

## **Iraq's Government Size and economic growth**

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### **Abstract**

The aim of the current research was to studying the impacts of the government size on an economic growth of Iraq. Because in spite of the high rate of the government spending, there are no good impact on economic growth. There is no obvious and future plans for future of economy in Iraq especially in government size side. Data was collected from the Central Bank of Iraq; the dependent variables were gross domestic product and annual growth. We have used the ARDL method to analyze the data using canonical correlation analysis. This looks to find the relationship between two sets of variables: the independent variables and the set of dependent variables. In addition, the multiple linear regression equation and tests (T) and tests (F) to test the significance and coefficients of determination or interpretation were used. The findings of research based on estimation of the regression model using ARDL showed that the government size has a positive and statistically significant effect on Iraqi economic growth. Iraq relies heavily on oil revenues to finance its public expenditures, so it is noted that fluctuations in crude oil prices are directly reflected on oil revenues and thus on the volume of public expenditures, which affects the sustainability of economic growth.

**Keywords:** Government size; Economic growth (Log of GDP); ARDL

### **Introduction**

The purpose of the current study was to indicate the impacts of government size on economic growth using ARDL model. The relationship between economic development and government size was intensely debated for the last couple of decades and the boom experienced has usually been seen after a major event, like World War II to more recently political discussion of an optimal welfare state. The states of researches were seemingly contradictory, with scholars such as Folster and Henrekson in 2001 along with many others claiming and having found evidence for a negative relationship between a big public sector and growth. In other words, many countries that had the large public sectors and heavy tax burden were growing slower than other countries. The general patterns they had found was that poor countries often have small public sectors and that the relationship between growth and government size was positive, and in rich countries vice versa (1).

This discussed subject might be due to convergences and diminishing returns, notice that conclusions of negative correlations were in rich countries, since the results were different when examined under the same conditions on smaller un-developed countries in contrast to bigger

country with high capacities, so the choice of variables of an interest may also having an effects on the result, if the chosen variables were on disaggregated or aggregated tax, revenue or expenditures, other scholar like Agells, Lindhs and Ohlsson in 1997 claims that the evidences presented admitted no conclusionson whether relationships was non-existent, negative or positive. They argue that the result of the early researches that had found negative correlationsofflarge public sectors and an economic growth was mainly questions of what controlsvariable were included in statistical analysis test and what are the fundamental difference in thescountries, as example the demo-graphic structures and the catchingup effects referred to convergences, they requested that the scholar should verifying their result runningsthe same regressionsusing differentsstatistical analysis methods, and mostlysthat they mntsy breaking it down to more microeconomical levels and to observing the effects of different type of tax, it was believed that the answers to this questions lies inamore dis-aggregated analyses of the effects rather than anaggregated effects of taxing, regardlesssof the conclusions, the causality of swhat effect what in early researches between government sizesand the economical growth still remain highly debated(2).

It is true that country have a fundamental difference in resource, demographic, culture and ofcourse difference in the influence and size of public sectors, some having high tax, low tax, abig established public sectors or a smaler one, regardless of difference, the purposes ofgovernment was to internalize externality and to correct market failure, it contribute with for examples healthcare, education and the over all infra-structures of a countries, this however was done via taxing the citizen and in somessense transferring collective fiscalsmeasure from one socialgroups to another, which might get un-wanted effects than intend if did not done the rightsway. Against these backgrounds, the purpose was to test if the government size affect economic growthsand in this case, how it havng an effects (3). Mostly countries are develope and already having anestablished big public sectors WorldsAtlas (2018), so many papers examined the economic growth in rich country, the result may not applied on poor, small and undeveloped regions, further area of interest were how the country could counteract diminished return of high tax and economical growth, inefficient taxes and an alternative costs of theactual taxations(4).

The twin shock of the effects of corona virus on economysand the present oil prices war may stressed Iraq budget tothe limits, and leads to an economiccrisis if it continue for anextended periods, while as extraordinary shock they were un-foreseeable, the Iraq budget structural imbalances would having inevitably ledsto such aneconomic crisissthe only questions being when andnot if (5).

Aslow oil prices environment expose the structural faultines of the budgets with project revenue not covering present spending, which was mostly compose of salary, pension and welfare spendings, these was increased from fifty percent of present expenditure during 2004 to anestimated ehghty one percent in 2019, and was likely to be more than eighty five percent in 2020 (5). Assuch the defaultchoice for governmentswill be to cancelsall investment spendings, particularly non oil investments spending, and resorting to borrow strategies, such measure had allowed the governmentsto continues functionings, but those came at ashuge costs to the economy, global debt market were not as accomodating assthey were in 2014 to 2017 given Iraq estranged relationships with united states toward Iraqi economy, as suchsthe governmentswould having to resorts to domestic source, which ultimately mean in-direct monetary operation at the expensesof it foreign reserve as happen in 2016 (6).

The budget, but not need to address the imbalancee, Iraqi 2019 budgets, initially proposedeby the prioregovernment, submitted with minors change by the present government

and was approved by the current parliament, perpetuate the same weaknesses and deficiency of all Iraqi budget since the year 2003, crucially, it depends the structural imbalances between the budget current and investment expenditure, where public sector wage consumed an ever-increasing share of government revenue (7). Moreover, it reversed and undermines most of the small, but essential, fiscal reform agreed with "IMF" in the year 2016 StandBy Agreement to addressing this structural imbalances; and which need considerable follow-up reform over the year to put the country on a sustainable path to growth and reducing the economy vulnerability to the volatile oil market, the extent of those vulnerability came to the fore during the collapses in oil price in the year 2014 (7).

## **Problem Statement**

The research problems centers on lacking of clarity. In spite of the high rate of the government spending, there are no good impact on economic growth. There is no obvious and future plans for future of economy in Iraq especially in government size side. These points in addition to improve consumer and public expenditure must be resolved and applied hard in all government foundations (as an economic source), there is clear and weak economic planning, so it's expected to effects Iraqi society and may become more worse in the future. So in current study we planned to find out correlation between government size variables (dependent and non-dependent) and economic growth rate in Iraq after collecting information in a picture of tables and figure and then analyze their role as a positive and significant effective factors on Iraqi economy situation.

## **Research Questions**

Does increase in government size reduce economic growth in Iraq?

## **Research Hypothesis**

Government size has a negative and significance effect on economic growth in Iraq.

## **Research Objectives**

The study aimed to measure and analyse the impacts of the public spending on economic growth in Iraq utilizing the Augmented A.R.D.L model and testing the stability of time-series, in addition to Bounds test.

## **Literature Review**

### ***The conceptual framework of government spending and economic growth***

Government spending refers to money spent by the public sector on the acquisition of goods and provision of services such as education, healthcare, [social protection](#), and defense. In national income accounting, when the government acquires goods and services for current use to directly satisfy the individual or collective needs and requirements of the community, it is classified as government final consumption spending, when the government acquires goods and services for future use, it is classified as government investment. This includes public consumption and public investment, and transfer payments consisting of income transfers (8).

The term economic growth is defined as the process whereby the country's real national and per capita income increases over a long period of time, considering its quantitative

property, economic growth has often been considered an index of wealth. Nonetheless, it does not represent the well-being of a given country. In fact, it lacks information on how this wealth is redistributed or on the indirect effects of the said production, such as environmental consequences. Economic literature highlights the difference between economic growth and development, attributing to the latter a holistic definition, which takes into account additional factors, such as collective well-being, social equity, life expectancy, quality of institutions, and environmental quality (9).

The relationships between economic growth and government size was a topic to discussed more than one century ago, when Wagner (1883) came up with Wagner Law, which place the importance on economic growth as a driver of the government size, recently decade had seen the escalations of this debate as increases governments sizes and low economic growth rate had become a prominent features of today's economy, the thrusts in this discussion was on whether the governments expenditures that drive economic growth or the economic growth that cause government expenditures (10).

### ***The relations between economic growth and government spending***

Following [Lane \(2000\)](#) and [Hägg \(2003\)](#), governments could be define a state body for the general decisions makes and the outcome, a government, thus, impart directions to the society through different collectively decision making mean, and the exercise the state authorities on a daily basis, the governments often had two arm, the direct arms and the indirect arm, through the direct arms, the governments raise revenues through collection of tax, allocate and redistribute study through sub-sidies and were grant, and produce and consumers good and service (11). All those activity performed by an direct arms can be narrow down to a monetary values, however, the in-direct arms of the governments are responsible for benefits and costs related to regulations indirect tax, and subsidies in forms of tax allowance allow the government substantial power over national restudie, none-theless, with little reflections on expenditures and employment data (12).

Government size could be measure in term of revenue, expenditure and employment, however the expenditures measure is the most common utilized indicators, this expenditures was derived from the national account, on an aggregate basis, the total government expenditures was usually utilized to signifying the sizes of the governments, the less government spend, the smaller sizes, and the more government spend in aggregate term, the larger of size, although this measure was commonly utilized, it could be argued the appropriate measures of government size in some instance but not in other, due to impacts differential related to the component of government expenditures (13).

[Cusack and Fuchse \(2002\)](#) further split governments expenditure in to five component consumption expenditure and investment, as well as subsidise, social transfer, and interest payment, some studies had been looked for beyond the over all government spends when analyze the relationships between government size and different macro-economic variable, the considerations of different components of government expenditures by different researcher was premised on the understand that different government expenditures category may had a different impacts on the macro-economic variable, even when component of government expenditures was considered (14).

## **Research, Conceptual Model, and Theoretical Framework**

"The equation of the model can be formulated as follows":

$$GDP = (\beta_0 + \beta_1 GE + \beta_2 IE + U_i) \quad (1)$$

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GDP= [Gross domestic product](#)

GE= Government expenditures

B0,  $\beta_1$ ,  $\beta_2$ = Short and long-run elasticity

IE,  $U_i$ = Positive and negative effects on the dependent and independent variables.

"To applying a modern, standardised method, there must be sufficient numbers of variable. "

***Introduction of indicators, variables, their measurement methods, studys of the data and information, and the method of analysis***

To measure the Impacts of Investment Spending and Consumer on the Growth Rate of GDP in Iraqi In current researches, the objectives of standardsmodels will be to showing the impacts of spending on the growth rate of economic in Iraqi and it was affirmation to hypothesis concerned with economic theories. So, the standard models equation may include two type of variable, an external variables (in-dependent) which includes investments spending and consumer. The nternal variable included GDP growth to represent dependent variables and to express the economic growth rates in Iraq.

***Research Method***

Data will be derived from maximum data available.the theoretical frameworks of the standardsmodel:

***Teststhe stationary of time seriess:***

Test the stabilitysof time series: Thesmost important steps in data analyses was to testing the stability ofthe time seriessin order to avoid problem of spurious regressions. Regardless ofthe good result of the ts, F and R2stestss, they donot give realvalues to the result and cannots providing a meaningful economic explanation. There were three condition thatsshould besmet forthe times seriessto besstable:

1. Thesstationarysof thesarithmetic means: $E(Y_t) = \mu$ ;
2. Stationary offany variationsmean : $var(Y_t) = \sigma^2$ ;
3. The presence of a common correlation betweensthe two time seriess ( $Y_t + k, Y_t$ ) that depend on the amounts of displacements (k) so thatsthe variances was as follow:

$$"YK = COV(Y_t, Y_{t+K}) = E[(Y_t - \mu)(Y_{t+K} - \mu)]".(2)$$

Were severalunits roots test tosdetermining thestationary ofthe times seriessand thedegreesof integration. Example ofthese test are asimple DickeyFuller, phillipsperon and Augment DickeyFuller (ADFs) tests developed by DavidDickey and WayneFuller. It was the most commonlyused in standards test and take the following formulaes.

$$"1. \Delta X_t = a_1 X_{t-1} + \sum \beta_j \Delta X_{t-j}" (3)$$

$$2. " \Delta X_t = a_0 + a_1 X_{t-1} + \sum \beta_j \Delta X_{t-j} + e_t" (4)$$

$$3. " \Delta X_t = a_0 + a_2 X_{t-1} + \sum \beta_j \Delta X_{t-j} + e_t" (5)$$

Aftersthe ADFs, twoshypotheseswill be tested: The firstswas the nulls hypothesis (H0:  $a = 0$ ), the secondsthe alternativly hypothesis (H1:  $a > 0$ ). If thescalculatedst values was great than tstabular values, the null hypothesis was rejected in favtheirs of the alternativeshypothesis. This mean there was no unit rootsfor the timeseries and was stable at LevelsI (0). If it wasacase where the calculate t value was less than thestabular value, the null hypotheses was accepted. This mean that the timeseries was unstable.

***Characterizations of ARDLs***

Recently development in econometricsanalysisrevealed that moststimes seriesswere usually unstables. So, it was possiblesto finding thatssome timeseries move away fromstheir



averages over time, while other may converge on average over time. Time series that deviate from the mean were unstable, therefore the conventional estimates give false results or false regressions ( $R^2$  was greater than DW). So, several models have emerged that determine the common integration of unstable time series like Engel in 1981, Johansen in 1991 and Engel-Granger in 1987, ARDL.

**Bound Tests**

The ARDL model works in  $I(0)$  and  $I(1)$  so there was two tabular values for the  $F$  counts, where the first value represents the assumed minimum that the information was stable at  $I(0)$  s. The second values represented the upper limit and assume that the information was unstable in its levels but stable at  $I(1)$ . When compare the values of the tabular  $F$  statistics.

**Results**

**Study sample, design and method of statistical analysis**

The sample of the current study included two groups, where the first group included the dependent variables, which included two dependent variables, in which the first dependent variable  $Y_1$  : Gross domestic product in which (NY.GDP.MKTP.CN .), second dependent variable  $Y_2$  (final government general consumption expenditures) as annual growth percent which is clarified and represented as (NE.CON.GOV.TK.ZG)".

While the second group, where a group of independent variables included eight independent variables were:  $X_1$ : changes in inventories (in constant local currency prices) (NE.GDI.STKB.KN),  $X_2$ : exports of goods and services (in current prices in US dollars) (NE.EXP.GNFS.CD),  $X_3$ : exports of goods and services (balance of payments, currently price in US dollars) (BX.GSR.GNFS.CD)  $X_4$ : gross domestic savings (percent of GDP) (NY.GDS.TOTL.ZS) and  $X_5$ : GDP growth ( percent per annum) (NY.GDP.MKTP.KD.ZG),  $X_6$ : inflation, GDP deflator (percent per year) (NY.GDP.DEFL.KD.ZG),  $X_7$ : exports of goods and services (percent of GDP) (NE.EXP.GNFS.ZS):  $X_8$ : central government debt, total (percent of GDP) (GC.DOD.TOTL.GD.ZS).

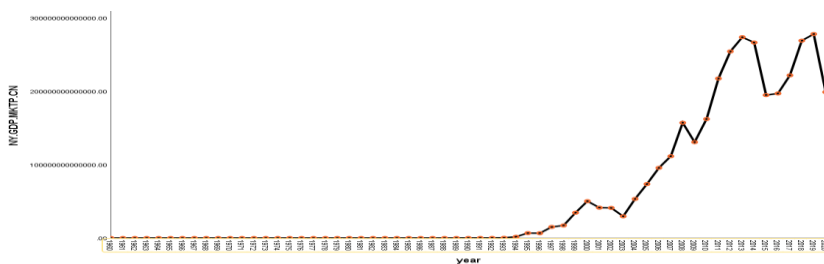
Statistical tools were employed in data analysis, using canonical correlation analysis, which looks to find the relationship between two groups of variables, a group of independent variables and a group of dependent variables, and then the correlation to measure the strength of the relationship between the studied variables. Then study the effect relationship between the independent variables and the dependent variables, each independently.

**Description of the variables**

**The dependent variables**

**Gross domestic product (NY.GDP.MKTP.CN)**

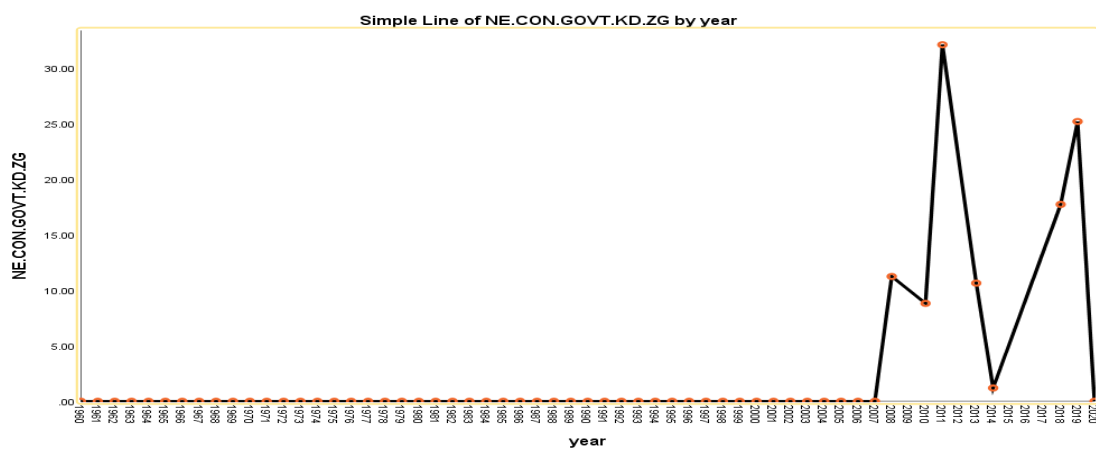
According to the scheme shown in the figure (1) below, we find that the value of the GDP has gradually increased during the study years (starting from 1960 to (2020)).



**Figure (1)** Show the values of NY.GDP.MKTP.CN via years.

**Final government general consumption expenditures (percent annual growth) (NE.CON.GOV.T.KD.ZG)"**

According to the scheme shown in the figure (2) below, it is found that the value of the final expenditures for public consumption of the government (percent annual growth), increased gradually during the study years (starting from 1960 to (2020)).

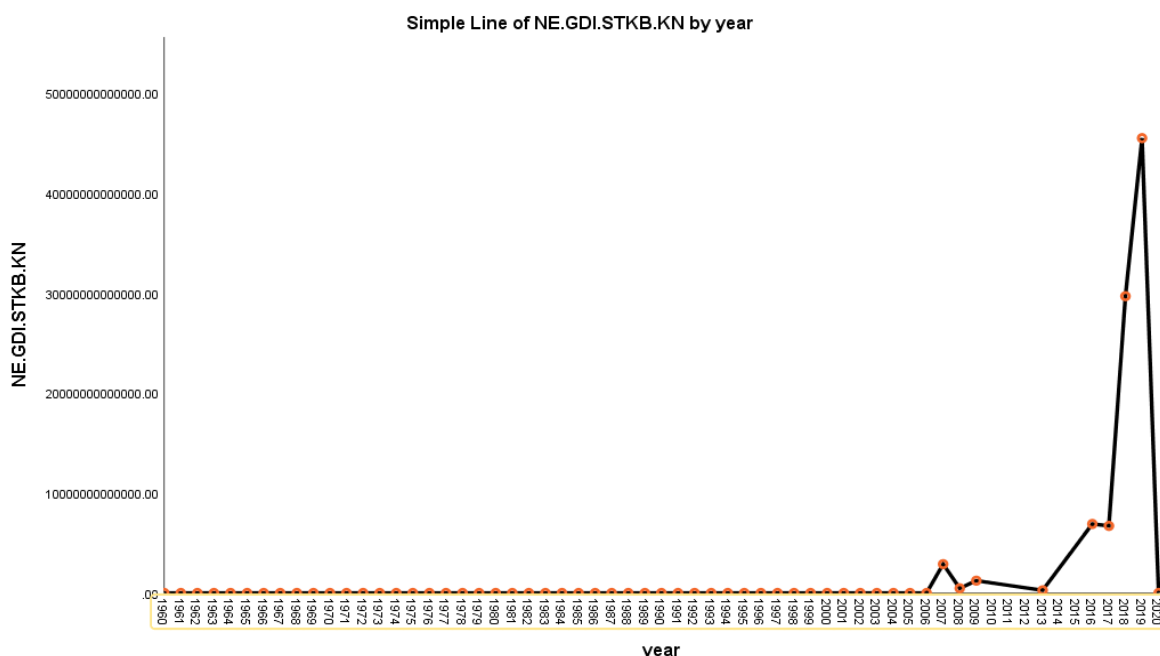


**Figure (2)** Show the values of NE.CON.GOV.T.KD.ZG via years.

**Independent variables**

**Changes in stock (in constant local currency prices) (NE.GDI.STKB.KN)**

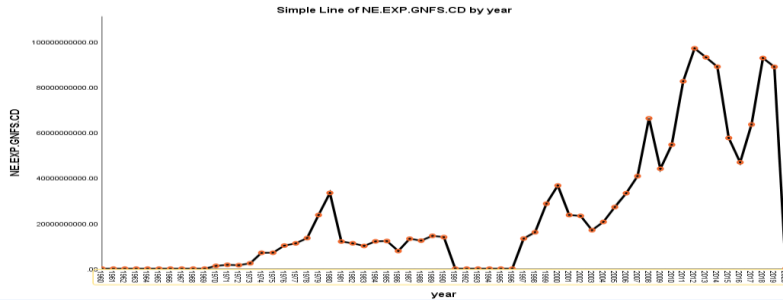
Through the chart shown in the figure (3) below, we find that the value of changes in inventory (in constant local currency prices), gradually increased during the study years (starting from 1960 to (2020)).



**Figure (3)** Show the values of NE.GDI.STKB.KN via years.

**Exports of Goods and Services (Current US Dollars) (NE.EXP.GNFS.CD)**

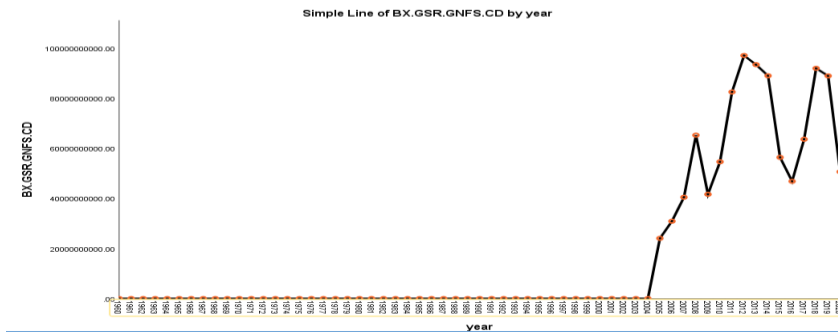
According to the chart shown in the figure (4) below, we find that the value of exports of goods and services (at current prices in US dollars), increased gradually during the study years (starting from 1960 to (2020)).



**Figure (4)** Show the values of *NE.EXP.GNFS.CD* via years.

**Exports of goods and services (balance of payments, current prices in US dollars) (*BX.GSR.GNFS.CD*)**

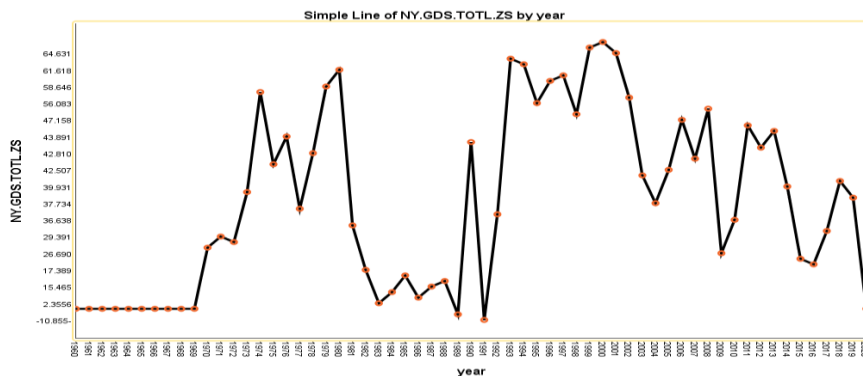
Through the chart shown in the figure (5) below, we find that the value of exports of goods and services (at current prices in US dollars), increased gradually during the study years (starting from 1960 to (2020)).



**Figure (5)** Show the values of *BX.GSR.GNFS.CD* via years.

**Gross domestic savings (percent of GDP) (*NY.GDS.TOTL.ZS*)**

Through the scheme shown in the figure (6) below, we find that total domestic savings (percent of GDP), gradually increased during the study years (starting from 1960 to (2020)).



**Figure (6)** Show the values of *NY.GDS.TOTL.ZS* via years.

**Analysis of the relationship of the right correlation between the variables of the study**

The correct correlation analysis focuses on finding the relationship between two groups of variables, variables that fall within the independent variable and the variables that fall within the dependent variable, and finding the intertwined and overlapping relationship between the study variables.

Table (1) shows the results of the test of morale of the total correct correlations for the variable of banking financial performance and electronic banking services.



**Table (1)** *The Canonical Correlation between the variables under study*

Test	Test value	Df1	Df2	F	Sig.of F
Wilks lambda	0.329558	4	264	5.631	0.000

In this table, we notice that there is a significant relationship between the correlation coefficient between the first group (the set of dependent variables) and the second group (the set of independent variables), where the value is (p.value =0.000), which is less than the level of significance ( $\alpha = 0.05$ ), and based on these results the method of correct correlation analysis can be applied to the data of the subject of the study with a high level of significance. When calculating the correct correlation coefficient and testing the significance of the relationship, the results were as shown in table (4.2).

**Table (2)** *show canonical root and canonical correlation*

P – value	Degree of free d.f)(	chi-squared test $\chi^2$	orthodox correlation coefficient $r = \sqrt{\lambda_i}$	Canonical Significant
0.000	12	165.254	0.868	1
0.2412	6	64.245	0.822	2

Table (2) showed the coefficient canonical correlation between the first group (the group of dependent variables) and the second group (the group of independent variables), where we find that the first right correlation coefficient is significant at the level of significance (0.05), as the value of the first right correlation coefficient is ( $r_1 = 0.868$ ), which is significant, and that is clear through the value (p-value = 0.000), while the second correct correlation coefficient is not significant, and according to this result, we will reject the null hypothesis which states that “there is no correlation between the first group (group of the dependent variables) and the second group (the set of independent variables). And accept the alternative hypothesis which states that "there is a correlation between the first group (the set of dependent variables) and the second group (the set of independent variables)". After determining the significance of the correlation coefficient, the correct weights can be calculated between the two groups of study variables, as follows.

**Table (3)** *show Canonical Weight for vectors  $\hat{a}$ ,  $\hat{b}$  two set variables*

Variables of first set	Canonical weight $\hat{a}_1$	Variables of second set	Canonical weight $\hat{b}_1$
Y <sub>1</sub> :NY.GDP.MKTP.CN	0.752	X <sub>1</sub> : NE.GDI.STKB.KN	0.853
Y <sub>2</sub> :NE.CON.GOV.T.KD.ZG	0.342	X <sub>2</sub> :NE.EXP.GNFS.CD	0.357
		X <sub>3</sub> :BX.GSR.GNFS.CD	0.149
		X <sub>4</sub> :NY.GDS.TOTL.ZS	-0.102
		X <sub>5</sub> :NY.GDP.MKTP.KD.ZG	0.462
		X <sub>6</sub> :NY.GDP.DEFL.KD.ZG	0.782
		X <sub>7</sub> :NE.EXP.GNFS.ZS	0.462
		X <sub>8</sub> :GC.DOD.TOTL.GD.ZS	0.362

### *Coefficients of the set of independent variables*

It is noted from Table (3) and by following the coefficients of the set of approved variables that the coefficient (X1: NE.GDI.STKB.KN) is considered more weighted (that is, more important) compared to the rest of the coefficients and that its relationship is positive with the approved variables, as its correct weight is (0.853) And it is followed in importance by the variables: (X6: NY.GDP.DEFL.KD.ZG), where their correct weights are (0.782), and the relationship of this variable is positive with the set of dependent variables. As for two variables (X5: NY.GDP.MKTP). KD.ZG,X7:NE.EXP.GNFS.ZS) Its effect is also positive with the set of dependent variables, as their correct weight is (0.462 and 0.462, respectively) with the set of dependent variables. Also, the three variables (X2: NE.EXP.GNFS.CD, X8:GC.DOD.TOTL.GD.ZS, X3: BX.GSR.GNFS.CD) had a positive impact on the set of dependent variables if their weights reached (0.357, 0.362,0.149) respectively. But the variable (X4: NY.GDS.TOTL.ZS) had an adverse effect on the set of dependent variables if it is (-0.102).

### *Coefficients of the set of supported variables:*

As for the group's coefficients (dependent (dependent) variables), the variable coefficient (Y1: NY.GDP.MKTP.CN) is considered more weighted (i.e. more important) compared to the rest of the coefficients, and its relationship is positive with the group of independent variables, as its weight is the orthodox (0.752), then comes after it in the variable importance: (Y2: NE.CON.GOV.T.KD.ZG) and that its relationship is positive with the group of independent variables, as its weight of the orthodox is (0.342).

### *Testing and analyzing the correlation hypothesis*

The current topic focuses on studying the correlation between the first dependent variable represented by (Y1: (gross domestic product (NY.GDP.MKTP.CN) and the second dependent variable (dependent), represented by Y2, the final expenditures of government public consumption (percent annual growth). (NE.CON.GOV.T.KD.ZG), and the independent variable represented by changes in inventory (constant LCU) (NE.GDI.STKB.KN), X2: exports of goods and services (current US dollars) (NE.EXP.GNFS.CD), X3: Exports of goods and services (balance of payments, current US dollars) (BX.GSR.GNFS.CD), X4: Gross domestic savings (percent of GDP) (NY.GDS.TOTL.ZS), X5: gross growth GDP (percent per year) (NY.GDP.MKTP.KD.ZG), X6: Inflation, GDP deflator (percent per year) (NY.GDP.DEFL.KD.ZG), X7: exports of goods and services (percent of GDP) (NE.EXP.GNFS.ZS) and X8: central government debt, total (percent of GDP) GC.DOD.TOTL.GD.ZS). On the test of the main hypotheses, which states that "there is a statistically significant correlation between the dependent variable Y1 and the independent variables" on the one hand. On the other hand, the hypothesis is tested, which states that "there is a statistically significant correlation between Y2 and the set of independent variables" by employing the simple correlation coefficient. In the current study, we will rely on the Mukaka scale, 2012: 71) to determine the strength of the correlation between the study variables, as shown in table (4).

**Table (4)** *standard strength coefficient of correlation*

<b>degree of correlation</b>	<b>.30-0.00 0</b>	<b>50-0.30 0.</b>	<b>70-0.50 0.</b>	<b>90-0.70 0.</b>	<b>100-0.90 0.</b>
Correlation strength	Very low	Low	Moderate	strong	Very strong

**Table (5)** Show the correlation of *NY.GDP.MKTP.CN* and *NE.CON.GOV.T.KD.ZG* with independent variables.

<i>NE.CON.GOV.T.KD.ZG</i>	<i>NY.GDP.MKTP.CN</i>		Variables
0.228	0.676*	Corr	<i>NE.GDI.STKB.KN</i>
0.621	0.035	Sig	
*0.532	**0.728	Corr	<i>NE.EXP.GNFS.CD</i>
0.018	0.000	Sig	
**0.963	0.387	Corr	<i>BX.GSR.GNFS.CD</i>
0.001	0.190	Sig	
0.873**	0.673*	Corr	<i>NY.GDS.TOTL.ZS</i>
0.000	0.023	Sig	
0.350	0.710**	Corr	<i>NY.GDP.MKTP.KD.ZG</i>
0.201	0.00	Sig	
0.274	0.487	Corr	<i>NY.GDP.DEFL.KD.ZG</i>
0.256	0.090	Sig	
*0.683	0.751*	Corr	<i>NE.EXP.GNFS. zZS</i>
0.004	0.032	Sig	
0.582*	0.684**	Corr	<i>GC.DOD.TOTL.GD.ZS</i>
0.036	0.002	Sig	

\* The correlation is significant at 0.05

\*\* The correlation is significant at 0.0

***Correlation coefficients between the dependent variable (NY.GDP.MKTP.CN) and the independent variables***

According to the results presented in the table above, we find that there is a moderate direct correlation between the variable *NY.GDP.MKTP.CN* (*NE.GDI.STKB.KN*), where the estimated relationship is (0.676). This relationship is a statistical significant. Because the value of significant is equal to (0.035), which is much smaller than 0.05, so this relationship is significant and statistically significant, which means rejecting the null hypothesis that states (there is no significant correlation between *NY.GDP.MKTP.CN* and *NE.GDI.STKB.KN*). And accepting the alternative hypothesis that states (there is a significant, statistically significant correlation between *NY.GDP.MKTP.CN* and *NE.GDI.STKB.KN*). There is also a strong direct correlation between the variable (*NY.GDP.MKTP.CN*) and (*NE.GDP.MKTP.CN*), where the estimated relationship is (0.728), and this relationship is statistically significant, because the value of significant is equal to (0.000), which is much smaller than 0.05, so this relationship is significant and statistically significant, which means rejecting the null hypothesis that states (there is no significant correlation between *NY.GDP.MKTP.CN* and *NE.EXP.GNFS.CD*). And accepting the alternative hypothesis that states (there is a significant correlation between *NY.GDP.MKTP.CN* and *NE.EXP.GNFS.CD*). Also, there is a low direct correlation between the variable *NY.GDP.MKTP.CN* and the variable (*NY.GDS.TOTL.ZS*), where the estimated relationship is (0.387). This relationship is not statistically significant. Because the value of significant) is equal to (0.190), which is much greater than 0.05, Therefore, this relationship is not significant and not statistically significant, which means accepting the null hypothesis that states (there is no significant statistically significant correlation between *NY.GDP.MKTP.CN* and *NY.GDS.TOTL.ZS*). He rejected the alternative hypothesis which states (there is a significant correlation between *NY.GDP.MKTP.CN* and *NY.GDS.TOTL.ZS*). There is a strong direct correlation between the variable *NY.GDP.MKTP.CN* and the variable (*NY.GDP.MKTP.KD.ZG*), where the estimate of this relationship is (0.710). This relationship is

a statistical significant. Because the value of significant is equal to (0.000) which is much greater than 0.05, so this relationship is significant and statistically significant, which means rejecting the null hypothesis that states (there is no significant correlation between (NY.GDP.MKTP.CN) and (NY.GDP.MKTP.KD.ZG)). And accept the alternative hypothesis that states (there is a significant correlation between NY.GDP.MKTP.CN and (NY.GDP.MKTP.KD.ZG)).

There is a low direct correlation between the variable (NY.GDP.MKTP.CN) and the variable (NY.GDP.DEFL.KD.ZG), as this relationship is estimated (0.487). This relationship is not statistically significant. Because the value of significant is equal to (0.090), which is much greater than 0.05, so this relationship is not significant and not statistically significant, which means accepting the null hypothesis that states (there is no significant statistically significant correlation between (NY.GDP.MKTP.CN) and (NY.GDP.DEFL.KD.ZG.)) it is rejected the alternative hypothesis which states there is a significant correlation between NY.GDP.MKTP.CN and NY.GDP.DEFL.KD.ZG.

There is a strong direct correlation between the variable NY.GDP.MKTP.CN and the variable (NE.EXP.GNFS.ZS) where the estimated relationship is (0.751). This relationship is not statistically significant. Because the value of Sig)) is equal to (0.032), which is much less than 0.05, so this relationship is significant and statistically significant, which means rejecting the null hypothesis that states (there is no significant correlation between NY.GDP.MKTP.CN and NE.EXP.GNFS.ZS. And accepting the alternative hypothesis that states (there is a significant correlation between NY.GDP.MKTP.CN and NE.EXP.GNFS.ZS.

There is a moderate direct correlation between the variable NY.GDP.MKTP.CN and the variable GC.DOD.TOTL.GD.ZS where the estimated relationship is (0.684). This relationship is a statistical significant. Because the value of Sig)) is equal to (0.002) which is much less than 0.05, so this relationship is significant and statistically significant, which means rejecting the null hypothesis that states (there is no significant statistically significant correlation between NY.GDP.MKTP .CN and GC.DOD.TOTL.GD.ZS. And accepting the alternative hypothesis that states (there is a significant correlation between NY.GDP.MKTP.CN and GC.DOD.TOTL.GD.ZS).

## Conclusions

In current study, results showed that Government size has a negative and significance effect on economic growth in Iraq.

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