL Error Correction Regression				
Dependent Variable: D(CUEX)				
Selected Model: ARDL(2, 2)				
Case 2: Restricted Constant and No Trend				
Date: 07/05/21 Time: 06:50				
Sample: 2004Q1 2019Q4				
Included observations: 59				
ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CUEX(-1))	0.774323	0.075980	10.19110	0.0000
D(RORE)	-0.638719	0.126065	-5.066565	0.0000
D(RORE(-1))	0.547627	0.131367	4.168685	0.0001
CointEq(-1)*	-0.074507	0.021701	-3.433304	0.0012
R-squared	0.719095	Mean dependent var	-0.187034	
Adjusted R-squared	0.703773	S.D. dependent var	1.665336	
S.E. of regression	0.906388	Akaike info criterion	2.706691	
Sum squared resid	45.18467	Schwarz criterion	2.847541	
Log likelihood	-75.84738	Hannan-Quinn criter.	2.761673	
Durbin-Watson stat	2.006342			

* p-value incompatible with t-Bounds distribution.

Source/ from the researcher's work based on the statistical program (Eviews)

Table (5) shows the error correction model and the short-term parameters of the model variables. The results indicate that the variables have the expected sign, as the sign is expected to be positive. An increase in the oil rent by one unit leads to an increase in the proportion of the contribution of current expenditures to the total expenditures by (0.638719) units. As for the error correction coefficient, its value was negative and significant, as its value amounted to (0.074507 -) and with a very low significance of (0.0012), and this confirms the existence of a long-term equilibrium relationship between the two variables under study in the short term, and the value of the error correction parameter shows that about 7 % of the short-term imbalance in the value of the contribution of current expenditures to the total public expenditures in the previous period (t-1) can be corrected in the current period (t) to restore the state of equilibrium in the long term when any change or shock occurs in the explanatory variables.

4- Appreciating the long-term relationship

Table (6)
Appreciate the long-term relationship

ARDL Long Run Form and Bounds Test
Dependent Variable: D(CUEX)
Selected Model: ARDL(2, 2)
Case 2: Restricted Constant and No Trend
Date: 07/05/21 Time: 06:54
Sample: 2004Q1 2019Q4
Included observations: 59

Levels Equation Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RORE	0.184885	0.308954	0.598422	0.5521
C	65.79138	16.94071	3.883627	0.0003

Source/ from the researcher's work based on the statistical program (Eviews)

Table (6) shows the effect of the oil rent on the percentage of the contribution of current expenditures to the total expenditures in the long term. We note from the table that the effect of oil rents is statistically significant, as the value of Prob.(0.5521) is greater than 1% for that. We accept the null hypothesis and reject the alternative hypothesis that states that there is no long-term equilibrium relationship, and that the direction of this relationship is from the value of the oil rent → to the value of the ratio of current expenditures to total expenditures, since an increase in oil rents by one unit leads to an increase in the proportion of the contribution of current expenditures to total expenditures, and this shows us the significant impact of oil rents on the contribution of current expenditures to total expenditures. And this high amount reflects the size of the imbalances in the structure of the general budget resulting from the impact of oil rents, which is affected by world oil prices.

5- Test the autocorrelation problem (Table 7)

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.009000	Prob. F(2,51)	0.9910
Obs*R-squared	0.020815	Prob. Chi-Square(2)	0.9896

6- Testing the heterogeneity of variance problem Table (8)

Heteroskedasticity Test: ARCH

F-statistic	0.037719	Prob. F(1,56)	0.8467
Obs*R-squared	0.039040	Prob. Chi-Square(1)	0.8434

Source/ from the researcher's work based on the statistical program (Eviews)

After examining the statistical significance of the model, it is directed towards conducting a diagnostic test to judge the extent to which the model passes the standard tests, as the results showed that the estimated model is free from the problem of autocorrelation in terms of the Breusch-Godfrey Serial

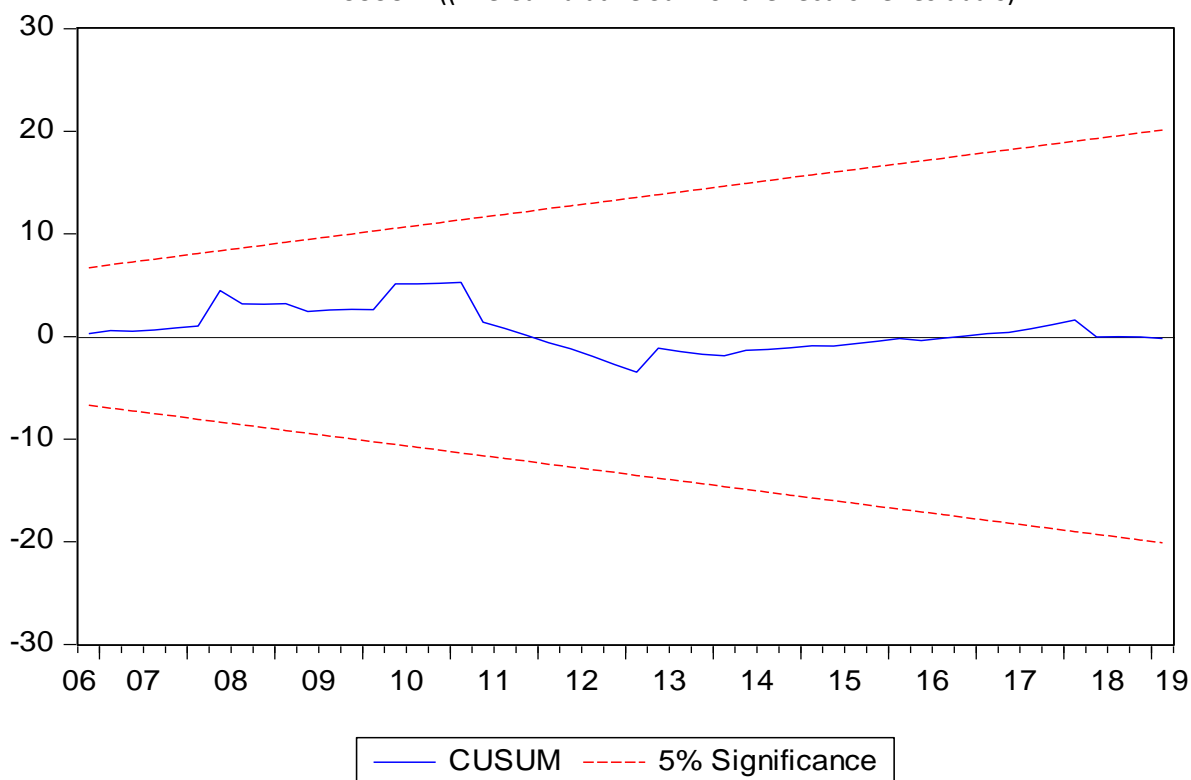
Correlation LM Test, as the value of Prob reached. Chi - square (0.9896) as shown in Table (7) and it is greater than (0.05), that is, we accept the null hypothesis which states that the residuals are not self-correlated, and to make sure that the residuals do not suffer from the problem of variance, we find that the value of Prob. Chi-square for the Heteroskedasticity Test ARCH has reached (0.8434) which is greater than 5%, and accordingly we accept the null hypothesis which says that the residuals are homogeneous and that it does not contain the problem of heterogeneity of variance.

7- Stability test for ARDL model parameters

In order to ensure that the data used in this study is free from the presence of any structural changes in it, especially the parameters of the long and short-term relationship, during the period used in estimating the ARDL model, one of the appropriate tests must be used for that, such as: The Cumulative Sum of the recursive residuals (CUSUM) and The Cumulative Sum of recursive residuals Squared (SUSUMQ) developed by Brown et al. The structural stability of the coefficients estimated by the error correction formula of the autoregressive model for distributed time gaps is achieved. If the graph of the two tests falls within the critical limits at the 5% level, and in the light of most studies, we have applied these two tests that were assumed by Broun, Dublin, and Evans (1975).

From the graphs, it is clear that the estimations are stable over time within the confidence limits or within the critical limits at the 5% level, meaning that we have no more than one equation, which confirms that the variables are stable over time and that the ARDL model is the optimal model for the presence of consistency in the model between the results of correction Error in the short and long term.

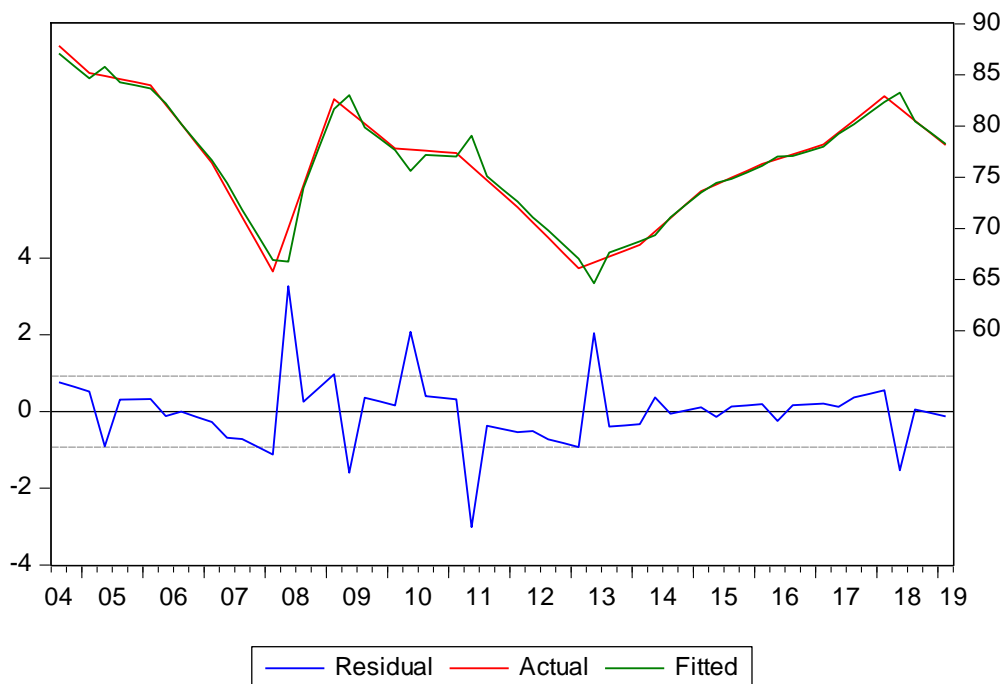
Figure (2)
. CUSUM ((The Cumulative Sum of the recursive residuals)



Source/ from the researcher's work based on the statistical program (Eviews))

Figure (3)

Estimated and actual model residuals



Source / prepared by the researcher based on the statistical program (Eviews)

Figure (3) indicates that the estimated and actual residuals of the model match, and it reflects the accuracy and quality of the model estimated according to the ARDL methodology.

fourth Axis:

Conclusions:

The study reached a number of conclusions, including:

1. The Iraqi economy is one of the rentier economies, as it depends mainly on the oil sector, while the contribution of other sectors to the composition of the gross domestic product decreases, and this would make the process of economic reform a process fraught with many difficulties if we take into account the current oil prices And the continuous decline in global demand for oil, so the government must work to diversify the economy.
2. Iraq's oil production capacity is the only determinant of resources, as the contribution of oil exports to total exports was (96.6%) as an average for the study period, while the percentage of non-oil exports' contribution was about (2.4%), and this indicates Iraq's dependence on Oil exports.
3. Iraq has suffered from many wars and political and security instability, which led to the failure to benefit from the oil wealth. Rather, these circumstances led to the squandering of oil revenues in military and security imports, which led to the failure to direct them to build a diversified economic base.
5. The boundary test for joint integration indicates the existence of a long-term equilibrium relationship between oil rents and the ratio of the contribution of current expenditures to total expenditures.

The Recommendations:

1. Working on diversifying the economy by raising the percentage of non-oil sectors' contribution to the real GDP, working to support the private sector and giving it the opportunity to practice economic work, as well as increasing its contribution to the development process because of its significant role in

the process of diversifying the economy, which is directly reflected in High percentage of its contribution to fixed capital formation from real GDP and non-oil output, reducing unemployment and reducing dependence on oil rents.

2. Diversifying exports and not relying on oil exports only, and this is done by developing a clear strategy for the industrial sector because this sector achieves a wide industrial base and industrial growth, as well as providing job opportunities and eliminating unemployment. The developed industry creates advanced trade, as well as the need to restructure trade. External by increasing the proportion of exports over imports, and following the strategy of production for the sake of export.

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