
| RESEARCH ARTICLE

Analyzing and Measuring the Impact of Customs Taxes on the Gross Domestic Product in Iraq for the Period (2004–2021)

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| ABSTRACT

The research aims to measure the impact of customs taxes on the gross domestic product in the Iraqi economy. The research covers data for a period of time, 2004-2021, and for measurement purposes, the annual data was converted into quarterly data using the (eviews10) program. The data for both variables are at the original level of the data, and it has settled at the first difference according to the Dick-Fuller method. For this reason, the Johansen method was used to estimate the co-integration in the long term. In the greatest value test, there was no integrative relationship in the long term, and these two variables were referred back according to the logic of the economic theory, and their behavior can be observed through the graph of the data of the two variables. It is known that the relationship between the two variables is a positive relationship. Positive between customs taxes and GDP, that is, the higher the customs taxes, the higher the levels of the gross domestic product, in addition to a set of recommendations, most notably working to activate the customs tax law in order to supplement the general budget with more financial resources.

| KEYWORDS

Customs Taxes, Gross Domestic Product, Unit Root, Cointegration, Johansen, Iraq.

| ARTICLE INFORMATION

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1. Introduction

Iraq suffers from a major imbalance in the structure of its national economy, as the Iraqi economy is a rentier (unilateral) economy that depends on the oil sector to provide the necessary revenues to cover public expenditures, with no interest in other sources of funding, including tax revenues and customs taxes, one of the most important indirect taxes imposed on operations. It is a means of protection as the government uses it as an effective tool for regulating the economy through its contribution to financing the state's general budget, supporting the trade balance and protecting the national industry from foreign competition, as well as achieving an increase in the added value of In order to raise growth rates in the GDP and achieve economic development, and from this, it is one of the tools of fiscal policy, so the research came to focus on the impact of customs taxes on the gross domestic product.

1.1 Research importance:

The importance of the research lies in the role played by customs tax revenues in light of the general budget deficit as it is an important source of financing the public budget, as well as its use in achieving important goals, including political, economic, and social.

1.2 Research problem:

In light of the absence of a development vision for the economic policies adopted in Iraq and the administrative and financial corruption that is prevalent in all parts of the government, as well as "Iraq's dependence on oil revenues that are subject to

fluctuations in crude oil prices in the global market, it has become necessary to adopt taxes, especially customs ones, as one of the sources of financial revenue to finance the budget." the public.

1.3 Research hypothesis:

The research was based on the hypothesis that "customs taxes have a positive impact" on the gross domestic product.

1.4 Research objective:

The research aims to introduce customs taxes, analysis of the reality of customs taxes in Iraq, and measure the impact of customs taxes on the gross domestic product in Iraq during the period (2004-2021).

2. Customs taxes:

2.1 Concept of customs taxes:

Customs taxes are one of the most important types of indirect taxes imposed by the government indirectly on certain facts and behaviors such as production, consumption, circulation of wealth, or the transfer of goods and services across borders. The price of the imported commodity on which the tax is imposed (Gijsbert & Claudio, 2016: 330) is a mandatory obligation imposed by the state due to its authority and sovereignty without return, and on this basis, customs taxes can be defined as those taxes that are imposed on goods that are traded between Countries (Appleyard & Alfred, 2006:23), or those taxes imposed on goods when they cross the state borders, the most famous of which is the import tax, and sometimes these taxes are imposed on exports in order to collect revenues or to reduce the volume of exports in order to raise their prices (Antony, & Measuring, 2019:6), then it is a financial obligation that you impose on goods and services entering and exiting from it, and it cannot be imposed in exchange for a good or service provided by the state to citizens, but rather it is imposed by law. (D, 2021: 15). That is why they are called customs duties because their purpose is to achieve economic, social, and political goals by regulating the movement of trade transactions between countries, encouraging national production, and limiting the entry of harmful goods into society, and accordingly they are smart taxes because they have the ability to control goods And the outgoing and incoming services to and from the country and monitoring them in order to achieve those aforementioned goals (Guartney and Astrup, 1999: 140).

2.2 Types of customs taxes:

Customs taxes can be divided into three main sections:

2.2.1 In terms of the nature of its container: it is divided into:

Import tax: The import tax is one of the most important types of customs taxes, whether in terms of its prevalence, effects, or areas of use. It is the tax imposed on foreign goods imported from abroad for the purpose of local consumption, as well as goods withdrawn from free zones for the same purpose because the original in which it is subject to customs tax (Kedawi, 2008: 164). Import taxes have several advantages, the most important of which are: (Dominick, 2010: 120)

The abundance of its yield.

Protection of local production from external competition.

Addressing imbalances in the balance of payments.

Rationalizing consumption and stimulating savings in order to raise investment rates.

Creating new job opportunities.

Export tax: This type of tax is imposed on goods exported outside the country, as well as on goods that enter the free zones, and it is less important than the taxes imposed on imported goods because these taxes are linked to exceptional or emergency circumstances that the country is going through, such as wars, for example" (Wartan, 2015: 49), or goods that the state does not want to leave, such as basic foodstuffs, and the goal of this tax is to maintain goods designated for local consumption and limit their export (Al-Ani, 2018: 109). Despite its low importance, there are several characteristics that characterize this tax, the most important of which are: (Jose, 1998: 212)

Ease of management.

Its flexibility is high when world prices change.

Protecting the national industry by raising the prices of primary raw materials for foreign industries than for national industries.

Transit tax: This type of tax is imposed on goods that cross the state borders, and these goods cannot be used for local consumption or use. These taxes are imposed at one rate on all goods regardless of their types or origins, so they are considered one of the unified taxes (Wartan, 2015: 50).

2.2.2 In terms of collection unit: It is divided into (Al-Ali, 2002: 139).

Value taxes: They are taxes imposed on commodities at a percentage of the value or price of the commodity, such as 5% or 10%, and they have advantages, the most important of which are:

- Ease and clarity of its procedures.
- Low management costs.
- It is flexible according to price changes.
- It is fair, as it is imposed on luxury goods.

Specific taxes: They are taxes imposed lumpy on each unit of measurement of goods (area, weight, volume) regardless of the value of those goods (Krugman, 2012: 195). An example of this is the imposition of a tax of \$5 per ton of wheat, and it has the most important advantages:

- Ease of management.
- Specialized in good varieties of goods.
- Its outcome is stable.
- Not affected by price fluctuations.
- It has the ability to protect the national economy, especially in periods of economic recession.

Mixed taxes: This type of tax combines ad valorem taxes and qualitative taxes in order to overcome the defects of the previous two types. And he gets 20% of its value (Sawyer, 2009: 145).

2.2.3 In terms of the goal: It is divided into (Al-Ali, 2022: 142):

Financing taxes: The objective of which is to provide financial resources for the state to meet the requirements of public spending. In this case, taxes include large numbers of goods that are not locally produced and goods that have a high elasticity of demand.

Protective taxes: The aim of imposing this type of tax is to protect the national industry from foreign competition.

Preventive taxes: The aim of imposing this type of tax is to limit the entry of certain types of foreign goods imported into the country, which are often harmful to society, such as alcoholic drinks, cigarettes, and other harmful goods.

2.3 Customs taxes objectives:

Countries seek, through the imposition of customs taxes, to achieve multiple goals that are not limited to the financial goal alone but also have economic, social, health, and other goals.

2.3.1 Financial goals:

Financial goals are among the most important goals that governments seek to achieve as a result of imposing taxes in general and customs taxes in particular. The country has a monopoly on the production of these goods, and it is imposed on imported goods, and in particular on goods whose demand is inelastic and not produced locally.

2.3.2 Economic objectives:

Customs taxes have economic objectives represented by:

Protection of national production, especially in the early stages of production for emerging industries, which are characterized by high production costs, and thus need protection from competition from foreign industries (John, 2004: 140).

Raising the level of employment and increasing production: the application of imposing customs taxes on imports as a protectionist policy will encourage local industries to expand production and create additional employment opportunities to absorb the unemployed labor (Pugel, 2004: 190).

Improving the rate of trade exchange: The imposition of customs tax on imports will lead to an increase in their prices and a lower demand for them compared to local goods (if the demand for the commodity is flexible and the country is influential in global markets), and this is what compels the exporting country - if it wants to maintain the same exported quantity - to reduce the prices of those goods on which the customs tax has been imposed, and thus increase the rate of trade exchange between the two countries (Wartan, 2015: 53).

Achieving economic stability: the imposition of customs taxes can contribute to the diversification of domestic production in developing countries so that they become less dependent on the global market, especially on goods that developing countries cannot control the determining factors for them, such as fluctuations in global demand or in emergency conditions, whether natural or otherwise (Khalil, 1980: 689).

2.3.3 Social goals:

These goals are the redistribution of wealth and income among the different groups of society in order to achieve justice and not primarily to obtain financial resources, as the goal of imposing the customs tax here is not to obtain financial resources as much as it represents the redistribution of wealth and income between the different groups of society in order to achieve justice, and this is achieved by distinguishing between necessary and luxury goods when imposing customs tax (Shameya, Al-Khatib, 1991: 141).

2.4 The relationship of customs taxes to the gross domestic product:

The gross domestic product is one of the most important macroeconomic indicators that are used in drawing up the economic policies of the country, and there is a close and direct relationship between customs taxes and GDP, and this relationship appears clear when imposing customs taxes through its direct impact on increasing production in the activities covered by customs protection (Al-Hashemi and Al-Jubouri, 2002: 12), and usually the impact of customs taxes on production is in two ways: the first is that its effects are deflationary on production, especially consumer and investment goods, through what they lead to increasing costs and reducing profits, and consequently a decline in the level of production on the one hand, and on the other On the other hand, customs taxes affect production through their impact on the volume of investment, which depends on the volume of savings that will decrease when the tax is imposed, which reduces the volume of investment and production, and on the other hand, when customs taxes have expansionary effects on production, which leads to raising the prices of customs taxes on goods Imported goods lead to an increase in demand for locally produced goods, which raises the level of GDP in the country (Al-Ali, 2009: 260).

3. Analysis of the impact of customs taxes on the gross domestic product in Iraq for the period (2004-2021):

When following the data of Table (1), it becomes clear to us the fluctuation in the data of both customs taxes and gross domestic product, and this is mainly due to the heavy dependence on oil revenues without paying attention to other sources of revenue, especially customs taxes, in addition to that the country has been exposed to internal crises and shocks. And foreign affairs have significantly and directly affected the gross domestic product, as it was in the global financial crisis, as the output fell in 2009 to 130,642,187 million Iraqi dinars, after it was in 2008 about 15,702,061 million Iraqi dinars, compared to the rise in customs tax revenues in 2009 to 590688 million Iraqi dinars. Which increased the proportion of customs tax revenues to the gross domestic product to 45% after it was 23% in 2008, as well as in 2014 and 2015 and the deterioration of the political, economic and social conditions during the control of terrorist groups on some border crossings that reduced the proceeds of customs taxes to 514,636 and 416,357 million Iraqi dinars for the above two years in a row, as well as the drop in oil prices, which significantly and directly affected the GDP, which amounted to about 266,42038 4 and 207876191 million Iraqi dinars, with percentages of customs tax revenues amounting to 19% and 20% of GDP for the two years mentioned above, respectively, and then the customs revenues returned to rise in 2020 and 2021 to 1122970 and 1141358 million Iraqi dinars, respectively, and in contrast, the GDP rose to 219768798 and 301439533 million Iraqi dinars for the above two years in a row, which indicates that customs taxes have a positive relationship with GDP reinforced by the curved path of customs tax revenue and GDP in Figure (1), which move in a gradual upward direction during the study period.

Table (1) Percentage of customs tax revenues from the gross domestic product in Iraq for the period 2004-2021 (million dinars)

Year	Customs taxes	GDP	Customs taxes/GDP %
2004	81020	53235358	0,15
2005	118177	73533598	0,16
2006	219035	95587954	0,22
2007	229076	111455813	0,20
2008	376540	157026061	0,23
2009	590688	130642187	0,45
2010	507341	162064566	0,31
2011	436714	217327107	0,20
2012	517867	254225490	0,20
2013	596644	273587529	0,21
2014	514636	266420384	0,19

2015	416357	207876191	0,20
2016	647482	196536350	0,32
2017	1236357	225995179	0,54
2018	1691737	251064480	0,67
2019	1056994	262917236	0,40
2020	1122970	219768798	0,51
2021	1141385	301439533	0,38

Source:

Republic of Iraq, Ministry of Finance, General Customs Authority for the period 2004 – 2021
 Ministry of Planning, Central Agency for Statistics and Information Technology, Directorate of National Accounts for the period 2004-2021.

The third column of the researchers' work.

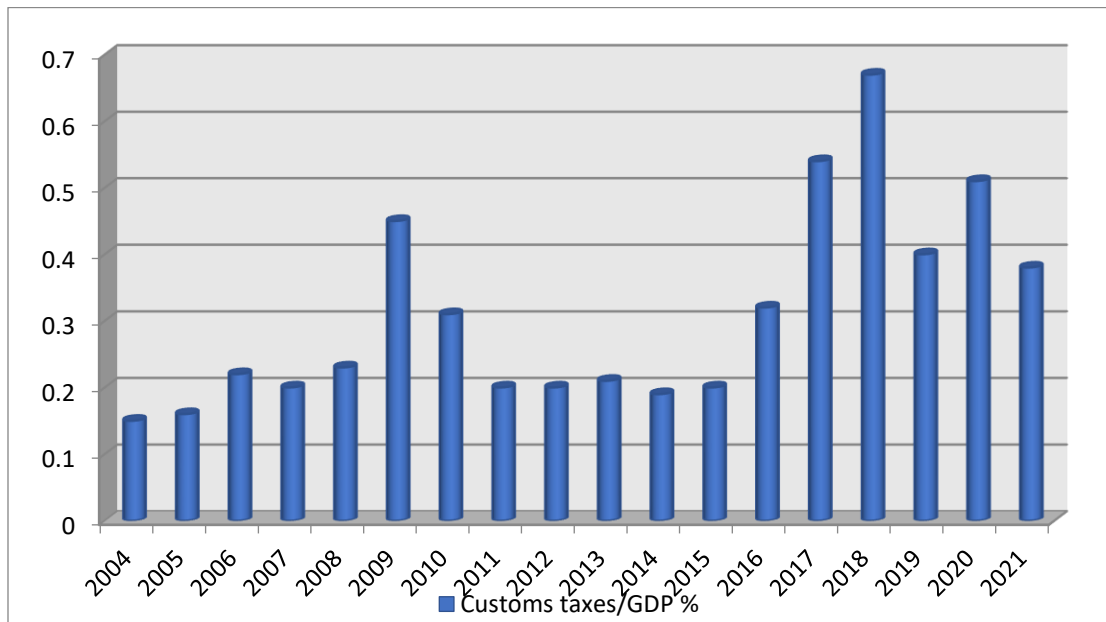


Figure (1) Ratio of customs taxes to GDP (%)

Source: From the researchers' work based on the data in Table (1)

4. Measuring the impact of customs taxes on the gross domestic product in Iraq for the period 2004-2021:

4.1 Data used:

The study aimed to show the impact of customs taxes on the gross domestic product in Iraq for the period 2004-2021 through the use of some indicators (GDP) and customs taxes (Text). Since the time series is not sufficient for analysis, which is (17) years, and for the purpose of reaching Accurate and non-false results, the annual data has been transferred to the quarterly so that the number of views is (72). The data on the subject of the study on Iraq were obtained through the website of the Ministry of Finance and the Ministry of Planning in Iraq.

We notice Figure (2), which shows the relationship between (GDP) and (text) and the extent of compatibility between them and to know whether they will go in one direction or whether there is a reciprocal direct equilibrium relationship between them in the long term or not.

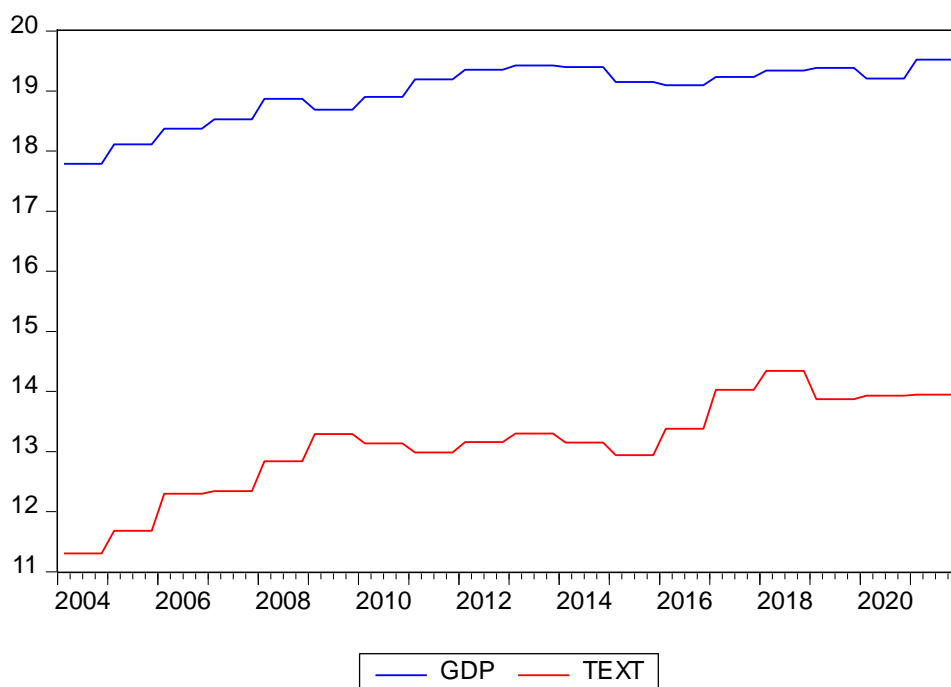


Figure (2) Relationship between GDP and Text

4.2 Time series stability test:

The time series test was conducted using the developed Dick-Fuller method, and the test results were that the variables are stable at the first difference and for both the independent variables (custom taxes) and the dependent variable (GDP). Logarithmic data for the variables under the current study.

4.2.1 Unit root test:

From observing the data in Table No (2), it is clear from the Dickey-Fuller test that both variables are not static at the original level because the probability was greater than 5%, which concludes that the variables under study are not static at the original values, and therefore we accept the null hypothesis which states that there is a unit root, which requires that we take the first difference in the data and for both variables.

Table (2) Unit root test for variables at the original data level

The result	none	Trend and Intercept	intercept	
	prob	Prop	prop	
not static	0.98	0.49	0.16	Ln gsp
not static	0.97	0.43	0.24	Lntext

Table (3) The stability of the quarterly data for the variables in the first difference

The result	none	Trend and Intercept	Intercept	
	prob	Prop	Prop	
not static	0.000	0.000	0.000	Ln gsp
not static	0.000	0.000	0.000	Lntext

Source: Prepared by researchers using the data in Table (1) after converting it into quarterly data.

From observing the data in Table (3), it is clear that both variables are stationary at the first difference, and this is evident by observing the probability that we find that it is less than 5%, as the probability for them reached (0.000) and for all cases, which concludes that the variables under study have become stationary at the first difference, and therefore we reject the null hypothesis and accept the alternative hypothesis which states that there is no unit root, which requires going to use the Johansen method to show that there is a co-integration between the variables under study or not, any long-term relationship or not.

4.2.2 Determine the degree of delay

From Table (4), the degree of delay was determined as zero according to the criteria SC, AIC, FPE, LOGL after taking the first difference for the variables.

Table (4) shows the degree of delay in the first difference of the variables and according to the indicators below

VAR Lag Order Selection Criteria						
Endogenous variables: DGDP DTEXT						
Exogenous variables: C						
Date: 08/21/22 Time: 00:36						
Sample: 2004Q1 2021Q4						
Included observations: 52						
HQ	SC	AIC	FPE	LR	LogL	Lag
-3.959702*	-3.913425*	-3.988473*	6.35e-05*	NA*	105.7003	0
-3.781727	-3.642898	-3.868042	7.17e-05	1.637306	106.5691	1
-3.578362	-3.346981	-3.722220	8.30e-05	0.377167	106.7777	2
-3.535556	-3.211623	-3.736957	8.19e-05	7.586250	111.1609	3
-3.486072	-3.069586	-3.745016	8.16e-05	6.961916	115.3704	4
-3.282454	-2.773416	-3.598942	9.50e-05	0.318637	115.5725	5

Table (5) shows the degree of delay in the level

HQ	SC	AIC	FPE	LR	LogL	Lag
1.912545	1.952679	1.886326	0.022609	NA	-60.24875	0
-2.565639*	-2.445237*	-2.644297*	0.000244*	293.0656*	93.26179	1
-2.408123	-2.207453	-2.539219	0.000271	0.984201	93.79423	2
-2.268651	-1.987714	-2.452186	0.000296	2.016583	94.92215	3
-2.143082	-1.781877	-2.379056	0.000319	2.740659	96.50884	4
-2.114977	-1.673504	-2.403389	0.000312	8.005006	101.3118	5
-1.955421	-1.433681	-2.296272	0.000349	0.747037	101.7770	6

Source: Prepared by researchers using the eviews10 program

* Here, one is subtracted from the slowdown period because the slowdown period was determined at the level, and here the degree of slowness is one minus one, so the degree of slowness becomes zero.

4.3 Co-integration using the Johansen method:

Although the results of the time series stability test for the study variables showed that the two series are complementary to the same degree and at the first difference, the Johansson co-integration test was conducted to test and evaluate the existence of a long-term relationship between customs taxes (text) and gross domestic product (GDP), and to know the number of vectors and the nature of the relationship The balance between them in the long run, based on the Trace test, and the Maximal eigenvalue test to test the null hypothesis that there is no integrative relationship in the long run between the variables (no co-integration vectors) or not, then test the alternative hypothesis that there are two complementary relationships (heading).

Table (4) shows the results of the (Johansen) co-integration test between (text) and (GDP), which shows the possibility of rejecting the null hypothesis that there is no co-integration vector among the study variables, as the calculated value of the impact test reached (15.7), which is greater than the value. The critical value (15.4) is significant at a level of significance less than 5%. It also shows that the calculated value of the test of the greatest characteristic values, which is (11.7), is less than the critical value at the level of significance of 0.05, which is (14.26), which is not significant at the level of significance. Less than 5% and this result do not support the results of the impact test, and thus we return to the behavior of these variables according to theory and economic

logic, as we conclude from this that there is a long-term relationship at least between the variables of the study, which proves the positive impact that customs taxes exercise in Gross domestic product.

Table 6: Co-integration test results

The result	prob.val	Critical value at 5% level	Statistical values of the test	Assumptions of the number of integration vectors
Trace statistic				
Not accepting the null hypothesis	0.046	15.49	15.71	There is an integral vector of 2
Not accepting the null hypothesis	0.46	3.841	3.9789	There is a second integral vector
statistic value Eigen Maximum				
Accept the null hypothesis	0.12	14.26	11.73	There is no co-integration vector between the variables
Not accepting the null hypothesis	0.46	3.84	3.97	There is a common integration vector

Source: Prepared by researchers using eviews10

5. Conclusions and Recommendations

5.1 Conclusions

The time series of the dependent variable (GDP) did not settle at the original level of the data and was stable at the first difference using Dick Fuller's method.

The time series of the independent variable (customs taxes) did not settle at the original level of the data and was stable at the first difference using Dick Fuller's method.

Because of the instability of the variables at the level, but rather they were stable at the first difference, the Johansen method was used to find out whether there was a long relationship between the variables, and the delay period was determined to slow down zero for the studied variables.

The tests showed the existence of two complementary relationships between the variables in the long term, according to the impact test, and this result was not confirmed by the maximum value test. The behavior of these variables was referred to according to the logic of the economic theory of gross domestic.

5.2 Recommendations:

Working on activating the customs tax law in order to supplement the general budget with more financial resources.

Encouraging local production by reducing the price of customs tax on imported production requirements and included in the production process.

Providing customs protection for local production by raising the rates of customs taxes imposed on imported goods that compete with local production.

Diversify sources of income and reduce dependence on oil revenues by developing the industrial, agricultural, and service sectors.

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