



MEASURING THE RELATIONSHIP BETWEEN GOVERNMENT SPENDING AND ECONOMIC GROWTH

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Article history:	Abstract:
Received: 22 nd March 2023 Accepted: 23 rd April 2023 Published: 24 th May 2023	In this study, the focus is on investigating the relationship between government spending and economic growth in Iraq. By analyzing data from multiple sources spanning a period of 10 years (2010-2020), the impact of government spending on the economy is evaluated. The findings of this research reveal that government spending does have a positive effect on economic growth in Iraq, although the magnitude of this impact varies across different sectors. This study can be beneficial for policymakers as it can assist them in creating policies that promote sustainable economic development in Iraq.

Keywords:

INTRODUCTION

Iraq faces numerous challenges in achieving sustainable economic growth and development, and government spending is a critical factor in this process. With limited resources and competing demands for public funds, policymakers must make difficult decisions about how best to allocate government spending to maximize economic benefits for society. The study of government spending and its impact on economic growth is particularly important in Iraq due to the country's reliance on oil revenues and the associated fluctuations in oil prices. This volatility in oil prices can impact government revenues and affect the level of government spending on various sectors.

Furthermore, effective management of government spending requires not only careful allocation of funds but also effective monitoring and evaluation of spending outcomes. Therefore, this study is not only relevant for understanding the impact of government spending on the economy but also for enhancing the efficiency and effectiveness of government spending in achieving broader development goals. In conclusion, this study is of great importance as it provides insights into the relationship between government spending and economic growth in Iraq, and offers valuable recommendations for policymakers to manage government spending in a way that maximizes societal welfare and promotes sustainable economic development.

RESEARCH PROBLEM:

The problem of the study comes from not directing Iraqi government spending in a way that is compatible

with the necessary economic requirements of the country, as well. Focusing on securing financial revenues to cover growth needs without giving enough importance to spending policy in a group of government approaches aimed at creating appropriate effects on the economy.

Therefore, the research aims to measure, analyze, explain and find out the impact of government spending on economic growth in Iraq

Study hypothesis:

1. There is a statistically significant relationship between government spending and economic growth in Iraq.
2. There is a significant effect between spending and growth.

Study Approach:

In its approach, the study relies on an empirical descriptive and inductive analysis by reviewing the concepts and literature presented in the past recent decades on government spending and economic growth.

The importance of studying:

The study stems from the importance that there is an important impact of government spending on economic growth.

1. Theoretical concepts of spending and economic growth

Establishing an accurate definition of government spending is of importance from an applied point of view in recording everything that is considered spending in the government's general budget, subject to the rules of the art of public finance in terms of



preparation, setting goals, implementation, and control (Al-Dulaimi, 2003, 19).

Therefore, government spending can be defined as the expenses that it is borne by the government during its exercise of the authority to rule and command (Al-Hiti et al., 2010, 12).

The government here means the various ministries, departments, and central, local, or regional authorities (Nashed, 2009, 27).

And there are those who believe that government spending is the sums that the state spends on services to citizens, or to purchase goods that enable it to provide its services to help a group of society or to establish various economic and social projects (Al-Badrany, 2010, 53).

It is also defined as: an amount of economic or monetary money issued by the state or any public legal person, with the intent of achieving a public benefit (Yousifi and Jafari 23, 2019).

According to these previous definitions, government spending can be considered to have three elements: government spending is a monetary amount that comes out of the government or one of its constituent authorities, and its purpose must be to achieve public benefit (Al-Hajj, 2009, 123).

Likewise, from here we can define government spending as all cash payments made by government agencies in exchange for goods and services in order to achieve the march of the economic system in order to achieve prosperity and economic growth.

2. COMPONENTS OF GOVERNMENT SPENDING.

2.1. Monetary character of public expenditure:

Public expenditure assumes the use of a cash sum paid by the state or its public bodies, as a price for the goods and services needed to run public utilities (Barhouma and Belabbas, 50, 2019).

All that is spent by the state and the purchase of goods and services for the conduct of business and the purchase of capital goods, and the granting of subsidies and assistance must take the monetary form to be included in government expenditures (Al-Baldawi and Ismail, 2019, 116).

And the most important result of the use of cash is to facilitate the financial system of the state and give it more effectiveness, and that is by approving the principle of control in its various forms over government expenditures to ensure their proper use in accordance with the public interest (Nasser, 2010, 49).

2.2. Issuance of public alimony by the state or one of its public bodies:

Alimony is required to be commanded by a public legal person, so the legal nature of the spending order is a key element in determining whether this alimony is public or private, and government expenditures are those that are carried out by the state regardless of its

republican, monarchical or presidential systems, and governments of different forms are federal, central and local, including public bodies and companies (Bin Suleiman and Orabi, 2020, 58-59).

2.3. The goal of public spending is to achieve public benefit:

The main and only goal of government expenditures is to satisfy and achieve public needs (Khaled and Abdel-Qader, 2018, 61). Public expenditure is not considered that which does not satisfy a public need or achieve a public benefit. Government expenditure is considered an amount of money paid by a person of public law to satisfy a public need (Al-Rasheed, 2010, 14).

3. GOVERNMENT SPENDING AND ITS DEVELOPMENT IN ECONOMIC THOUGHT:

The size of government expenditures indicates the amount of public need that the state secures for citizens. The more government expenditures increase, the more this leads to satisfying the citizens' necessary and then luxury desires. Government spending in evolutionary stages represented by the following economic schools of thought:

3.1. Classical school:

The economic schools of thought analyzed government spending, and it was not within the scope of the classical thought of government spending of importance in the context of their call for non-interference of the state in economic activity. The need to restrict government spending within narrow limits without affecting the activities of economic activity (Tayeh and Saleh, 326, 2020).

and the classic thought was distinguished by not allowing interference in economic activity (3, Auerbach & Fildstein, 2005) and limiting its role to carrying out traditional functions such as defense, security, justice and the provision of some goods and services (Al-Khatib and Shamia, 51, 2007).

3.2. Keynesian school:

The Keynesians emphasized the intervention of the state in economic, social and political activity and the creation of an economic balance, regardless of the state of the budget, by leading to an increase in the volume of production, employment and economic growth rates in order to get rid of the crises that began to plague economic performance (Khazali, 2017, 152) and the Keynesian spending policy is an expansionary policy To achieve economic goals such as increasing aggregate demand, stimulating producers, and pushing the economy to a state of full operation (Al-Quraishi, 2008, 151), bringing the economy out of a state of recession to a state of recovery, and covering the increase in government expenditures through the issuance of new cash and loans (Ardaga 2012, 31)



Keynes proved that the decline in aggregate demand is caused by the lack of directing of saving towards investment, as well as that saving is determined by factors other than the interest rate that contribute to determining it, such as income, expectations, and psychological factors, as investment is not determined by the interest rate, but the marginal adequacy of capital plays an important role in determining it. Savings are determined by individuals, while the investment decision is determined by businessmen and entrepreneurs (McConnell & Brue 2005, 340). Government spending reduces the phenomenon of unemployment, by hiring new workers and employees or paying cash to suppliers for the purchase of some goods and services. These suppliers employing a number of workers to accomplish and meet the demand for goods and services (Hamdan 2018, 3) .

4.MEASURING THE IMPACT OF GOVERNMENT SPENDING ON ECONOMIC GROWTH.

4.1. A model for estimating the relationship between government spending and economic growth.

4.1. Nature of the form:

When the main objective of the model is to diagnose the relationship between government spending and economic growth, the basis for that is to understand developments in the field of government spending and to involve the main relevant variables affecting it so that the model is consistent with theoretical and realistic economic perceptions.

4.2. Description of the model used in the estimate:

The description stage is one of the most important stages of preparing the econometric model, in which the relationship between the dependent economic variables and the independent variables included in the model is determined in light of the data of economic theory (Hajji et al., 2002, 22). For the purpose of building a standard model that shows the relationship between government spending and the Iraqi GDP, the variables have been described into independent and dependent variables, which are as follows:

$$y = a + b_1 \text{Exp}$$

4.3. Description of the model variables: The variables used in the estimation can be described as follows:

4.3.1. Dependent variable:

Government expenditure (GDP) ((Gross Domestic Product) was determined as an approved variable and we expressed it in current prices and in Iraqi dinars, which is the market value of all goods and services produced in the sectors of the national economy in a particular country, whether the output is stored, sold or consumed.

4.3.2. The independent variable:

It is represented by government spending (Exp) (Government Expenditure), and we have expressed it in current prices and in Iraqi dinars, as government spending plays a fundamental role in financing developmental economic growth on the one hand, and financing basic state activities in the field of public services, by virtue of its basic functions in leading and directing society on the one hand.

4.3.3. data sources:

The model covers the period (2010-2020), as we were able to obtain data on the variables included in the model within the publications of the Central Bank of Iraq, the Ministry of Planning, and the Central Statistical Organization. This period is sufficient to allow standard analysis to be conducted without problems, not to mention that this period witnessed significant developments in terms of government spending and GDP.

4.3.4. Model assumption:

The model is based on the assumption that government spending exerts a positive effect on government spending and expands it through two directions: the first, its impact on productive capacity, and the second, its impact on the volume of effective aggregate demand

5. RESULTS:

5.1. Test of Unit Root Stationary:

The unit root test is an important pre-test for time series data. That is, time series variables must pass this test before the desired model can be estimated. Therefore, the variables used in the model to be estimated must be stationary, and if they are not, the data must be transformed in order to be stable, either by using new variables data or by taking the first difference of the original variables data or other data conversion methods (behind, 2015, 74). The Extended Dickey-Folar (ADF) selection was used to test the stability of the model variables as follows:

Unit root test results for level using (ADF)						
section		section and general direction		Without clip and general direction		variants
Prob	t-Statistic	Prob	t-Statistic	Prob	t-Statistic	
0.5118	-1.466791	0.5569	-1.937705	0.8358	0.626546	GDP

0.5622	-1.358800	0.2016	2.939435-	0.6618	0.002309	Exp
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Table (1) Unit Root Test Results for Level Using (ADF)

The table shows the results of the Augmented Dickey-Fuller (ADF) test, which is a type of unit root test used to determine whether a time series variable is stationary or non-stationary. Stationarity is important in time series analysis because it allows for the use of statistical methods that assume constant statistical properties over time.

The ADF test is conducted on the level of the variables, and the null hypothesis is that the variable has a unit root, indicating non-stationarity. The alternative hypothesis is that the variable is stationary. In the table, the t-Statistic represents the test statistic for the ADF test, while the Prob column represents the p-value associated with the test statistic. If the p-value is less than the significance level (usually 0.05), then

the null hypothesis is rejected in favor of the alternative hypothesis of stationarity.

For the variable GDP, the t-Statistic is 0.626546 and the p-value is 0.8358, indicating that we fail to reject the null hypothesis of non-stationarity. However, for the variable Exp, the t-Statistic is 0.002309 and the p-value is 0.6618, indicating that we also fail to reject the null hypothesis of non-stationarity.

It is important to note that the results may differ depending on the sample period and the model specifications used. Therefore, it is recommended to conduct various unit root tests and examine the results in combination with other diagnostic tests to ensure the reliability of the findings.

Unit root test results for first difference using (ADF)						
section		section and general direction		Without clip and general direction		variants
Prob	t-Statistic	Prob	t-Statistic	Prob	t-Statistic	
0.0017	1.480072-	0.0010	-1.545091	0.0076	-1.614713	GDP
0.0069	2.137535-	0.0022	-1.516505	0.0030	-1.775699	Exp

.through the adoption of the program (12 Eviews)

It is clear from Table (1) that the variables of the time series (domestic product and government spending) are unstable in their initial state at the level, and this means accepting the null hypothesis that indicates that the data is unstable at its first level and that there is a unit root for all the estimated variables, whether in the presence of the time trend Or without it, because the computed (1) values are less than the tabulated (t)

values at a significant level (5%). When taking the initial differences of the variables, the data turns into a state of stability, so it is possible to reject the null hypothesis that there is a unit root problem and accept the alternative hypothesis that states the stability of the time series and is called integrated of the first order I- (1)

The results of the counteraction test using the (Johnson) method:

Table (2) the results of the Johansen test for the cointegration between internal public debt and GDP

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.5 Critical Value	Prob.**
* None	0.633559		11.49471	0. 0014
At most 1	0.207953	5.331345	3.841466	0.0068

Source: The table prepared by the researcher based on the data of Table No. (1) and through the adoption of the program (12 Eviews).

Results of the Cranger test for causality:

After knowing the direction of influence from the measures and indicators that are very important to the economic policy maker, the test of the trends of the causal relationship between the estimated variables was carried out. It becomes clear that there is a causal

relationship in one direction from government spending to government spending during periods of slowdown (Lags:2) through the statistic (F). This explains the role played by the government agreement in the formation and development of the gross domestic product.

Table (3) Results of the Cranger test for causality

Lags: 2			
Null Hypothesis	Obs	F-Statistic	Prob
GDP does not Granger Cause Exp	10	0.11876	0.8905
Exp does not Granger Cause GDP		1.03460	0.0207

Source: The table prepared by the researcher based on the data of Table No. (1) and through the adoption of the program (12 Eviews)

CONCLUSION

By analyzing government spending data and government spending, it is noted that in years in which government spending achieves high growth rates, it is matched by low levels of GDP, and in one year the output achieves a negative growth rate, which reflects the state of corruption and waste of public money. Most government spending is directed in its negative aspects, namely operational spending, i.e. it is not directed in the productive and investment aspects, which are the positive aspects of spending. The results of the stability tests showed that the time series of the study variables contain the unit root and are unstable at the general level, according to the extended Dickie-Fuller test (ADF).

It is also clear from the standard results that there is a causal relationship in one direction from government spending to government spending. This explains the role played by government spending in the formation and development of the domestic product, as the increase in government spending leads to the growth of government spending.

Since government spending in Iraq is one of the most important components of government spending, so the study recommends increasing it in activities that lead to addition to the national wealth. - Work on expanding and deepening the capital formation index by increasing investment spending on productive equipment and infrastructure that enhance the productive capabilities of the Iraqi economy and delineate the limits of economic development and its capabilities to the most skilled and productive. - Increase spending on Scientific research and activities undertaken by business establishments, or in research centers maintained by the state, which are considered the main source of technological development and technical innovations in production methods, which explain part of the growth in government spending, as technological development can help raise the efficiency and productivity of both labor and capita and thus to increase the total production without the need to expand the use of these two components. Enhancing human capital by increasing investment spending in education and training. As an investment commodity, education is an engine of economic growth that leads to a long-term workforce.

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