

Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 **ISSN: 2749-3628,**

MEASURING AND ANALYZING THE IMPACT OF GOVERNMENT SPENDING ON SOME ECONOMIC VARIABLES IN IRAQ FOR THE PERIOD 2004-2020

Researcher / Assist. Prof. Dr. Azhar Shamran Jabur College of Administration and Economics / Wasit University

<u>ashamran@uowasit.edu.iq</u>							
Article history:		Abstract:					
Received: Accepted:	28 th May 2024 26 th June 2024	Government spending is one of the basic and important elements in influencing economic variables and is one of the tools of fiscal policy for government intervention in economic life in order to achieve economic and social goals set by the Iraqi government. This study specializes in measuring and analyzing the impact of government spending on some economic variables in the Iraq for the period 2004-2020. This is done through a standard model of the data used, represented by (government spending, gross domestic product, unemployment rate and inflation rate). Government spending is the main and effective element in influencing the various economic variables in the country. Since the Iraqi economy is a rentier economy that depends heavily on the oil sector for its revenues due to the weak contribution of other sectors to government revenues and in the formation of GDP. As a result, the government spending has a significant impact on some of the economic variables under study, and the study has found that government spending has a significant impact on the economic variables, represented by GDP, inflation rate, unemployment rate according to the premise of economic theory and as a result of those results that we have reached, so we recommend that the Iraqi government should adopt modern methods and methods to rationalize government spending according to the revenues of the Iraqi government. As well as providing the appropriate infrastructure in order to overcome all the problems and obstacles facing the economic variables under discussion in order to achieve the desired goals by the government and achieve economic growth in the country.					

Keywords: Government, GDP, Economic Growth

INTRODUCTION:

The mechanism of government spending since the beginning of the emergence of societies to this day is responsible for it is the state and that the process of government spending is within the framework of the process of economic and social development of the country by influencing the economic variables under study . The growing interest in the process of economic development is the interest of researchers and economists in government spending, especially developing countries, due to the lack of savings and the lack of resources for public government spending, which constitutes an obstacle to achieving economic development in the country. This led to the resort of developing countries, especially Iraq, to resort to other sources to cover spending, through loans and borrowing from abroad, especially from developed countries, in order to finance economic development and work to achieve it. In view of the great importance of government spending in achieving economic development rates in the Iraq by influencing some economic variables, many researchers and economists have addressed on their various schools and ideas government spending in all its multiple aspects and the promise of government spending is one of the important and necessary things in achieving acceptable or high economic growth rates in the country. It must also be taken into account that any country that is in the ranks of developed countries must provide a set of cultural, economic and social factors, and that the increase in the volume of expenditures is not enough to achieve economic growth in a country, but must intensify a set of factors, the most important of which is progress and technological development as well as organizational and technical skills necessary for the operation of productive capacities as well as the availability of natural resources and appropriate external conditions to achieve economic growth in the country, especially in the progress of And the development of all its economic sectors.



Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 ISSN: 2749-3628,

SEARCH PROBLEM.

The economic crises experienced by the Iraqi economy led to the emergence of a set of economic phenomena that indicate a defect in the economic system, including low investment rates, low living standards , exacerbating unemployment rates , resorting to external borrowing and the negative effects of external debt burdens , which made the state It resorts to increasing the volume of government spending in order to achieve economic growth for the country.

THE IMPORTANCE OF RESEARCH.

The importance of the research is represented by preparing a study and analysis of the impact of government spending on some economic variables in Iraq for the period 2004-2020 through the use of statistical means to reach and analyze results in the light of economic theory in showing the impact of government spending on some economic variables under study.

Research hypothesis: The research proceeds from the following hypothesis

The increase in government spending significantly affects the achievement of economic growth in the Iraq through the impact of government spending on some economic variables, represented by GDP, unemployment rate and inflation rate, and that there is a long-term relationship between government spending and the economic variables under study. **Research objective**. The research aims to study and analyze

First. Clarify government spending and the role played by government spending in all economic fields.

Secondly. To what extent does government spending affect GDP, unemployment and inflation in order to achieve economic growth in the country?

Research limitations.

The limits of the search

BThe spatial boundaries Iraq. and time limits for the duration 2004 2020.

Analysis of the reality of government spending and economic variables in Iraq (GDP, unemployment rate, inflation rate).

The traditional method adopted in preparing the general budget by the Iraqi government is not compatible with developments and changes in government spending and the size of economic resources, as well as the problems that Iraq suffer from from the deficit in the general budget, administrative and financial corruption, economic instability and lack of sufficient job opportunities, all of which can lead to a negative impact on future generations and the inability to achieve economic development. 9).

However, the general budget after 2003 is characterized by high public government spending with no increase in the country's domestic production, which led to the trend towards importing goods and services in order to meet the requirements of domestic consumption, not members of society.

The overall government spending structure of any country is a basic and important indicator of the objectives of the direction of that country's spending policy. Investment spending after 2003 was very low, which negatively affected the infrastructure that needs to be rebuilt in Iraq, especially after the events of liberalization and regime change that the country was subjected to. The following table represents the percentages of the structure of general government expenditure in Iraq for the period 2004-2020. (1)

Table (1) Structure of Government Expenditure in Iraq (Percentages) for the Period 2004-2013

Total	Purchase of non- financial assets %	Other expenses	Social Benefits %	Grants %	Subsidies %	Benefits %	Goods & Services %	Salaries of employees %	Sunnah
100%	7.70	12.60	17.50	6.60	4.20	1.8	13.30	36.30	2004
100%	7.70	12.60	17.50	7.60	3.20	1.8	14.40	35.20	2005
100%	6.40	6.31	47.15	4.09	1.25	4.00	6.59	24.21	2006
100%	8.80	11.50	16.50	7.60	4.20	1.80	12.30	37.30	2007
100%	10.63	13.49	13.90	10.35	5.42	0.67	12.10	33.44	2008
100%	11.08	6.51	10.77	9.01	2.99	0.73	11.19	47.71	2009
100%	18.80	7.78	7.98	7.73	2.56	1.28	12.40	41.49	2010
100%	14.27	10.51	8.50	8.50	0.56	2.13	11.85	43.69	2011



Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 ISSN: 2749-3628,

100%	15.65	10.7	8.21	9.77	2.38	0.69	12.87	39.67	2012
100%	1.90	12.30	9.3	3.90	2.80	1.40	13.30	55.10	2013
	10.29	10.43	15.73	7.515	2.956	1.63	12.03	3.36	Average
									duration

Source: Central Bank of Iraq / Central Bureau of Statistics / miscellaneous reports for the period 2004-2013. **Table (2) Structure of Government Expenditure in Iraq (Percentages) for the Period 2014-2020**Source: Central Bank of Iraq / Central Bureau of Statistics / Miscellaneous reports for the period 2014-2020.

We note that the exchange doors have differed in Table 1 from Table 2, due to the economic and security conditions

Total 100%	Social welfare and pensione rs' salaries	SOA Progr ams	Obligatio ns and contribu tions %	Grant s, subsi dy and debt %	Capital expendi ture	Asset Mainten ance	Service Supplies	Supplies %	Salarie s of emplo yees %	Years
100%	24.50	0.00	0.24	16.00	0.80	0.91	2.82	6.22	48.51	2014
100%	22.09	0.11	0.27	9.08	0.3	0.82	1.12	3.20	62.99	2015
100%	20.23	0.10	0.15	12.73	0.19	0.64	1.33	2.43	62.21	2016
100%	25.11	0.40	0.16	11.62	0.19	0.61	1.28	4.95	55.68	2017
100%	22.62	0.45	0.10	16.75	0.18	0.61	0.67	5.1	53.44	2018
100%	22.56	0.69	0.06	18.73	0.59	0.64	1.74	8.44	46.54	2019
100%	21.20	0.98	0.04	21.43	0.41	0.75	0.74	7.05	47.41	2020
	22.61	0.39	0.14	15.19	0.38	0.71	1.38	5.34	53.82	Avera
										ge durati on

experienced by the country, and we note through the above tables that the largest share of government spending was what is paid for salaries and wages during the study period. Note that this percentage has increased since 2004 until it reached the highest rate during 2020 and approximately 47. 4% And that the reasons behind this increase are due to many reasons that can be mentioned as follows: (2) Introduction

- 1. Increase the number of new ministries and bodies such as the Ministry of Environment, Technology, the Ministry of Municipalities and Public Works and the Ministry of Human Rights.
 - 2. Law 22 of 2008 on salaries and employees of the public sector.
- 3. The return of the dismissed military The return of the dismissed military and civilians to work and the restoration of rights to this class by the Iraqi government.

It can be said through tables one and two that the rates of investment in Iraq are very low, due to the absence of government investment spending, which led to a decrease in domestic production and thus an increase in domestic consumption by increasing imports of goods and services from abroad, and since Iraq is a rentier country that depends in its revenues on the oil sector only, the bulk of its revenues go to consumption purposes without investing at the required level, and this works to increase the structural imbalance in the various economic sectors. Hence the lack of development and catching up with the developed countries and thus the lack of economic stability. ⁽⁸⁾· Economic variables can be clarified only as follows:

1. Gross Domestic Product (GDP)

One of the most important basic indicators that indicate the level of economic well-being and economic progress in the country is the economic variable (gross domestic product) because it is a measure of sustainable economic development because any increase achieved in the per capita GDP is the basic condition in promoting the achievement of sustainable development and economic growth of the country as well as an indicator of the progress and development of the country economically as we mentioned earlier. (4)

Table (3) Average GDP per capita for the period 2004-2020 Million JD



Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 **ISSN: 2749-3628,**

Average GDP per capita	Gross Domestic Product (GDP)	Years
1961.5	53235358.7	2004
2629.6	73533598.6	2005
3317.8	95587954.8	2006
3754.9	111455813	2007
4923.2	157026061.6	2008
4125.8	130642187.0	2009
4988.13	162064565.5	2010
6518.9	217327107.4	2011
7431.7	254225490.7	2012
7795.4	273587529.2	2013
7399.5	266420384.5	2014
5528.6	194680971.8	2015
5444.5	196924141.7	2016
5968.3	221665709.5	2017
7053.7	268918874.0	2018
6719.4	262917150.0	2019
4937.8	198774325.4	2020

Source: - From the work of the researcher relying on the Ministry of Planning Central Organization for Statistics and Information Technology. For the period 2004-2020.

Source: Prepared by the researcher using Excel based on table (3) data.

It is noted from the data of the above table that the average GDP per capita in 2004 was equal to 1961. 5 million Iraqi dinars and increased to 2629. 6 million dinars during 2005 and began to rise from 2006 to 2013 and note that the average per capita GDP during that period remained high and was not affected by the difficult conditions experienced by the country, due to the high rates of economic growth. Seemed average GDP per capita declined during 2014 and reached approximately 7399. 5 million Iraqi dinars, due to the decrease in the quantities of oil exported due to the political crises that the country went through from the entry of the terrorist ISIS. In 2017, GDP per capita rose to nearly 5,968. 3 million Iraqi dinars After that, the average per capita GDP for the years 2019-2020 decreased, due to the Corona pandemic as a 19 pandemic, which the world was exposed to to the fullest, which led to an economic recession in the entire world. (7) Praft resolution

2. Inflation rate.



Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 ISSN: 2749-3628,

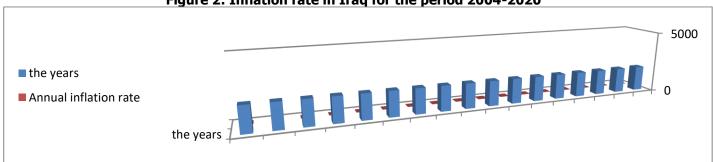
The problem of inflation is one of the most important problems facing various countries of the world, whether developing or developed countries, as the Iraqi economy witnessed many successive waves of high prices, especially after the year of change in 2003. It can be said that inflation is the case of continuous rise in prices, which reflects the imbalance between the commodity sector and the monetary sector, and there are those who view inflation as the continuous rise in aggregate demand for goods and services at a faster rate than the rate of rise in The level of aggregate supply as a result of many factors, the most important of which is government spending that is financed by deficit and the expansion of the money supply in a manner that is not commensurate with the development of the total supply of goods and services. (3) Inc.

Table (4) Inflation rate in Iraq for the period 2004-2020

Annual inflation rate	Years
26.8	2004
37.1	2005
53.1	2006
30.9	2007
12.7	2008
8.3	2009
2.5	2010
5.6	2011
6.1	2012
1.9	2013
2.2	2014
1.4	2015
0.5	2016
0.2	2017
0.4	2018
0.2-	2019
0.6	2020

Source: Central Bureau of Statistics. Annual Statistical Bulletin 2004-2020.

Figure 2: Inflation rate in Iraq for the period 2004-2020



Source: Prepared by the researcher using the Excel program based on the data of Table (4).

Through the above table, we note that inflation rates began to rise from 2004 to 2006 compared to 2004, as the inflation rate during 2004 was approximately 26. 8 In 2006, it was about 53. 1 As a result of the rise in prices for oil derivatives, as well as the increase in public government spending, represented by the increase in wages and salaries for employees, which led to a rise in the general level of prices and during the period 2007-2010, as shown in the previous table, the inflation rate appeared Declining due to the decline in oil prices and the imposition ofcustoms duties for imported goods, as well as the decline in the exchange rate of the Iraqi dinar.

Then the inflation rate began to rise during the years 2011-2012 due to the increase in government spending, and then inflation rates began to decline during the period 2014 and 2019, as the inflation rate reached (0.2% -) during 2019 and amounted to approximately 6. 0 during the year 2020, which are low rates compared to previous years, due to the government's adoption of a deflationary austerity policy as a result of the decrease in government revenues represented



Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 ISSN: 2749-3628,

by oil revenues due to the decline in oil prices as a result of the Corona pandemic, which negatively affected global oil prices, the decrease in government spending, and the increasing demand for health materials and medicine.

3-. Unemployment.

One of the most important requirements for achieving economic growth in Iraq is to achieve the optimal use of labor and eliminate the phenomenon of unemployment in accordance with the goals determined by the country's development policy in order to eliminate unemployment by identifying the demand and supply sides of the labor force in the market and that addressing the issue of unemployment is an important topic in the reconstruction and development of Iraq, especially at the current stage. ⁽⁶⁾

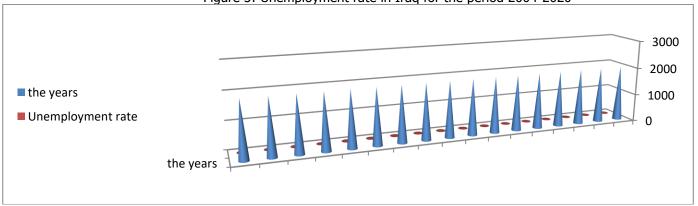
The increase in population is an economic burden on the national economy, especially in developing countries, especially those suffering from low and low rates of growth of economic activities. The unemployment rate indicator is one of the most important indicators to measure the efficiency of the country's economic performance, and unemployment is a large socio-economic variable that is dangerous to the Iraqi economy, which confirms the actual need to reconsider the structure of human resources in order to ensure the optimal use of the labor force and the sustainability of the course of the social and economic development process in Iraq. ⁽⁵⁾

Table (5) Unemployment rate in Iraq for the period 2004-2020

trie period 2004-2020
Years
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020

Source: Central Bureau of Statistics. Annual Statistical Bulletin 2004-2020.

Figure 3: Unemployment rate in Iraq for the period 2004-2020



Source: Prepared by the researcher using Excel based on Table (5) data.

From the above table, we can see that the unemployment rate in 2005 is equal to 97. 17% The decline in unemployment continued until 2007, reaching nearly 70%. 11% This is due to the government's policy of reducing unemployment rates



Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 ISSN: 2749-3628,

by increasing employment in public institutions affiliated with the Iraqi government, and then the unemployment rate increased during 2008 and reached approximately 34. 15% due to the instability of the political and security situation in the country During the period 2009 to 2013, unemployment rates began to decline during that period as a result of the improvement in the economic, security and political conditions of the country. After that, unemployment rates rose for the years 2015, 2016 and 2017, as we showed the percentages in the table above, due to the entry of terrorist ISIS into Iraqi territory and the destruction and destruction of the country's infrastructure, which led to the continued rise in unemployment rates until 2018, and unemployment rates also increased during the years 2019 and 2020, due to the Corona Covid-19 pandemic, which negatively affected the country, as the unemployment rate as a result during 2020 reached approximately 74. 13%.

Standard Side:-

Three statistical models were reconciled to show the extent of the impact of government spending on some economic variables in Iraq and the analysis was as follows:

The first model.

AThe model of the impact of government spending on the GDP indicator The F test statistic showed a high significance of 45. 129 with a p-value of 00. 0 which means the significant impact of government spending on the GDP index. The value of the coefficient of determination was also showing a high percentage of interpretation of the government expenditure variable in the GDP variable. For example, it appeared with a non-negative sign, which means that the effect is direct in the independent variable GDP Total The T-test of the regression parameter also showed high significance for the effect, dependent variable and GDP. As shown in the following statistical results:

Regression Analysis:

The regression equation is

GDP = 14911068 + 2.35 General Government Expenditure

Predictor Coef SE Coef T P
Constant 14911068 16006972 0.93 0.366
General Government Expenditure 2.3516 0.2067 11.38 0.000

S = 23920307 R-Sq = 89.6% R-Sq(adj) = 88.9%Analysis of Variance

Source DF SS MS F P Regression 1 7.40662E+16 7.40662E+16 129.45 0.000 Residual Error 15 8.58272E+15 5.72181E+14 Total 16 8.26489E+16 Unusual Observations

Resulting spending
Local Year

Gross Government Obs Fit SE Fit Residual St Resid
15 80873189 268918874 205094959 6073550 63823915 2.76R

R denotes an observation with a large standardized residual.

The second model.

Model of the impact of government spending on the annual inflation rate index The T-test statistic showed the significance of this effect, which amounted to 48. 18 is the value of F. and with a probability valueP= 0. 001, the coefficient of determination reached its value. 2. 55%, which means that the spending variable affected by 2. 55%, of the total change in the annual inflation rate variable.

As for the test statistic T and the parameter of the marginal slope of the regression line, it is a negative sign and shows the reverse effect of the expenditure variable in the effect of the secondary variable because increasing one unit of government spending would reduce the annual inflation rate by approximately 0.00000041 in units of inflation. As shown in the following statistical results:

Regression Analysis:



Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 ISSN: 2749-3628,

The regression equation is Annual inflation rate = 40.7 - 0.000000 government general expenditure

Predictor Coef SE Coef T P
Constant 40.706 7.369 5.52 0.000
Government Public Expenditure -0.00000041 0.00000010 -4.30 0.001

S = 11.0113 R-Sq = 55.2% R-Sq(adj) = 52.2%

Analysis of Variance

Source DF SS MS F P Regression 1 2240.8 2240.8 18.48 0.001 Residual Error 15 1818.7 121.2 Total 16 4059.6

Unusual Observations

Spending rate
Inflation year
Obs Annual Government Fit SE Fit Residual St Resid
3 38806679 53.10 24.83 4.15 28.27 2.77R

R denotes an observation with a large standardized residual.

The third model.

AThe model of the effect of the government spending variable as an independent variable with the unemployment rate variable. The results of the estimation showed that the model is significant and the impact of government spending on the unemployment rate because the test statistics F amounted to 16. 9 with a p-value of .000 and since it is less than the level of statistical significance 05. 0 Therefore, the variable ofgovernment spending is influential in the unemployment rates in Iraq and that this effect is the opposite effect, which is what the signal showed The negative of the regression parameter, which means that government spending contributed to reducing unemployment rates and that the ratesof this change were shown by the value of the coefficient of determination R2, its value was 1. 85% because it is a variable government spending that was able to affect unemployment rates by about 38%, which is a very good rate.

The regression equation is

Unemployment rate = 28.99 - 0.000000 general government expenditure
+ 0.000000 Government Public Expenditure**2

S = 2.87989 R-Sq = 54.5% R-Sq(adj) = 48.0%

Analysis of Variance

Source DF SS MS F P Regression 2 139.077 69.5383 8.38 0.004 Error 14 116.113 8.2938 Total 16 255.189

Sequential Analysis of Variance

Source DF SS F P Linear 1 97.3348 9.25 0.008 Quadratic 1 41.7417 5.03 0.042



Available Online at: https://www.scholarexpress.net

Vol. 36, July, 2024 ISSN: 2749-3628,

CONCLUSIONS AND RECOMMENDATIONS.

First. Conclusions.

- 1. The record results showed a significant relationship between public government spending and the economic variables under study, represented by GDP , unemployment rate and inflation rate.
- 2. The current government spending during the study period records the largest percentage of public government expenditure by approximately 94% of the general government expenditure and the rest is approximately 6% of the total government spending is investment spending, and this is an indicator that indicates the weakness of the infrastructure in the country and the weak contribution of the economic sectors in the formation of GDP.
- 3. The decrease in the volume of commodity supply as a result of the decrease in production capacities in the commodity sector, the increase in the prices of goods and services, and the emergence of the problem of inflation as a result of the increase in demand for goods and services.
- 4. Government spending is one of the most important components of GDP and the largest and important contributor to achieving the economic growth of the country if it is directed towards investment spending.
- 5. Most of the public government spending is directed towards operational spending, i.e. not directed towards the positive investment aspects that work to develop and progress the country economically.

Secondly. Recommendations.

- 1. Work to find a state of balance between government investment spending and current government spending, as current government spending constitutes the largest percentage of government spending compared to investment spending.
- 2. Work to increase investment spending in the Iraqi economy in order to promote economic sectors and increase local production to achieve the economic development of the country because investment represents an important and effective means in changing the structure of the economy and stimulating it to develop, progress and growth.
- 3. The need to set standards for the efficiency of government spending and work to restructure it in order to achieve and promote the economic growth of the country
- 4. The need to provide the basic base for the economic sectors and seize a new investment policy in accordance with the economic vision of the country in order to achieve the principle of diversification in the investment fields to achieve the economic achievement of the country.
- 5. Stop the employment policy in public sector institutions and work to raise the productivity and efficiency of workers and create job opportunities in the private sector in addition to supporting the private sector and developing it and its participation with the public sector in order to reduce unemployment rates and the country's domestic production.

SOURCES:-

- 1- Abdul Karim Abohat, Iraqi debt reduction, what it means for the future, Al-Qadisiyah Journal of Administrative and Economic Sciences, Volume 6).
- 2- Samir Siham Dawood, Miqdad Ghadban Latif, The dominance of the consumption pattern of government expenditures and its impact on economic growth in Iraq for the period 2003-2014, Journal of Economic and Administrative Sciences, University of Baghdad, Volume 24, Issue 102.
- 3- Awad . Ibrahim , the phenomenon of stagflation in the Egyptian economy Analytical study ,zagazig university ,Egypt. 2002.
- 4- Ghada Saleh Abboud, The impact of oil shocks on the GDP of Iraq, Kuwait and Saudi Arabia for the period 1970-2020, Al-Qadisiyah University, College of Administration and Economics, 2021.
- 5- P.F Holt pressman , Rutledge . Richard Steven 2001 ,Anew Guide to post Keynesian.
- 6- Gartner Manfred Gartner, 2009, Macroeconomics prentice Hall third Edition.
- 7- Bassem Khamis, Estimation and analysis of the relationship between the GDP growth rate and the unemployment rate in the Iraqi economy for the period 1990-2014, Journal of Economic and Administrative Sciences, Issue 96, Volume 23.
- 8- Mohamed Hassan Odeh, Study and analysis of the relationship between public spending and GDP and the extent of its contribution to achieving economic development in Iraq for the period 1975-2014, Gulf Economy Volume, Issue 31, 2017.
- 9- Adel Falih Al-Ali, State Finance, Oman, Dar Zahran for Publishing and Distribution, first edition.
- 10- Mohamed Shaker Asfour, The Origins of the General Budget, Oman, Dar Al-Masirah for Publishing and Distribution, Second Edition, 2009.