

Economic growth related to Iraqi government Size

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Abstract

Background: The aim of the current research was to studying the impacts of the government size on an economic growth of Iraq. In spite of the high rate of the government spending, there are no good impact on economic growth.

Methods: Data was collected from Central Bank of Iraq, including, the dependent variables, which were Gross domestic product and annual growth. We have used the ARDL method to analyses the data using canonical correlation analysis. The study included the effect relationship between the independent variables and the dependent variables, each independently. In addition the multiple linear regression equation and tests (T), test (F) to test the significance, and coefficients of determination or interpretation (R2) to find out the percentage of interpretation of the independent variable from the dependent variable was used.

Results: 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.

Conclusion: It was noted that fluctuations in crude oil prices are directly reflected on oil revenues and thus on the volume of public expenditures, which affects the economic growth.

Keywords: Economy; Government size; ARDL

1. Introduction

The purpose of the current study was to indicate the impacts of government's size on economic growth using ARDL model. The relationship between economic. The impact of government size on economic growth has been the focal point of academic research for many years. Over the past decade, and especially following the recent European sovereign debt crisis, the level of government spending has been at the centre of many political debates. For instance, one of the primary targets of the Euro Plus Pact in 2011 is the sustainability of public finances within the European Union (1).

An oversized government sector may have negative spillover effects to the economy due to financing of government spending via increasing taxes, borrowing and/or printing money. On the contrary, if government spending is very small, or even zero, the economic growth is very limited due to difficulties in the provision of public goods. Therefore, the optimal level of government spending which maximizes growth is an issue of paramount importance (2).

The empirical literature is yet inconclusive. Several papers, using linear approaches, find that government spending and growth are negatively related, whereas other studies find a positive relationship (3).

The majority of existing literature supports an inverted “-shaped” curve relationship between government spending and economic growth, also known as the BARS curve after Barro (1990), Armev (1995), Rahn and Fox (1996) and Scully

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(1995). In other words, the increase of government spending is beneficial up to a certain threshold but beyond that level the impact on growth is negative. Studies that empirically test the BARS curve include: Karra (1997), Chen and Lee (2005), Chiou-Wei et al. (2010), Gunalp and Dincer (2010) and Altunc and Aydın (2013). In order to establish the optimal level of government spending, a rich panel of countries should be employed. Most important, there is a prevailing issue of endogeneity, which has not been addressed in the literature, since higher growth over a time period may incite greater government spending through the channel of higher returns from taxation (4). Showing that this impact remains valid even if we split the sample to developed and developing countries, with asymmetric effects on the two groups (5).

1.1. 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. 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.

1.2. Research Questions

Does increase in government size reduce economic growth in Iraq?

1.3. Research Hypothesis

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

1.4. Research Objectives

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

2. Literature Review

2.1. Framework of government spending and economic growth in Iraq

The first view was the "government size-led economic growth view," or the supply-leading response", this view place importance on the size of the governments and argue that it is the government sizes that cause economic growths, and not the other ways round (6). On the extreme continuum of this views was the "growth governments size," alternatively known as "demande-following responses" as it was also popularly known, according to these view, government was inefficient in providing service (7). Wagner (1883/(1958) has been termed the as Wagner Law, so the Wagner Law and the Keynesian views, it was debatable which one of the two was the mostly wide favored view (8).

The middle ground the third view, known as the bidirectional causality view or the feedback response, which place importance on both the governments size and thee conomic growth as they were deemed to mutually causes each other inea feedback responses fashion (9). Then, this view place importance neither on the government size nor on economic growth as the two are seen to be independent of each other and therefore do not causes each other (10).

On the empirical fronts, each of those view has supported in studies or the other, giving rise to a far from conclusive debate, yet the outcomes had perilous policy implication (11).

2.2. The relation between government spending and economic growth

"A small governments was considered advantage based on crowding out effect principles, on the consumption different front, government can only spending what they had takeout of the real economies via tax and they could alternately finances their spends through borrow, an increases in tax revenues mean reduced private consumption by the same amounts of tax increases, the results were stagnation in overall demands and subsequently no wealth creations, from the investment angle, the same principles applied (18). Government borrowing from private lenders makes restudies available for lending to private investors decline by the same amount lent to the government by the private lender. Thus, by and large, if government spending and borrowing go up, the private borrowing and spending go down by the same margins, its government counterparts has gone ups, however, on the flipsides were the pro-big government size proponent who argues that a big government was good for the economies as it provide job and financial security's to a

numbers of peoples to the tunes of million in most case, big government also were known to creates economy of scales and to provides infrastructural developments, which was a precursor to private investments (15)."

2.3. Research, Conceptual Model, and Theoretical Framework

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

$$"GDP = (GE,) GDP = \beta_0 + \beta_1GE + \beta_2IE + U_i \dots \dots \dots (1)"$$

GDP= Gross domestic product

GE= Government expenditures

B0, β1, β2= Short and long-run elasticity

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

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

2.4. 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 economicstheories. 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.

3. Research Method

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

3.1. Teststhe stationary of time series

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

- Thesstationarysof thesarithmetric means: $E(Y_t) = \mu$;
- Stationary offany variationsmean : $var(Y_t) = \sigma^2$; ands
- The presence of a commonscorrelation betweensthe two time series (Y_{t+k}, Y_t) that's depend on the amounts of displacements (k) so thatsthe variances was as follow:

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

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

$$"1. \Delta X_t = a_1X_{t-1} + \sum \beta_j \Delta X_{t-j} \dots \dots \dots (3)"$$

$$2." \Delta X_t = a_0 + a_1X_{t-1} + \sum \beta_j \Delta X_{t-j} + e_t \dots \dots \dots (4)"$$

$$3. " \Delta X_t = a_0 + a_2X_{t-1} + \sum \beta_j \Delta X_{t-j} + e_t \dots \dots \dots (5)"$$

Aftersthe ADFs, twoshypotheseswill be tested: The firstswas the nulls hypothesis (H0= as= os), the secondsthe alternativly hypothesis (H1: sa>s0). If thescalculatedst values was great than tstabular values, the null hypothesis was rejected in favtheirsof 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 valuet, the null hypotheses was accepted. This mean that the timeseries was unstable.

3.2. Characterizations of ARDLs

Recently development in econometrics analysis revealed that most times series were usually unstable. So, it was possible to find that some time series move away from their averages over time, while others 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 Engle in 1981, Johansen in 1991 and Engle-Granger in 1987, ARDL.

3.3. Bound Tests

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

3.4. Gross domestic product (GDP)

The Bureau of Economic Analysis (BEA) give a clear definitions for gross domestic product: is the values of the good and service produced by the nation economy less the values of the good and service utilized up in productions. gross domestic product was also equal to the sum of personal expenditures, consumption, gross private domestic investment, net export of good and service, and government consumption expenditure and gross investments (12). The United State Commerce Department began to publish regular time a of gross domestic product, defined essentially as above, in the early 1940. The Commerce Department's framework built on method that Simon Kuznets utilized to estimate the national incomes for 1929 to 32 under the auspice of the National Bureau of Economic Researches. Kuznets work has been preceded by two volume published in 1920 that provided estimate of national incomes over the preceded decades. Another were also engage in effort to measure economic activities around this times. As example, the National Industrial Conference Boards began published a regular estimate of the national incomes in 1920. Colin Clark, British statistician and economist, has been doing work similarly to Kuznets, measuring the aggregates economy of the United Kingdoms (13).

Gross domestic product is the feature measure of out-puts in the National Incomes and Product Account (NIPA), a vast sets of economic data that capture economic activities in the U.S some explanations of the NIPA was needed to understand the texts that follow. As describe in Bureau of Economic Analysis (2015), there was different approach to measuring GDPs. The expenditure approaches, in which GDP was measured as the sum of investment, consumption, government spend, and net export, was the most familiarly too many peoples. The expenditures side of the national account include estimate of these piece as well as the component. GDP can also was measured through the income approach, which add up all of the income earned through production, and the income side of the national account include the different type of incomes that goes into GDPs (14). The income side measured of GDP was known as GDI. In theories, GDP measure through the expenditures approach must equal GDI; in practices, of their, GDP does not equal GDI because of measurements error, and BEA publish statistical discrepancy that capture the gap between the two series (15).

4. Results

4.1. 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: X1: changes in inventories (in constant local currency prices) (NE.GDI.STKB.KN), X2: exports of goods and services (in current prices in US dollars) (NE.EXP.GNFS.CD), X3: exports of goods and services (balance of payments, currently price in US dollars) (BX.GSR.GNFS.CD) X4: gross domestic savings (percent of GDP) (NY.GDS.TOTL.ZS) and X5: GDP growth (percent per annum) (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): X8: 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.

4.2. Description of the variables

4.2.1. 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)).

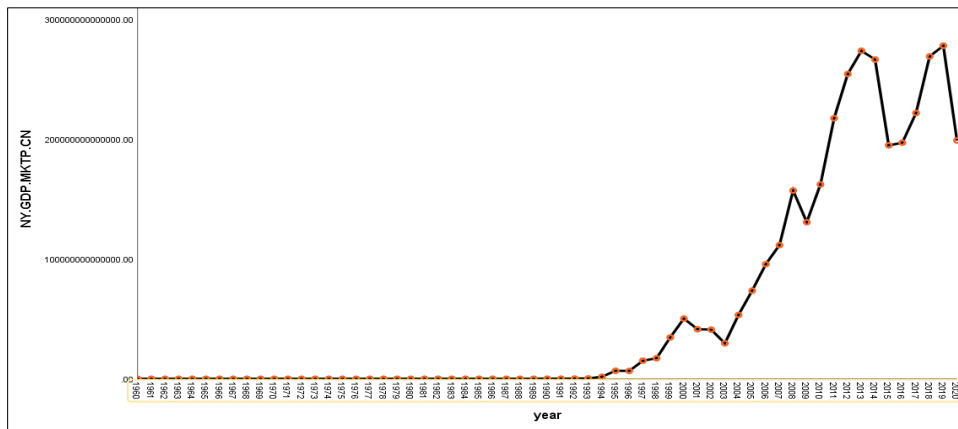


Figure 1 The values of NY.GDP.MKTP.CN via years

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)).

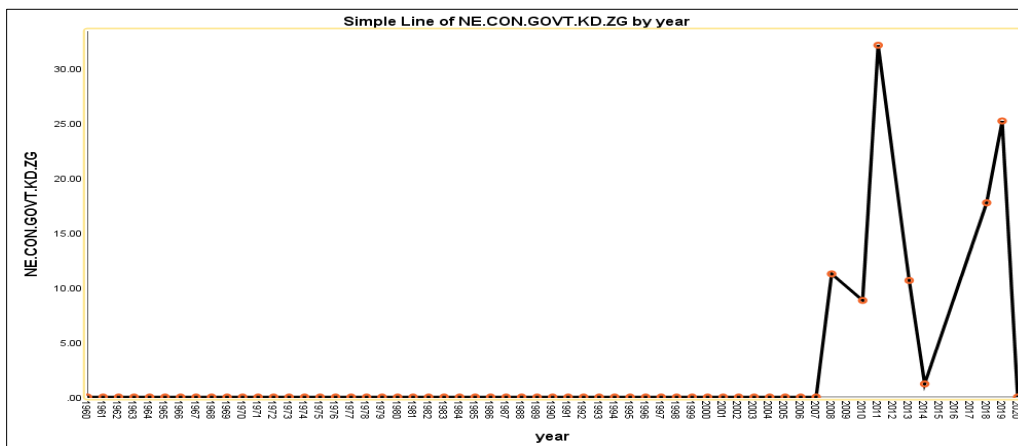


Figure 2 The values of NE.CON.GOV.T.KD.ZG via years

4.2.2. 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)).

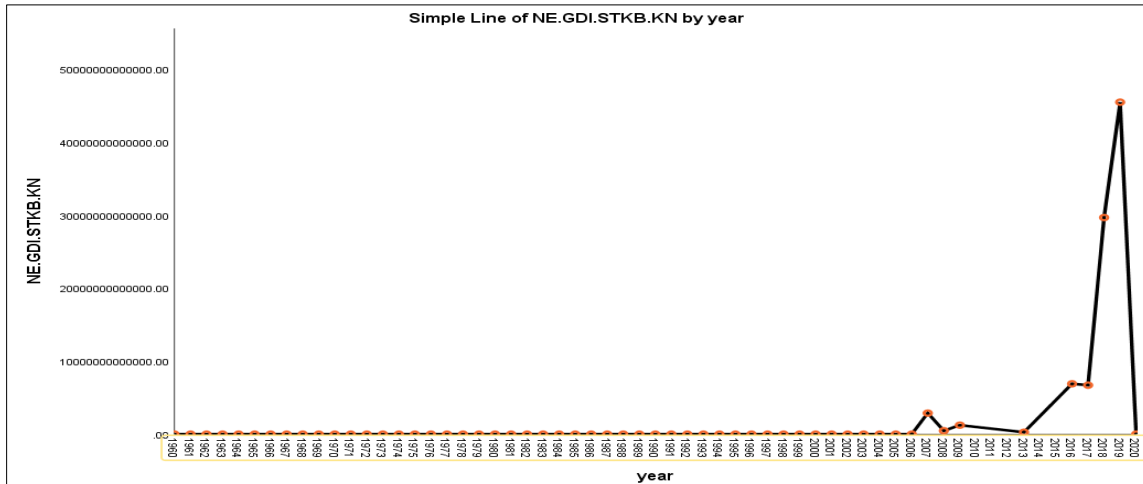


Figure 3 The values of NE.GDI.STKB.KN via years

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

Through the scheme shown in the figure (4) below, we find that total domestic savings (percent of GDP), gradually increased during the study years (starting from 1960 to (2020)).

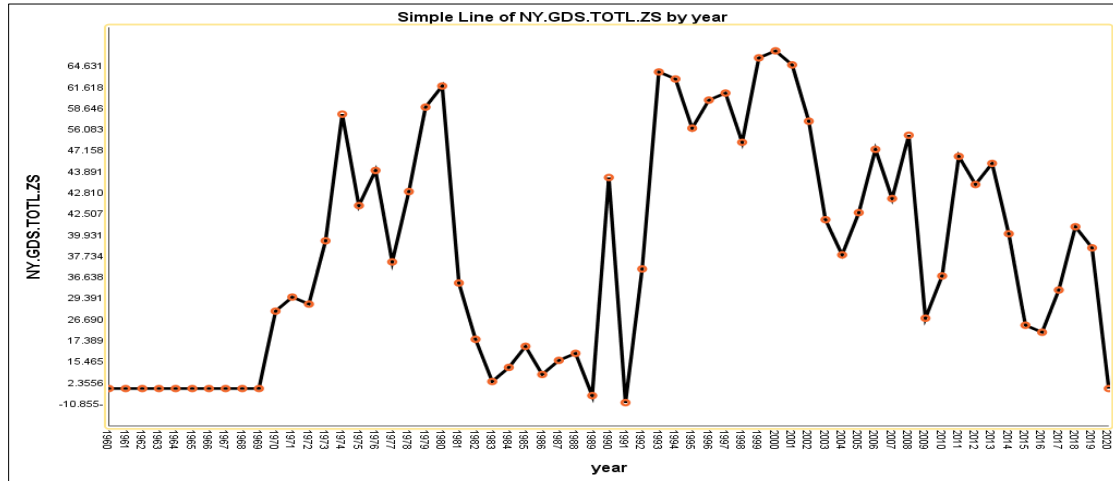


Figure 4 The values of NY.GDS.TOTL.ZS via years

GDP growth (in percent annually) (NY.GDP.MKTP.KD.ZG)

Through the chart shown in the figure (5) below, we find that the growth of the gross domestic product (percent annually), gradually increased during the study years (starting from 1960 to (2020)).

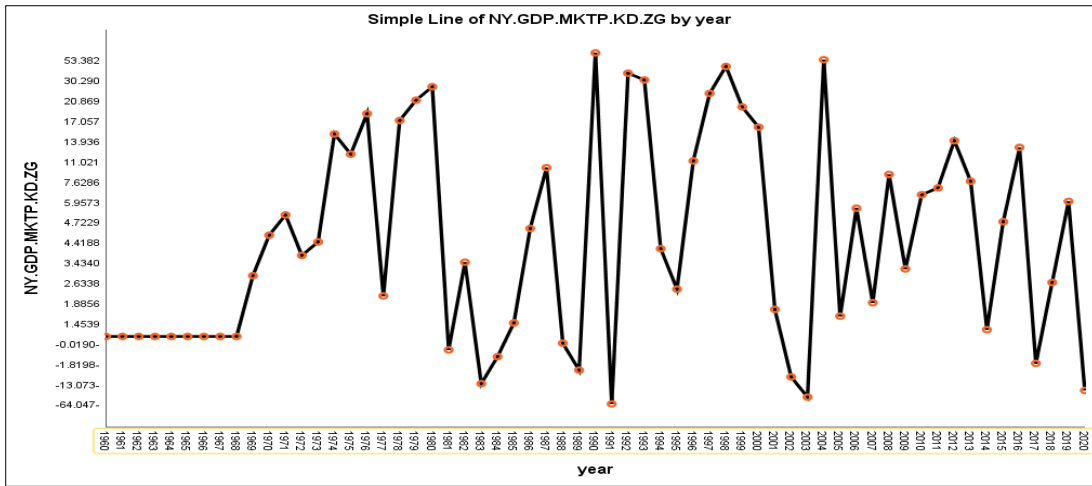


Figure 5 The values of NY.GDP.MKTP.KD.ZG via years

Central government debt, total (percent of GDP (GC.DOD.TOTL.GD.ZS))

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

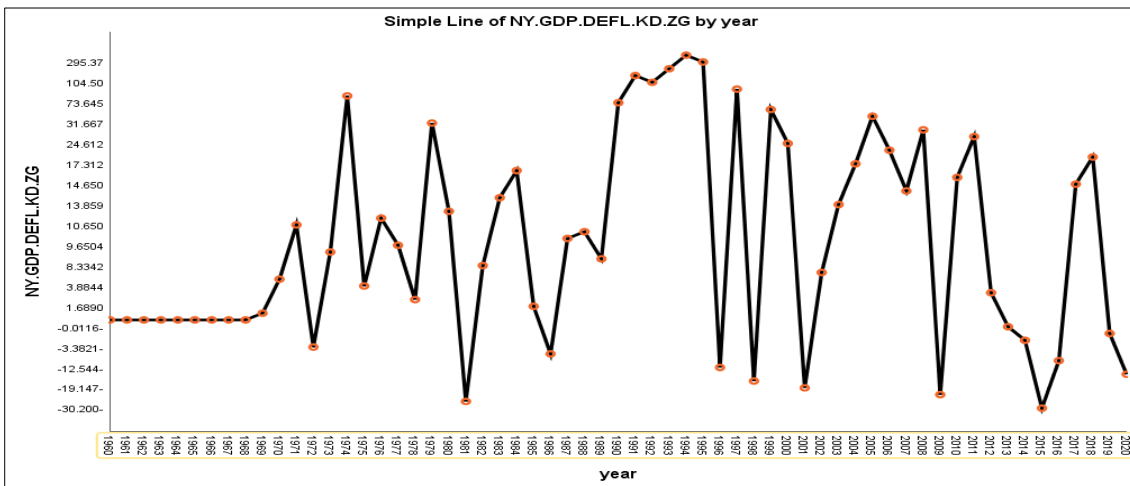


Figure 6 The values of NY.GDP.DEFL.KD.ZG via years

Exports of goods and services (percent of GDP) (NE.EXP.GNFS.ZS)

Through the chart shown in the figure (7) below, we find that exports of goods and services (percent of GDP), gradually increased during the study years (starting from 1960 to (2020)).

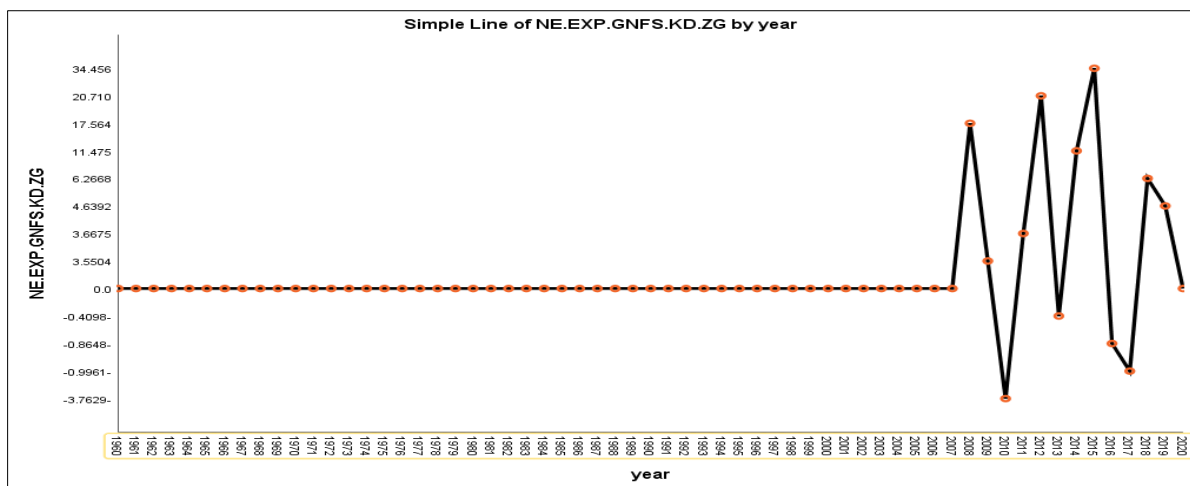


Figure 7 The values of NE.EXP.GNFS.KD.ZG via years

Central government debt, total (percent of GDP (GC.DOD.TOTL.GD.ZS)

Through the scheme shown in the figure (8) below, we find that the central government debt, total (percent of GDP), gradually increased during the study years (starting from 1960 to (2020)).

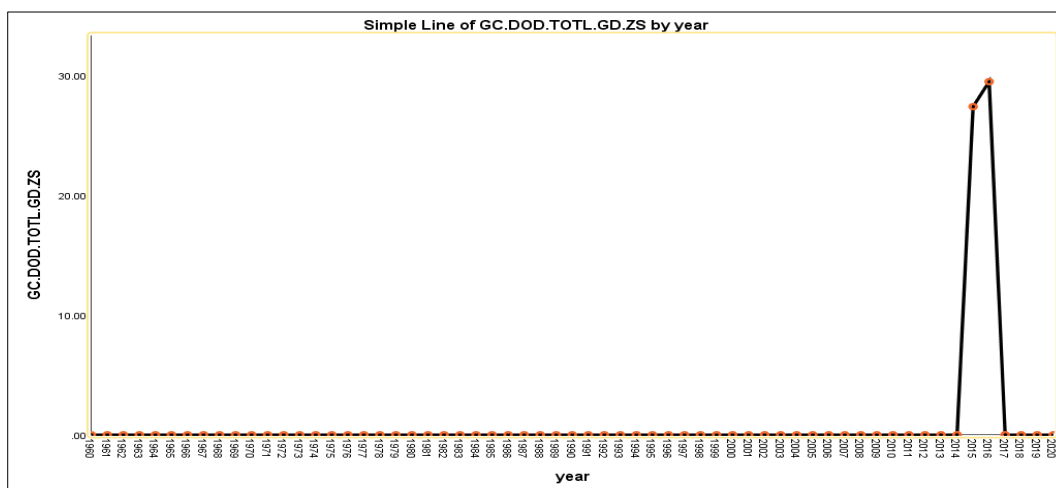


Figure 8 The values of GC.DOD.TOTL.GD.ZS via years

After describing the study variables, statistical tools can be employed to explain the relationships between the studied variables, as following:

4.3. Correlation coefficients between the dependent variable (NE.CON.GOV.T.KD.ZG) and the independent variables

Through the results presented in the table above, we find that there is a very low direct correlation between the variable NE.CON.GOV.T.KD.ZG (NE.GDI.STKB.KN) where the estimated relationship is (0.228). This relationship is not statistically significant. Because the value of Sig)) is equal to (0.621), 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 NE.CON .GOV.T.KD.ZG and NE.GDI.STKB.KN).

It is rejected the alternative hypothesis which states (there is a significant, statistically significant correlation between NE.CON.GOV.T.KD.ZG and NE.GDI.STKB.KN. There is also a moderate direct correlation between the variable NE.CON.GOV.T.KD.ZG). The variable (NE.EXP.GNFS.CD) where the estimator of that relationship is (0.532), and this relationship is a statistical significant, because the value of Sig) is equal to (0.018), which is much less than 0.05, so this relationship is statistically significant, which means rejecting the null hypothesis that states (there is no significant correlation between NE.CON.GOV.T.KD.ZG and NE.EXP.GNFS.CD). And accepting the alternative hypothesis that states

(there is a significant correlation between NE.CON.GOV.T.KD.ZG and NE.EXP.GNFS.CD). Also, there is a very strong direct correlation between the NY.GDP.MKTP.CN variable (NY.GDS.TOTL.ZS), where the estimated relationship is (0.936). This relationship is a statistically significant. Because the value of Sig)) is equal to (0.000) which is much less than 0.05, so this relationship is statistically significant, which means rejecting the null hypothesis that states (there is no significant statistically significant correlation between NE.CON.GOV.T.KD.ZG and NY.GDS.TOTL.ZS), and accepting the alternative hypothesis that states (there is a significant correlation between NE.CON.GOV.T.KD.ZG and NY.GDS.TOTL.ZS). There is a strong direct correlation between the NE.CON.GOV.T.KD.ZG variable (NY.GDP.MKTP.KD.ZG) where the estimated relationship is (0.873). This relationship is a statistical significant. Because the value is equal to (0.000) which is much less than 0.05, so this relationship is statistically significant, which means rejecting the null hypothesis that states (there is no significant statistically significant correlation between NE.CON.GOV.T.KD.ZG and NY.GDP.MKTP.KD.ZG). And accepting the alternative hypothesis that states (there is a significant correlation between NE.CON.GOV.T.KD.ZG and NY.GDP.MKTP.KD.ZG).

There is a very low direct correlation between the NE.CON.GOV.T.KD.ZG variable (NY.GDP.DEFL.KD.ZG) where the relationship is estimated (0.350). This relationship is not statistically significant. Because the value of Sig)) is equal to (0.210), 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 NE.CON.GOV.T.KD.ZG and NY.GDP.DEFL.KD.ZG). it is rejected the alternative hypothesis which states (there is a significant correlation between NE.CON.GOV.T.KD.ZG and NY.GDP.DEFL.KD.ZG).

The correlations between the study variables can be illustrated through the figure (9).

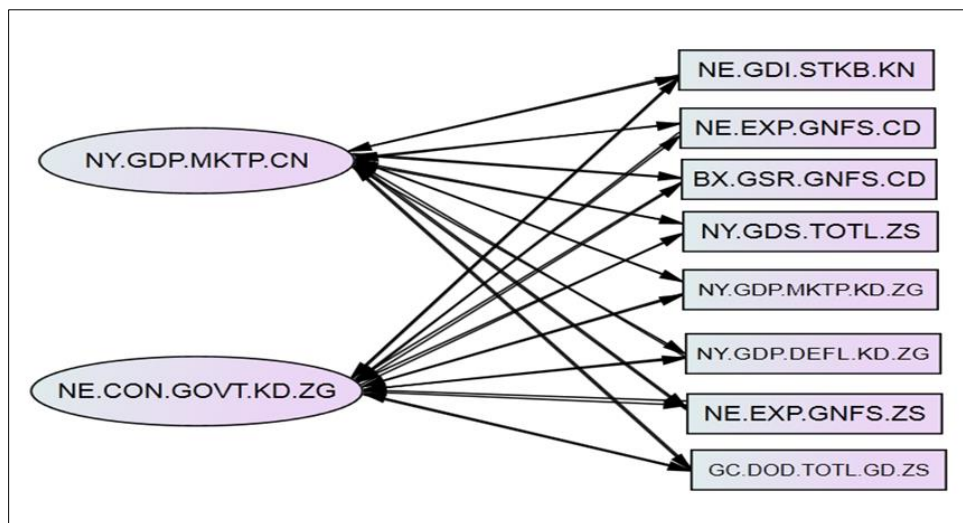


Figure 9 The correlation between the study variables

4.4. Test hypotheses of the effect between the studied variables

This topic deals with the study of the influence relationships between the study variables represented by changes in the stock (in constant local currency prices) (NE.GDI.STKB.KN), X2: exports of goods and services (in current prices in 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: GDP growth (percent per annum) (NY.GDP.MKTP.KD.ZG), X6: Inflation, GDP deflator (percent annually) (NY.GDP.DEFL.KD.ZG) X7: exports of goods and services (percent of GDP) (NE) and X8: Central government debt, total (percent of GDP) .EXP.GNFS.ZS (GC.DOD.TOTL.GD.ZS) as an independent variable and the variables represented (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) as the dependent variable each separately, which focuses on testing the main hypothesis, which states that (there is a significant, statistically significant effect of the set of independent variables on the set of dependent variables. For the purpose of testing this effect, we must use a set of tests, which are represented by the multiple linear regression equation and (T) test, and Test (F) to test the significance, and coefficient of determination or interpretation (R2) to find out the percentage of interpretation of the independent variable from the dependent variable.

4.4.1. Test the effect between the dependent variable (NY.GDP.MKTP.CN) and the independent variables

There is point is centered on testing the main hypothesis which states that (there is a significant effect of the independent variables on NY.GDP.MKTP.CN). To prove or negate the above hypothesis, it is necessary to employ the multiple linear regression equation that is concerned with describing the relationship between the independent variables and the variable accredited (NY.GDP.MKTP.CN) as shown in table (1).

Table 1 The effect between independent variable set and NY.GDP.MKTP.CN

Dependent Variable Independent variables	NY.GDP.MKTP.CN				
	(β)	(T)	Sig	(F)	Sig
Intercept	1.007	4.117	0.003	7.31	0.000
NE.GDI.STKB.KN	1.113	5.351	0.000		
NE.EXP.GNFS.CD	1.235	6.521	0.000		
BX.GSR.GNFS.CD	0.926	4.746	0.002		
NY.GDS.TOTL.ZS	1.324	4.691	0.001		
NY.GDP.MKTP.KD.ZG	1.672	1.322	0.382		
NY.GDP.DEFL.KD.ZG	0.834	1.297	0.282		
NE.EXP.GNFS.ZS	1.762	6.728	0.000		
GC.DOD.TOTL.GD.ZS	0.027	1.521	0.176		
R square R²=0.831	Adjusted R square R²= 0.817				

From the results listed in the table above, when NE.GDI.STKB.KN is increased by one unit, NY.GDP.MKTP.CN will be affected by the increase at a rate of ($\beta=1.113$), this means that there is a positive and statistically significant effect of the NE.GDI.STKB.KN variable on NY.GDP.MKTP.CN. This leads to the possibility to say that the NE.GDI.STKB.KN variable will have a positive role in NY.GDP.MKTP.CN, and this is evident by the value of the test (t) for the parameter beta (B), which reached (4.117), which is an evidence of the significance of NE.GDI.STKB.KN under the significance level of 0.05. Through the results shown in the table above, we accept the hypothesis that says (there is a significant effect of statistical significance for the variable NE.GDI.STKB.KN on NY.GDP.MKTP.CN, against any other hypothesis).

Also, when NE.EXP.GNFS.CD is increased by one unit, NY.GDP.MKTP.CN will be affected by the increase at a rate of ($\beta=1.235$), this means that there is a positive and statistically significant effect of the NE.EXP.GNFS.CD variable on NY.GDP.MKTP.CN. This leads to the possibility to say that the NE.EXP.GNFS.CD variable will have a positive role in NY.GDP.MKTP.CN, significant and this is evident by the value of the t-test for parameter (B) which is (6.521), which is evidence of the significance of NE.EXP.GNFS.CD under the significance level of 0.05. Through the results shown in the table above, we accept the hypothesis that says (there is a significant effect of statistical significance for the variable NE.EXP.GNFS.CD on NY.GDP.MKTP.CN, against any other hypothesis).

The studied model between the independent variables shown in the above table and NY.GDP.MKTP.CN is in great agreement with the studied model, and this is evident from the calculated (F) value (7.371), which is a significant value below the significance level of 5percent.

In addition, it is noted from the above table that the value of the coefficient of determination (R^2) is (83.1percent) and the corrected determination coefficient is (81.7percent), which shows that the interpretability of the regression model used is very high, which indicates that (81.7percent) of the changes What occurs in banking financial performance is due to the variable of electronic banking services. The effect relationship between the variables can be illustrated as shown in figure (10) and table (2).

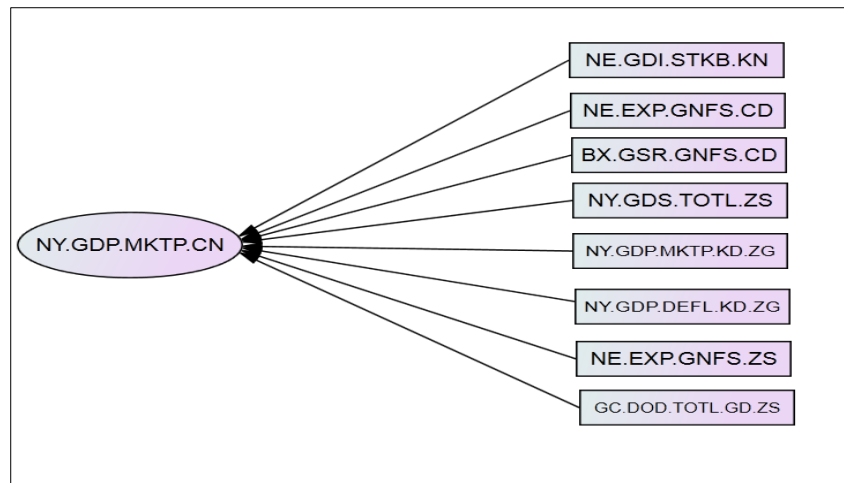


Figure 10 The effect relationship between the dependent variable and the set of independent variables

Table 2 How the effect between independent variable set and NY.GDP.MKTP.CN

Dependent Variable Independent variables	NY.GDP.MKTP.CN				
	Value of β	(F) calculated	Sig	(F) calculated	Sig
intercept	2.341	5.224	0.000	8.562	0.000
NE.GDI.STKB.KN	1.282	6.762	0.000		
NE.EXP.GNFS.CD	1.672	5.022	0.000		
BX.GSR.GNFS.CD	1.046	5.681	0.000		
NY.GDS.TOTL.ZS	1.381	1.548	0.371		
NY.GDP.MKTP.KD.ZG	1.562	1.524	0.461		
NY.GDP.DEFL.KD.ZG	1.031	1.371	0.451		
NE.EXP.GNFS.ZS	1.842	5.671	0.000		
GC.DOD.TOTL.GD.ZS	0.034	1.473	0.276		
R square $R^2=0.782$	adjusted R square $R^2= 0.768$				

From the results listed in the table above, when NE.GDI.STKB.KN is increased by one unit, NE.CON.GOV.T.KD.ZG will be affected by the increase at a rate of ($\beta=1.282$), this means that there is a positive and statistically significant effect of the NE.GDI variable. STKB.KN or NE.CON.GOV.T.KD. ZG this leads to the possibility to say that the NE.GDI.STKB.KN variant will have a positive role in NE.CON.GOV.T.KD.ZG, and this is significant and evident by the value of the test (t) for parameter beta (B), which reached (6.762), which is an indication of the significance of NE.GDI.STKB.KN under the significance level of 0.05. Through the results shown in the table above, we accept the hypothesis that says (there is a significant effect of statistical significance for the NE.GDI.STKB.KN variable on NE.CON.GOV.T.KD.ZG, against any other hypothesis.

Also, when GC.DOD.TOTL.GD.ZS is increased by one unit, NE.CON.GOV.T.KD.ZG will be affected by the increase at a rate of ($\beta=0.034$), this means that there is a positive and statistically significant effect of the GC.DOD.TOTL variable. GD.ZS on NE.CON.GOV.T.KD.ZG and this leads to the possibility that the GC.DOD.TOTL.GD.ZS variant will have a positive role in NE.CON.GOV.T.KD.ZG, and is not significant and this is evident from The value of the t-test for the parameter beta (B), which reached (1.473), is evidence of the insignificance of GC.DOD.TOTL.GD.ZS under the significance level of 0.05. Through the results shown in the table above, we reject the hypothesis that says (There is a significant, statistically significant effect of the variable GC.DOD.TOTL.GD.ZS on NE.CON.GOV.T.KD.ZG, against any other hypothesis. The effect relationship between the study variables can be clarified in figure (11).

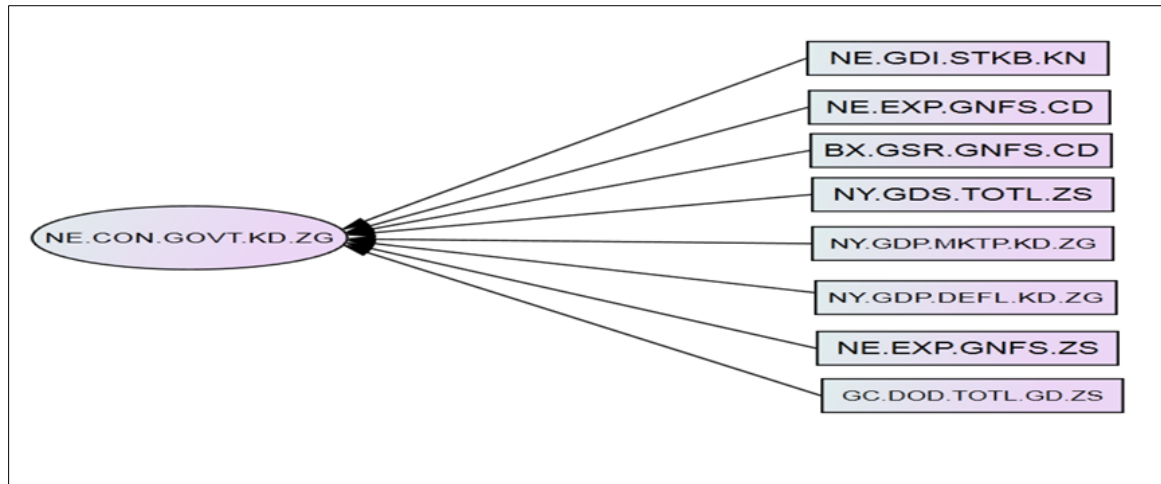


Figure 11 The effect relationship between the dependent variable and the set of independent variables

5. Conclusion

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

Compliance with ethical standards

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Disclosure of conflict of interest

The authors declares that they have no relevant or material financial interests that relate to the research described in this paper.

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