RES MILITARIS
REVUE EUROPEENNE D ETUDES EUROPEAN JOURNAL OF MILITARY STUDIES
Social Science Journal

Analysis of the relationship between the internal public debt and the public budget deficit in Iraq for the period from 2010-2020

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Abstract

The study aimed to analyze the relationship between the internal public debt and the public budget deficit in Iraq during the period 2010–2020 using descriptive and analytical approaches to the data of the financial phenomenon. Furthermore, to track the development of public debt and the percentage of its contribution to the public budget of Iraq during the study period. The study showed that the origin of the debt with its benefits consumes a large proportion of oil revenues through what is deducted from these revenues to pay the principal debt with interest, which hinders the development process in the country. It has been shown that although there was a surplus in some years of study, it was not properly exploited by diversifying public revenues. The study also recommended the necessity of following an economic policy based on developing the economic sectors, especially the agricultural and industrial sectors. This can be achieved by following a policy aimed at reducing the dependence on oil revenues as a primary source of financing the public budget.

Keywords: public debt, public budget deficit, public revenues, oil revenues

Introduction

The general budget has become increasingly important in the various economies of the world, especially after World War II, as well as the role that governments have played in economic activity. We find that the deficit in the public budget has tended to increase in various countries around the world, and it has reached levels that may threaten. The financial and monetary stability of the state, as the effects of inflation appeared, resulting in a continuous deterioration in the purchasing power of the national currency and a deterioration in the standard of living of individuals, as well as the escalation of the volume of the internal public debt and the escalation of its service burdens. Public borrowing requires returning amounts with the interest rate, and the new monetary issuance (inflationary financing). It represents a burden on the national economy, especially if the exported money is not directed to finance productive projects that contribute to increasing the commodity supply.

Iraq, as in the case of most developing countries, and during the study period from 2010-2020, faced several years of deficits in its public budgets, which forced successive governments to resort to internal public borrowing. The relationship between the internal public debt and the public budget deficit was fluctuating due to the weak ratio of public borrowing to the total revenues of the public budget due to Iraq's budget reliance on oil resources to finance its public expenditures and the consequent internal financial crises due to the drop in oil prices and the lack of public revenues to finance the increasing expenditures resulting from the needs of society and the political and military crises experienced by the Iraqi economy.

Research problem: The dependence of the general budget in Iraq on oil resources mainly to finance its public expenditures made the relationship between the internal public debt, specifically (public borrowing), volatile and weaker than its role in financing the public budget deficit during the study period.

Research hypothesis: The relationship between the internal public debt and the public budget deficit in Iraq during the study period does not contribute to financing the deficit in a way that reduces dependence on the depleted oil resources, limits the impact of inflation, and supports the growth of GDP.

The aims of the study

1. To identify the limits of the relationship between the internal public debt and the public budget deficit in Iraq during the study period 2010-2020.
2. To encourages public borrowing as a source of sovereign revenue to diversify Iraq's budget sources of income and reduce dependence on the depleted oil resources.

Study divisions

- The first topic is to analyze the meaning of public debt and distinguish it from the concepts mixed with it.
- The second topic is the public budget deficit and methods of covering it.
- The third topic is the evolution of public debt and the percentage of its contribution to Iraq's budget for the period 2010-2020.

The fourth topic is the general budget of Iraq in the face of the increasing deficit and fluctuations in oil prices.

The first topic: Analyzing the meaning of public debt and distinguishing it from the various concepts that comprise it

Public debt is considered revenue for the public budget when it is issued and public expenditure upon payment, especially for the main component of public debt, which is the public loan.

1. The meaning of "public loan

For the sum of money for which you condemn him, A public body (the state) from the public or from banks or financial institutions with a pledge to return the borrowed amount and to pay interest for the length of the loan term, according to permission from Parliament or whoever authorizes it. That includes the amount of the loan, its interest, its term, and how it is repaid (Abdul Qadir Al-Sakian, 1963).

The state resorts to borrowing in two main cases:

- When the taxes reach their maximum and the tax rate reaches their size, it means that you (estimated commissioning nation) are exhausted, so it is not appropriate for the state to go into more taxes, and it deteriorates economic activity and standard of living.
- When violent reactions appear among those charged with paying the tax, even before the first case is achieved, it means that taxes have limits other than economic ones of a

psychological nature that put a limit on the state's ability to seek help from them (Abdel Karim Sadiq, 1986).

In the two previous cases, the importance of the public loan is not limited to being an irregular resource used to finance public expenditures, but rather it represents, in theory and practice, a tool of financial policy (and even of economic policy in the broad sense), i.e., a means of economic guidance that should be used with great care to serve the purposes of the economic state.

2. General loan types

Public loans vary according to the basis on which they are based.

Internal loans and external loans

The internal loan is written in its bonds by natural or legal persons inside the borrowing country, that is, when the financial market is where the loan is held within the state, and it is divided into two types:

- A real internal loan, which entails transferring real resources from natural and moral members of society to the government, and the loan will not affect the total money supply in the society but is expected to result in a reduction in individuals' purchasing power, and the loan period is either less than a year. It is considered short-term, such as public treasury bills, or its duration exceeds one year, so it becomes a long-term public loan, an example of which is development bonds (Adel Ahmed Hashish, 1996).
- False internal loan: It results in the creation of new purchasing power in the community. It represents borrowing by the government from the central bank and commercial banks. In fact, it represents a disguised increase in the amount of money in the community, and that is why it is called a "false fictitious loan."

As for foreign loans, they are the sums obtained by the state from abroad, whether the creditor is another country, an international organization, an international institution, or a foreign bank. The state resorts to borrowing from abroad due to its need for capital and the insufficiency of national savings, as well as its need for foreign currencies, whether to cover a deficit in its account balance or to support its currency and protect it from deterioration. The state also borrows to obtain the necessary production and consumer goods, and finally, the borrowing enables it to benefit from the foreign expertise that it lacks in the areas of development (Adel Ahmed Hashish).

a) Optional loans

Optional loans are the loans issued by the state, whether in the form of bonds or public treasury bills and leave individuals the freedom to subscribe to them or not, meaning that they are not obligated to subscribe to them, even if the state tries to lure them by raising the annual interest rate, effectively making subscribing to state loans better than investing savings in other aspects of investment.

The principle of the general loan is that it is optional because the loan, in its legal nature, is a mutual act that is achieved through the compatibility of the wills of the lender and the borrower (Abdel Karim Sadiq, 1986). As for the compulsory loan, according to which the state obliges its members to provide it with certain amounts in the form of loans, there are reasons that push the state to contract compulsory loans, including the following:

1. The case of the individuals' low confidence in the state is such that if the loan was

optional, they would not have taken it because of their low confidence in the state's economic situation and its ability to return it with its interests.

2. The situation in which inflation prevails and the accompanying effects leads to a rise in the price level and a deterioration in the value of money as the state sees the necessity of forcing individuals to lend it to absorb part of the amount of money in circulation to reduce the prevailing effects of inflation.

In view of the seriousness of the effects arising from compulsory loans, the state tends to avoid them, except in cases of extreme necessity (Hisham Safwat Al-Omari, 1988).

b) Fruitful loans and non-performing loans

The sums of fruitful loans are spent on an investment project that brings in revenue and pays off the principal with the interest accrued on it. The loans are called non-performing when the loan amounts are spent in areas that will not increase the productive strength of society, will not result in cash income, and will not result in any benefits in the future. An example of this is the debt that occurs due to wars or its spending in consumer areas.

3. Public loan issuance methods

Issuance means the process by which countries obtain the money subscribed by lenders in return for their pledge to pay the interest and return the amount in accordance with the terms of the loan contract. The most important ways that the state uses them are:

4. Direct Public Offering (DPO)

The state undertakes this method by itself by offering bonds for subscription directly to the natural and legal persons who want to do so, starting with the subscription date and ending for those who wish to subscribe from the departments, whether from the central or commercial banks (Mr. Attia Abdel Wahed, 2000).

5. Indirect Public Offering (bank subscription)

In case of doubt about the possibility of general mail being covered by direct public subscription, the government resorts to the financial banks by paying its value immediately after deducting its commission in agreement with the government.

6. Issuance on the stock exchange

The state here sells its loan bonds on the stock exchange like any other person and without publicity, which allows selling loan bonds at the stock market price, but this method only allows employing a small number of bonds because offering more bonds leads to a decrease in their price (Taher Al-Janabi, 1990).

7. Subscription by bidding

The state offers to auction the bonds to the public, banks, or financial institutions at a price below the par price (which is the nominal price at which the bond is issued), provided that the state undertakes to return the loan amount according to the nominal price (Abdel Karim Sadiq, 1986).

1. Distinguishing between the internal public debt and its mixed concepts

Generally, a public loan is not the only form of debt that the state is obligated to fulfill, as was referred to in the first paragraph. There are compensations that are judged or estimated for those who expropriate them for the public benefit. The public loan also differs from the tax in that it is obligatory to pay and interest revolves. As for the tax, it is a compulsory contribution that the state obtains from the taxpayers permanently without return, while the principle of the public loan is to allocate the proceeds for a specific purpose specified by law. As for the concept of using the general budget policy and the concept of lending (credit) policy, there are two main points of convergence:

1. Fiscal policy determines the size, timing, and disposition of the general loan contract's proceeds. Either the loan is in the form of long-term or short-term bonds, it is related to monetary policy.
2. Financing the general budget deficit through cash issuance. The decision to issue, its size, timing, and how to dispose of the proceeds are all determined by fiscal policy. As for the technical method for achieving this issuance, it is related to monetary policy. The monetary policy complements the fiscal policy, including the general loan and monetary issuance in the field of achieving economic stability (Abdel Karim Sadiq, 1986). From the standpoint of monetary and financial economic analysis, the issuance of new money represents, in essence, a debt to the national economy because the unit of money used represents a purchasing power that loses all of its value unless it is matched by goods and services produced in the country, whether in the public or private sectors. Therefore, the issuance is considered a debt on the government or on the issuer that must be fulfilled by supporting the productive capacity of the community before any cash issuance process, especially in developing countries (such as Iraq). If the public loan in the advanced concept is not the only form of debt that the country is obligated to fulfill, as the country is committed to many debts and financial obligations as a result of performing its functions, the public loan is just a part of the public debt (public dept) and it does not match with its other forms, even if custom on the use of public loan as a synonym for public debt.

The second topic: The public budget deficit and methods of covering it

First: The concept of public budget deficit

The general concept of the public budget deficit is the annual increase in government spending on its revenues

The budget deficit is defined as (CADauten M.Twelshans, 1975):

1. From an economic and social point of view, it is the lack of public revenues for financing investment and current public expenditures that prompts the state to cover this difference through internal or external loans in order to achieve economic and social goals (David N. Hyman, 1997).
2. From a financial point of view, a finance deficit is the increase in the total amounts of public expenditures estimated in the general budget for a particular fiscal year over the total amounts of public revenues estimated in the general budget for the same fiscal year, and the cash deficit of the general budget may sometimes appear, which is the deficit that results from a lack of a temporary balance between the treasury's revenues and expenses as a result of the delay in collecting some revenues for administrative or seasonal reasons (www.mafhoum.com).

Second: Types of public budget deficits

The public budget deficit includes one of the following two types

1- The intended budget deficit

The basis for the idea of the intended deficit can be found in Keynes' analysis and what he wrote about full employment during the Great Depression (1929–1933) that the capitalist system went through. Keynes suggested that the creation of the intended deficit in the state budget would generate expansionary effects in a stagnant economy as a result of raising the ratio of expenditures to revenues. (Hamdi Abdel Azim, 1987). The state's tax policy is set with the goal of increasing both consumption and investment, and this necessitates those indirect taxes on goods be imposed within narrow limits to encourage individuals to consume. Similarly, corporate taxes and taxes on profits must be reduced to encourage investment, because reducing such taxes will raise the marginal sufficiency of capital and thus increase investment.

2- Unintended Deficit

It can be said that the unintended deficit occurs automatically and without state intervention and takes the following forms:

A. Nominal Deficiency and Real Deficiency

The nominal deficit is the deficit determined by looking at the difference between public expenditures and public revenues and is represented by the value stated generally. The real deficit is the nominal deficit adjusted for inflation. It is known to everyone that inflation erases debt (accumulated deficits-accumulated interest) or in another way, it reduces it.

Real deficit = nominal deficit - (inflation x total debt) (Sami Khalil, 1982).

B. Structural Deficit and Cyclical Deficit

A structural deficit is described as the continuity of the insufficiency of public revenues to cover public expenditures for a long period of time, becoming a permanent deficit due to the imbalance of the entire financial system. This is due to the increase in public spending at rates exceeding the financial capacity of the national economy with all its sources, which indicates a defect in the structure of the economy itself. As for the periodic deficit, the idea of a periodic deficit is based on the idea that the economic stages (recovery and deflation) are cyclical, and since the state can achieve a budget surplus during the years of economic recovery, it can accept the idea of a deficit in the general budget in years of economic downturn, and the periodic deficit can be covered by the surplus that the country achieved in the years of recovery (David C. Colander, 2006°. The cyclical deficit arises due to abnormal circumstances such as a financial crisis, and it disappears as soon as the crisis ends and the economy emerges from its ordeal, as is the case in advanced capitalist countries such as England and the United States of America.

C. Weakness and Strength Deficiencies

A weakness deficit is defined as the deficit caused by a weak government administration and its inability to generate revenues offset by irrational public spending. As for the power deficit, it is the deficit resulting from the support provided by the state in the form of economic and social subsidies, whether for individuals or projects to achieve economic and social goals or work to raise growth rates in its economic sectors (Muhammad Abdul Aziz Al-Maarik and Ali Shafiq, 2003).

Third: Ways to Cover the Deficit in the General Budget

The public budget deficit is financed from several sources that can be divided in general into traditional and non-traditional sources of financing (Robert J. Gordon et al., 1978).

The first source: Conventional financing, which includes:

1. Internal financing of the deficit (internal loans) The state sometimes resorts to local financing for the deficit in the general budget. The financing has several forms, which are as follows (Hamad Ahmed Al-Afandi,2016).

2. Borrowing from the public: This is done through the government's issuing of government bonds and selling them to individuals. This type of financing is a type of non-inflationary financing. However, this financing can result in what is known as the "crowding-out effect." This effect, which results from selling government bonds to individuals, transfers part of the income allocated to individuals' spending to the government, which leads to a decrease in consumer spending for individuals, causing a decrease in the total demand of individuals equivalent to the volume of individuals' purchases for government bonds.

3. Bank borrowing: This is done through two channels: either through the expansion of government borrowing from the central bank, or through the government borrowing from commercial banks; but this leads to an increase in the monetary mass, which results in an increase in the severity of inflation.

4. External financing (borrowing from abroad): The state sometimes resorts to borrowing from abroad, which is one of the most important means that the state can resort to cover the deficit in its public budget, by borrowing from international institutions or other countries, or resorting to international reserves. Due to the increasing public budget deficit, most developing countries have had to resort to withdrawing from their international reserves in order to cover their requirements and what they need in foreign currencies, as it is known that a large part of government expenditures are settled in foreign currency.

The second source: unconventional financing (inflationary financing)

This type of financing is represented in the new cash issuance by creating an additional amount of money without a cover to finance development operations or to push and motivate productive activities. Financing seems to be one of the easiest ways or means, but at the same time, it is considered one of the most dangerous, resulting in inflationary consequences that affect the economy with negative effects that may lead to the collapse of the national economy. The most prominent of these effects are the following:

- The local currency has a low exchange rate.
- High deficit in the balance of payments.
- Economic decisions of institutions and consumers are being distorted as a result of the continuous rise in the prices of production factors.
- Inflation may also result in a rise in interest rates, either because of a state of uncertainty or uncertainty regarding investment returns, or as a result of the monetary authority's intervention and its adoption of a contractionary monetary policy in order to contain inflation.

The third topic: The evolution of public debt and the percentage of its contribution to Iraq's budget for the period 2010–2020

First: An Analysis of the Trends in Public Debt in Iraq during the Period 2010-2020

For the state to carry out its basic financial functions of satisfying the general needs of society, it must first mobilize and provide the necessary financial resources (represented by public revenues) to cover public expenditures. Despite the diversity and multiplicity of the sources of public revenue, especially in the modern era, and the different nature of their nature depending on the type and purpose of the public service provided by the state, they are limited to either sovereign financial resources (which are represented in taxes of all kinds) or credit resources from public debt (which is one of the financial policy tools that the government resorts to cover the deficit in the general budget when public revenues are unable to cover the public expenditures of the state general budget deficit) and these securities come in three varieties: long-term, medium-term, and short-term (Al-Hassan Dardori, 2014).

The problem of public debt (which represents all government debts whose assets and interests must be paid from the borrower to the lender when the due date comes or any future date that has been determined to repay the debt) is one of the most important problems that the Iraqi economy suffers from and has resulted in financial imbalances that have led in turn to deepening the structural imbalances within the Iraqi economy. In addition to the aggravation of the volume of public debt, which made the state vulnerable to interference in its internal affairs by imposing economic programs on the Iraqi government that may have had a negative impact on the level of economic and social conditions, most of the economic programs that are imposed on the state, especially by international financial organizations, and the government is asked to adopt them, have austerity policies that call for reducing public spending and reducing government support. The internal public debt is the first source that the Iraqi state resorted to during the period 2010 to 2020 to support public budgets and cover the deficit in them. The internal debt in Iraq is mainly formed in two directions:

Treasury transfers: Which are short-term securities issued by governments for a period, usually less than a year, with the aim of covering and financing the seasonal financial deficit, and their purchase value is often less than their nominal value. These securities in Iraq are based on the instructions for selling government securities No. 1 of 2004, where they are issued at a certain discount rate and are amortized at their nominal value on their due dates, according to the specified interest rate and according to the instructions (Campbell McConnell and Stanley Brue, 2008).

Bonds: which are one of the types of investment based mainly on public debt, whereby individuals and institutions lend money to the government in return for an agreed upon specific interest rate, and the government, in turn, spends this money on infrastructure projects. On the part of investors, it is an investment channel. It allows them to obtain a specific return that flows regularly. When buying bonds, the individual will lend the government an agreed amount of money, provided that the government pays him in return a certain rate of interest and during a regular period of time, which is known as the "coupon." This means bonds are financial assets with a fixed income (Duraid Kamal Shabib, 2009). The purpose of issuing this type of bond is to finance the state's general budget deficit.

Table 1 *explains the path of Iraq's internal public debt from 2010 to 2020.*

Annual growth rate (%)	Internal debt	Years
-	9.2	2010
14.1	10.5	2011
-5.71	9.9	2012
-27.27	7.2	2013
54.73	17.3	2014
47.40	25.5	2015
5.49	26.9	2016
1.11	27.2	2017
-8.3	10.3	2018
-3.88	9.9	2019
46.46	14.5	2020

Source: The table is the work of researchers based on the reports of the Ministry of Finance, Public Debt Department, for different years.

Table 1 shows that the internal public debt in Iraq rose from $9.2 billion in 2010 to

$10.5 billion in 2011, with an annual growth rate of 14.1%. This is due to the increase in public expenditures and the expansion in the issuance of public treasury transfers in favor of some investment projects, for example, the transfer of the Ministry of Electricity for the year 2010.

The Iraqi government also allowed banks to buy remittances, which led to the expansion of their issuance to cover public expenditures for the year 2011. This debt tended to decline during the years 2012-2013 to reach (7.2) billion dollars until 2013, with negative growth rates during these years amounting to (-5.71%) and (-27.27%), respectively, and the reason for this decline is due to two main things: the first is the rise in oil revenues as a result of the rise in oil prices in global markets, and the second is the decrease in loans provided by the Central Bank to government departments in that year. However, this decline did not last long. The levels of internal public debt quickly resumed during the years 2014–2017, as the value of the total internal public debt increased from $17.3 billion in 2014 to $27.2 billion in 2017, with a growth rate. For the four years in a row, it reached (54.73%), (47.40%), (5.9%), and (1.11%). In a war with terrorist groups that took control of parts of Iraqi territory, which led to the Iraqi government losing a number of major oil wells and pipelines in the country. As well as the decline in oil revenues, which represent the basis of public revenues in Iraq, due to the drop in oil prices in the world markets during the aforementioned period, all of which resulted in a noticeable deficit in the state's general budget, forcing the Iraqi government to try to bridge this deficit by resorting to debt each year in order to cover the expenditures of the general budget. After that, the level of public debt returned to decline during the years 2018–2019 to reach (9.9) billion dollars in 2019 with a negative growth rate of (-3.88%).

However, the decline in global demand for oil as a result of the spread of the Corona pandemic led to a significant drop in oil prices, as a result of which the state's general revenues fell, which exacerbated the public budget deficit, which the government was forced to fill through the internal public debt, which rose by (64.64%) to reach (14.5) billion dollars in 2020.

Second: The relationship between the public debt and the general budget in Iraq

A budget is defined as a detailed financial statement that details the expected revenues and prepared expenditures. A budget is also a forecast of expenditures and revenues for a specific period of time, usually a year (Salah Al-Din and Salem, 2010). The state's general budget is a mirror that reflects the performance of the government and the directions of its adopted economic policies. It is the tool responsible for estimating the volume of expected public revenues and expenditures and, thus, estimating the expected surplus or deficit in the budget. The concept of surplus or deficit refers to the difference between public spending and public revenue in the event of an increase in expenditures. A public budget exceeds the actual revenues available to the state, creating what is known as a deficit (or the general budget deficit). But if the opposite happens, and the state's expected revenues during the year exceed the volume of its expenditures, a surplus will be achieved.

Developing countries, including Iraq, suffer from the problem of deficits in their general budgets for several reasons. The most important of which is the increase in government spending and the decrease in the volume of public revenues of the state, which result in a deficit in the general budget. In this case, the government has two options to bridge the financial deficit gap in the budget. As for financing the deficit by increasing the amount of money in the economy without this being accompanied by a real increase in the state's reserve balance, this matter has negative consequences for the economy, as it leads to a decrease in the value of the local currency and a rise in inflation rates in the country.

The second option for the government (which is the most applied) is to bridge the expected deficit gap in the budget by resorting to borrowing, by issuing public treasury bonds, and this leads to an increase in the size of the internal debt, which reflects the strong relationship between public debt and the public budget deficit. The process of continuing to finance the public budget deficit through the public debt for successive years may lead the economy to bear another problem represented by the burden of the public debt as a result of the accumulation of obligations resulting from the repayment of the debt for several years to come. Table 2 shows the reality of the general budget in Iraq and the ratio of internal debt to total public revenues for the period from 2010–2020.

Table 2: *Illustrating the general budget in Iraq, the size of the internal debt during the period 2010-2020 (billion dinars).*

Internal debt / public revenue %	Internal public debt	general revenue	overhead	Years
13.08	9181	70178	70134	2010
6.84	7447	108807	78757	2011
5.46	6548	119817	105139	2012
4.09	4658	113840	119127	2013
9.03	9520	105364	115937	2014
44.30	32143	72546	82813	2015
88.67	47362	53413	73571	2016
61.58	47679	77422	75490	2017
39.24	41823	106569	80873	2018
35.63	38331	107566	111723	2019
-	-	-	-	2020

Source: The table is from the work of researchers based on the annual bulletin of the Central Bank of Iraq, for different years.

Through the data in Table 2, which shows the direction and path of public budgets in Iraq during the period 2010-2020, we note that the path and trends of the internal public debt have witnessed fluctuations between rise and fall during the study period. The internal public debt is headed towards a decline, as its value decreased from (9181) billion dinars in 2010 to (4658) billion dinars in 2013 in conjunction with the increase in the achieved oil revenues, and it constituted 13.08% of the total public revenues, while the period from 2014 to 2017 witnessed an accelerated rise in the total internal public debt from (9520) billion dinars in 2014, or (9.03%) of the total revenues, to reach (47679) billion dinars in 2017, representing (61.58%) of the total public revenues, and this increase came at the cost of the internal debt. The size of the internal debt is a result of the Iraqi government's resorting to borrowing due to the need to cover public expenditures, especially military expenditures, in the face of the war on terrorism and displaced families.

Third: The effect of the relationship between the internal public debt and the budget deficit on some economic indicators

The impact of the relationship between the internal public debt and the public budget deficit can be explained economically through the GDP and inflation indicators:

1. The impact of the relationship on the gross domestic product:

Gross Domestic Product (GDP) is one of the most important macroeconomic variables, and since 2003, especially after the political change and the situation in Iraq, it became clear the government's tendency to address the issue of internal debts through cooperation between the Central Bank and the Ministry of Finance for the purpose of correcting the structure of these debts. Table 3 shows the growth rates of GDP the Iraqi total and the ratio of the general budget deficit and the internal public debt to the gross domestic product.

Table 3: *Gross domestic product and its growth rates for the period from 2010-2020.*

The ratio of internal debt toGDP %	Internal Public Debt	Deficit / Surplus Ratio GDP %	Public budget deficit/surplus	Growth Rate GDP %	GDP (at current prices)	Years
5.49	9181	0.26	440	-	167093	2010
3.42	7447	13.82	30050	30.36	217327	2011
2.57	6548	5.77	14678	16.97	254225	2012
1.71	4658	1.95-	-5287	6.63	271091	2013
3.57	9520	3.96-	-10573	1.69-	266420	2014
16.09	32143	5.14-	-10267	25.03-	199715	2015
23.23	47362	1.05-	-20158	2.07	203869	2016
21.50	47679	0.87	1932	8.72	221665	2017
15.55	41823	9.55	25696	21.31	268918	2018
14.57	38331	1.58-	4156-	2.23-	262917	2019
-	-	-	-	24.39-	198774	2020

Source: The table is from the work of researchers based on the annual bulletin of the Central Bank of Iraq, for different years.

Through the data in Table 3, we note that the general budget achieved a surplus of 440 billion dinars in 2010, which constitutes about 0.26% of the gross domestic product. This surplus continued to rise during the following years, reaching approximately 30050 billion dinars, which is the highest value of the budget surplus recorded during the study years, constituting 13.82% of the gross domestic product, supported by the oil surpluses achieved as a result of high oil prices. In 2012, the value of the budget surplus amounted to about 14678 billion dinars, equivalent to 5.77% of the gross domestic product.

The fluctuation and rise in the value of the gross domestic product during the years of study can be explained by analyzing the components of this output, as the oil sector possesses the largest proportion in the formation of this output in exchange for limited contribution rates for other economic activities, especially distributive and service activities, which means that there are structural imbalances in the structure of the output GDP and that any halt or slowdown in the oil sector will quickly be reflected in the GDP. The general budget witnessed a remarkable improvement during the years 2017–2018, as it recorded a surplus of (25,696) billion dinars in 2018, equivalent to 9.55% of the gross domestic product, and with the recession that began to hit the global economy at the beginning of 2019 due to the Corona pandemic and a decline in exports. The demand for oil and its low prices in the international market resulted in a decrease in public revenues, which recorded a deficit in the state's general budget, which amounted to about -4156 billion dinars in 2019, and a decline in GDP growth for the years 2019-2020.

2. The effect of the relationship on inflation:

There is a close relationship between the general budget deficit, on the one hand, and inflation, on the other. When the economy suffers from a deficit in financing public spending, this deficit is funded mainly through new monetary issuance, thus feeding the inflationary pressures in the country, which is reflected in the high level of This may lead to inflation becoming a chronic feature in the economy, and the increase in prices requires an increase in current spending and then the erosion of the purchasing power of the local currency, which increases and deepens the budget deficit again. Thus, the relationship between the state's general budget deficit and inflation continues in the form of a vicious circle (Abdullahi, Yakubu, 2011). Table 4 shows the inflation rates witnessed by the Iraqi economy for the period from 2010-2020.

Table 4: *showing the development of inflation rates in the Iraqi economy for the period 2010-2020.*

Inflation rate	Price index	Deficit\Surplus	years
2.26	125.1	0.26	2010
5.60	132.1	13.82	2011
6.10	140.1	5.77	2012
1.86	142.7	1.95-	2013
2.24	145.9	3.96-	2014
1.44	148.0	5.14-	2015
0.5	104.1	1.05-	2016
0.2	104.3	0.87	2017
0.19	104.7	9.55	2018
0.38	104.5	1.58-	2019
-	-	-	2020

*Source: Ministry of Planning and Development Cooperation, Central Statistical Organization, annual statistical group for different years. • Please keep in mind that the index for the years (2010–2019) was derived from the base year 2007 using the following equation: New Year's index = New Year's index x (New Year's inflation rate x 100) /100.

The previous table shows the inflation rates recorded in the Iraqi economy for the period 2010-2020, which witnessed fluctuations during the first four years of the study, as it rose from (2.46%) in 2010 to reach (5.60%) and then (6.10%) for the years 2011 and 2012, respectively, This came with the general budget achieving a surplus of 14,678 billion dinars during the year 2012, and with the increase in public expenditures during the years 2013-2014, which was reflected in the occurrence of a deficit in the state's general budget amounting to (-5287, -10573) billion dinars for the two years in a row.

The inflation rate fluctuated with it between (1.68) in 2013 and (2.24) in 2014. The increase in public expenditures as imposed by economic theory leads to an increase in aggregate demand and therefore total production, but this depends on the degree of flexibility of the state's production apparatus, as the impact is reflected on production and decreases production. Prices and the rate of inflation will decline if the production system is flexible. In the case of the Iraqi economy, which is characterized by the low flexibility of its production apparatus, the effect of the increase in aggregate demand tends to raise the general level of prices, thus increasing the rate of inflation.

While we note that it tended to decline for the period 2015–2019, it went from a high of 1.44 in 2015 to a low of 0.2 in 2019, which is the lowest rate recorded during the study years. This decline came as a result of the decline in oil revenues and limited the government's ability to expand public spending during that period.

Fourth topic: Public budget options in Iraq in the face of the growing deficit and fluctuations in oil prices

The financial deficit is one of the biggest problems that impede the path of economic growth in Iraq, and what makes the matter worse is the weakness of the government's treatments and procedures used to treat this deficit's state responsibilities, which led to an increase in public spending, which is offset by fluctuation and instability in the revenues allocated to cover this spending. With the growing phenomenon of the general budget deficit in most developing countries, including Iraq, and the spread of the ideas of the neo-classical school that were in harmony with economic globalization and the rapid internationalization of the economy, a group of alternatives emerged to address the problem of financial insufficiency and chronic deficits in public budgets, and these alternatives are concentrated in two main directions:

The first direction: the International Monetary Fund Model (the monetary approach)

The approach followed by the International Monetary Fund is based mainly on the ideas of the neoclassical school, which attributes the cause of structural imbalances in developing countries to an excess in the aggregate demand stream offset by a shortfall in aggregate supply, which raises inflation levels and increases the volume of public debt.

This surplus must be addressed in order to restore balance to the sectors of the economy, as excess demand is the main cause of the general budget deficit, which is certainly offset by an excess of money supply. Therefore, the treatment of this problem requires the elimination of excess aggregate demand by following strict policies on total demand. Its objective is to control the financial and monetary variables (Kishore G. Kulkarni, 2010).

And since public expenditures, both current and investment expenditures, constitute a large proportion of the volume of aggregate demand, tackling the problem of the budget deficit requires working to limit the growth of public spending in exchange for an increase in public revenues (Hassan Al-Hajj, 2007). Based on the foregoing, the vision of the International Monetary Fund, which is defined by the economic stabilization program, in addressing the problem of the public budget deficit, is divided into two directions:

The first direction is reducing public spending.

This is done in accordance with the vision of the International Monetary Fund through:

A. The government's reduction of public spending, especially the item of transformational expenditures, and working to reduce spending of a social nature, such as the expenditures for subsidizing fuel, energy, and some food commodities.
B. The need to work to reduce the number of workers in the public sector and to reconsider the employment policy followed by the Iraqi government, especially since 2003, even if this led to an increase in unemployment rates at the beginning of the implementation of the program.
C. Calling for the privatization of the public sector through the sale of public facilities and companies (especially companies that make losses) to the private sector.
D. calling for trade liberalization, lifting restrictions, and opening the Iraqi market to imported products. As for the second axis, it is represented by increasing public revenues through:

1. Raising the prices of services provided by the government to individuals, such as energy services and other government services.
2. Increasing sovereign revenue by focusing on indirect taxes.
3. Liberalizing the exchange rate of the local currency against foreign currencies.

The second trend: the development model

This model represents the viewpoint of developing countries, as it considers that the treatment of the problem of the public budget deficit must begin through reforming the state's public resources, not by reducing the aspect of public expenditures, as illustrated by the viewpoint of the International Monetary Fund. Most developing countries see that reducing public spending has deflationary effects on the economy, so they focus on the aspect of increasing public revenues, especially tax revenues, by reconsidering the applicable tax laws and working to combat tax evasion, in addition to working on rationalizing public spending by re-prioritizing public expenditures and focusing on areas of public expenditures. This is accomplished by imposing a set of controls on state expenditures, as well as addressing job slack in state institutions and the resulting disguised unemployment in employee preparation and subjecting these institutions to an economic feasibility study. To increase its efficiency, the development model also sees that the basis for reducing the public budget deficit is conditional on reducing the size of the public debt.

The Iraqi economy is characterized as a unilateral rentier economy, which depends to a large extent on one resource, namely oil revenues, which constitute the largest percentage of the composition of the country's gross domestic product, the main component of Iraqi exports, and the mainstay of the state's public revenues, despite the Iraqi economy enjoying other components. It has natural and human energies that can enable it to achieve economic diversification if it is invested correctly, and thus overcome the problem of structural imbalances that the economy suffers from, foremost of which is the financial imbalance resulting from the volatility of public revenues as a result of its association mainly with oil prices in the international market, which is an external variable that, as we mentioned, Iraq cannot control.

From the foregoing, it is clear that the options available to the public budget in Iraq to address the problem of the financial deficit that accompanied the preparation of public budgets during the years of study are as follows:

1. Modernizing the general budget system: In order to achieve the objectives of the general budget, which include creating new sources of income and production capacities, it is necessary to reconsider the method of preparing the general budget in Iraq, and shift from item budgets to program and performance budgets and make adjustments that include measuring and implementing public budgets. By organizing the budget as follows:
2. The operating budget of the government sector, which includes current spending, adopts the tabulation system according to the budget items, taking advantage of the program and performance budgets in order to reach the level of performance of these budgets and the extent to which the goal of spending can be achieved.
3. Since the trends of fiscal policy in Iraq during the school years were not in favor of the productive sectors of the economy, such as industry, agriculture, and housing, these income-generating sectors are able to create diversity in the sources of public revenues and find new sources (non-oil revenues), so the Iraqi government must work to increase financial allocations to these productive sectors, especially the agricultural sector, through agricultural loans, in addition to imposing a tax on unused agricultural lands, which would lead to an increase in agricultural production and meet the needs of the local market and thus reduce the volume of agricultural imports and thus reduce the burden of the general budget.
4. Raising the efficiency of tax policy and correcting its trends in order to increase the tax proceeds is one of the most important tools that will achieve financial resources, in addition to its role in achieving economic stability and redistributing income. This can be achieved through:

a) A: Simplifying the collection process by assigning a tax identification number to each taxpayer.
b) Focusing on sales tax and value-added tax, provided that prices are moderate and that there is a distinction between goods according to economic and social objectives,

c) Reconsidering the applicable tax laws and activating Customs Tariff Law No. 22 of 2010.

d) Adopting environmental taxes in order to improve and protect the environment.

Activating the role of the public loan: There is a close relationship and mutual influences between the budget policy and the public loan, because the issuance of the loan contract, its signature and how to dispose of its proceeds (which is a resource of the general budget), is determined by the financial policy, as it is one of the most important sources of financing the public budget deficit. In addition to its role in achieving monetary stability and reducing the inflation rates that the Iraqi economy suffers from.

On the other hand, through the public loan, the government can absorb part of the excess cash in the economy and reduce the volume of aggregate demand. This requires raising awareness of the importance of the public loan and its role in development on the one hand, in addition to coordination between monetary and financial policies and the existence of a developed financial market capable of mobilizing savings on the other hand.

1. Establishing a sovereign fund or (revenue control fund)

Its main objective is to absorb the annual financial surpluses and benefit from them in the years of financial deficit and times of natural and financial crises, in addition to saving part of the oil revenues for future generations.

2. Activating the role of the private sector

Although the private sector is the locomotive of growth in most capitalist countries, including Iraq, we note that this sector did not take its role in the process of economic development alongside the public sector, as a result of the presence of many obstacles impeding growth, Therefore, attention must be paid to the private sector within the framework of the philosophy of the market economy by providing a stimulating legal and legislative environment that helps the growth and development of this sector. on the general budget.

Conclusion

3. The researchers reached several conclusions about the subject of their research, as follows

1. Through the data contained in the research, which shows an increase in the volume of public expenditures at rates that exceed the state’s public revenues, and that most of these expenditures fall under the operational expenditures item in the budget, and that the majority of them go to cover the expenses of salaries, wages, social benefits, and grants, which reflects the consumptive nature of public expenditures. which confirms the existence of a clear defect in the spending policy and the failure to direct these expenditures correctly.
2. The large increase in public expenditures witnessed by the Iraqi budgets during the study period is not in the interest of the Iraqi economy and does not help to solve its problems. On the contrary, the increase in public spending will result in a similar increase in the volume of aggregate demand, and in the absence of a flexible production apparatus to meet increasing demand, this will lead to higher prices and an increase in inflation rates, which means that most of the spending will be dedicated to meeting the rise in the general level of prices and not spending that is of general interest to the community.
3. The growing phenomenon of the fiscal deficit in the public budgets during the years of study, as a result of following an expansionary financial policy, led to an increase in the volume of the internal public debt due to the high aspect of public expenditures in

the budget significantly as a result of Iraq's entry into more than one political and economic crisis, as well as an increase in the volume of the internal public debt During the period from 2014-2017, as a result of Iraq's exposure to a double shock represented by the significant drop in oil prices (the main component of public revenues) and the war on terrorism, which resulted in a large destruction of infrastructure in a number of cities, which led to a significant increase in public expenditures in return for a decrease in Total public revenues, which led to a deficit in the public budget, which prompted the state to borrow, since financing the deficit through debt was the best option that was available to the government

4. The interest and debt instalments consume a large proportion of oil revenues through what is deducted from these revenues to pay the principal debts with their interests, which leads to obstructing the development process. The largest proportion of these debts are not optimally exploited but rather go towards financing consumption, in particular importing goods, which means that the debt amounts did not create new financial surpluses that were used to pay off the principal and interest of the debt.
5. By analyzing the relationship between the public debt, the budget deficit, and the gross domestic product, we found the clearest fluctuation during the study period, which is the result of the Iraqi economy's dependence on oil resources in a large way to keep the public budget and its prices linked to the international situation, as the rise in oil prices is reflected in an improvement in that relationship and an increase in output and its growth rates. And vice versa, in the event of a drop in international oil prices and the Iraqi government's need for public revenues, it is forced to resort to internal public debt, as happened in 2014, 2015, and 2016.
6. As for inflation and the impact of the relationship between the internal public debt and the budget deficit, the relationship is direct because the budget deficit financed by cash issuance will inevitably contribute to the rise in price rates.

As for the Iraqi economy, we find that the causes of inflation are not related to the fact that the general budget suffers from a surplus or a deficit, due to the inflexibility of the production system to absorb the surplus in the budget if it is achieved.

Recommendations

1. Work on a rational economic policy that works on managing public debt through precise and clear criteria related to the foundations and conditions of indebtedness, and the ways and methods of using it in a manner that ensures reducing the burden of public debt to the lowest possible level and working to direct public debt amounts to investment fields and productive projects.
2. Working on diversifying sources of income by adopting an economic policy based on developing the economic sectors, especially the agricultural and industrial sectors, in addition to following a policy aimed at reducing dependence on oil revenues as a primary source of financing public budgets.
3. The need to work on achieving financial discipline for spending is a first and basic step with the aim of reducing the public budget deficit, which would contribute to reducing borrowing in addition to reducing financial waste.
4. The need to modernize the general budget system in Iraq through the introduction of modern scientific management methods, especially government administration, to ensure that the government performs its duties efficiently and effectively in accordance with the approved plans to achieve the objectives of economic policy with the use of modern financial methods in the field of planning for state financial management and according to the budget of programs and performance, and dispensing with traditional

methods of balancing items.

5. Work on the establishment of a sovereign fund that works to manage the surpluses of the general budget in years of financial prosperity and uses them to finance economic and infrastructure projects.

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