



EFFECT OF PUBLIC EXPENDITURE STRUCTURE ON ACHIEVING FINANCIAL SUSTAINABILITY IN THE IRAQI BUDGET FOR THE PERIOD 2005-2020

Hanan Hussain Khudair¹, Prof. Khaleel Mohammed Shahab²

Department of Financial and Banking Sciences/ College of Administration and Economics/ University of Iraq. Email: hananhussain113@gmail.com

Department of Financial and Banking Sciences/ College of Administration and Economics/ University of Iraq. Email: Khilil.aljibory@gmail.com

Article history:	Abstract:
Received: 11 th June 2023 Accepted: 10 th July 2023 Published: 14 th August 2023	The current research aims to identify the importance of public spending, what is financial sustainability, and measure the impact of public spending on financial sustainability and the impact of the time variation of public spending on productivity. In order to reach the goal for which this research was prepared, urine models were relied upon in order to know the strength of the correlation and influence between the two variables. Several conclusions were reached, the most important of which is that the misdistribution of public spending during the fiscal year is one of the most important reasons that lead to a gradual decrease in the productivity of public spending, as the low percentage of public spending means an increase in its productivity in the first quarter, and the inflation of the volume of public spending at the end of the year leads to Low productivity. We also reached many recommendations, the most important of which was the development of a modern and sophisticated method for preparing budgets so that by linking the funds spent with the goals achieved, and thus identifying what is being achieved and the extent of the integrity of government units by committing to achieving the set goals.

Keywords:

INTRODUCTION:

Iraq is among the rentier countries that heavily rely on oil as the main source of funding expenses. The country has faced challenges since 2003, marked by fluctuations in oil prices due to its link to global markets. In contrast, other economic resources have been neglected, and revenue allocation has not been appropriately organized with expenditures. The Iraqi budget focuses on the simplicity of budgeting items, organizing expenditures based on annual funds and historical spending of institutions during one fiscal year. This approach prompts units to dispose of or return any remaining funds at the end of the fiscal year.

The topic of public expenditure is significant in national economies and is a crucial tool in financial policy, greatly affecting economic activity and, consequently, monetary policy, particularly money supply.

The research is divided into five sections. The first outlines the research methodology, the second focuses on the theoretical framework of the virtual reality, the third addresses financial information in the virtual reality context, the fourth analyzes survey results, and the fifth section is dedicated to conclusions and recommendations.

Chapter One: Research Methodology

In this chapter, we describe the adopted methodology for fulfilling research requirements, including the research problem, significance, objectives, hypotheses, scope, data analysis methods, research approach, and procedural plan.

1-1 :Research Problem:

The research problem lies in using statistical methods and data collected over financial years under study. The research relies on modern means of data collection. The research problem can be formulated as follows:

- 1 .Did public expenditure achieve an impact on financial sustainability?
- 2 .How does financial sustainability affect the general budget?

1-2 :Research Objectives:

The current research aims to achieve the following:

- 1 .Measure the impact of public expenditure on financial sustainability.
- 2 .Understand the achievements of financial sustainability and their reflection on the general budget.
- 3 .Monitor the readiness of the Iraqi Central Bank in its supervisory role to achieve financial sustainability.



4 .Measure the impact of the time lag of public expenditure on productivity.

1-3 :Research Hypothesis:

The study primarily focused on the following hypothesis:

- The irregular implementation and concentration of expenditure during the latter half of the financial year in most Iraqi units and ministries are significant reasons for the decline in the productivity of public expenditure. This is due to the failure and delay of most government projects' execution, as the actual expenditure process is a reflection of state institutions' activity. It must be balanced throughout the fiscal year.

1-4 :Research Significance:

The research's significance stems from the importance of the subject it addresses. The current research aims to reveal the relationship between public expenditure, sustainable development, and the general budget. Public expenditure is fundamentally linked to the general budget, and the general budget is associated with financial sustainability represented by revenues. Governmental institutions are mainly linked to the budget by determining the annual public expenditure for each institution. Thus, these units' expenditures are akin to implementing the state's financial plan to achieve its multi-dimensional goals.

1-5: Research Procedure Plan: The research idea can be elucidated through the following procedural plan:

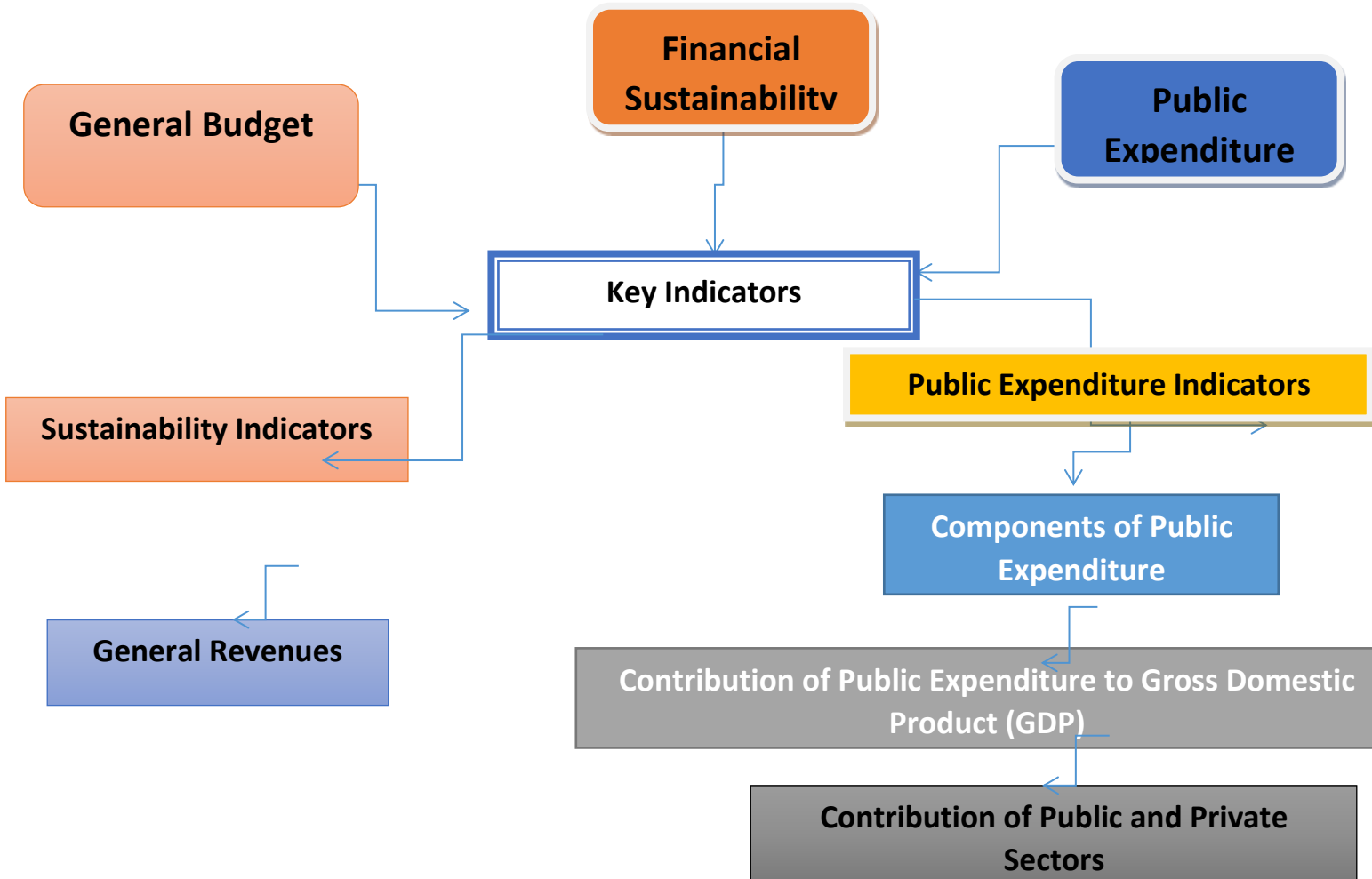


Figure (1) Research Procedure Plan
Source: Prepared by the researcher

Chapter Two: Public Expenditure and its Concepts, Effects, and Divisions

2-1 Definition of Public Expenditure: Public expenditure is a monetary amount spent by a legal



entity for the purpose of achieving a public benefit. (Mr. Abdul Mawla, 57)

Similarly, public spending has been defined as achieving a public benefit, leading to equality among citizens in bearing public burdens. There are several concepts and definitions about expenditure. Public expenditure is considered a cash amount spent by an entity to satisfy public needs. (Khalfaja, 2013, p. 23).

Public expenditures are defined as the use of funds by the public authority to produce goods or provide services for the public needs. (Mahmoud Saleh Al-Atiya, 2005, p. 42).

It's also defined as a cash amount withdrawn from the financial treasury to a public institution with the aim of satisfying public needs. (Zainab Jabbar Al-Da'ami, 2018, p. 8)

It's referred to as "all payments made by the government such as current expenditures, transferable capital expenditures, and debt service." (Mohammed Ali Al-Huwaini and Abu Jabil, 1995, p. 231).

Expenditure also encompasses spending on goods and consumption services carried out by governmental authorities at all levels. (Iktifa Zaghir Athab, 2017).

In conclusion, public expenditures are the monetary amounts issued by the public sector to achieve public benefits. This definition, which most countries rely on, does not provide a clear and explicit expression of the actual size of public spending.

2-2 Importance and Effects of Public Expenditure:

The importance of public expenditure lies in its impact on economic activity, improving the economic level for both developing and advanced countries. The significance of public expenditure can be summarized as follows: (Shaker Al-Wasti, 1973, p. 54).

- 1- Social expenditures are among the most important expenditures, as they include health and educational services. If the state performs this service for free, it leads to achieving the purpose and benefiting from it (Tariq Kadouri, 2016, p. 73). Transfers may occur to beneficiaries and those with high incomes, and lead to economic transformations, and in turn, there are Income distribution for those with limited income.
- 2- Economic expenditures are those that have an economic objective, such as spreading investment and correcting production.
- 3- Securing the necessary commodities provided by the government, such as expenses for diplomatic

representation, foreign relations, and security and defense expenses.

- 4- Providing basic services such as transportation, electricity, education, health, support for foreign trade, agriculture, irrigation, and others.

Chapter Three: Financial Sustainability

3-1 Concept of Financial Sustainability:

Sustainability, as defined by the United Nations, is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (United Nations, 1987, p. 8.)

Financial sustainability is the ability of a state to bear debt while continuing to service its debt without correcting its financial policies to achieve a balance between revenues and expenditures. Financial sustainability ensures achieving this balance⁽¹⁾.

Financial sustainability is also defined as the ability of government fiscal policy to repay debt and provide services smoothly without scattering them⁽²⁾. It's the state's non-profit financial status, capable of achieving long-term charitable continuity of its mission, thus maintaining the state's financial capacity over time. (Omar Mohammed Mahmoud Suleiman, 2014, p. 286).

Financial sustainability and budget: It's the government's ability to achieve a surplus in its budget in the future sufficient to repay the public debt. Achieving sustainability is related to repaying the public debt, as well as government revenues and expenditures in the present and the future.

3-2 Indicators of Financial Sustainability:

Financial sustainability is analyzed through composite indicators based on financial variables, especially nominal debt and budget deficits. The financial indicators include:

3-2-1 Tax Indicator: This indicator aims to reduce the gap between realized taxes and actual taxes. It calculates the tax ratio according to the law: the targeted tax ratio to the gross domestic product = government spending ratio to output excluding interest payments + real interest rate - real output growth rate * public debt ratio to total GDP. Often, annual

¹ –The Policy Development and Review Department, Assessing Sustainability, INTERNATIONAL MONETARY FUND, 2002,p4.

² –Craig Burnside, Assessing New Approaches to Fiscal Sustainability Analysis, World Bank Latin America and Caribbean Departments report, 2004, p1.



revenues are insufficient to finance spending, which prompts the search for alternative sources of funding. (Marwa Fathi Al-Sayyid Al-Baghdadi, p. 418).

3-2-2 Public Debt Indicator:

This indicator holds significant importance as it provides an overall picture of local debt burden. It has been relied upon in the European system. The evolution of the public debt-to-GDP ratio serves as a guiding indicator for the financial situation and verifying adherence to preliminary controls for achieving sustainability, rooted in the importance of preventing continuous government borrowing⁽³⁾.

3-3-3 Deficit Indicator:

This indicator relies on estimating the value of the deficit or surplus from the budget by calculating the difference between expenditures and revenues without interest. It serves as a benchmark for making budget decisions due to the increase in the debt burden. This indicator is a fundamental and essential requirement to ensure the stability of the debt ratio and the financial sustainability resulting from it. To achieve financial sustainability, the budget must consistently achieve a surplus over a long period, ensuring the repayment of annual debt obligations⁽⁴⁾.

3-3-4 Net Foreign Exchange Reserves Indicator:

This indicator signifies the number of times external liabilities exceed foreign exchange reserves. It is used as a percentage to gauge the rate of foreign exchange accumulation alongside the external debt indicator.

3-3-5 Debt Consumption to External Debt Payments Indicator:

This indicator reflects the level of debt consumption as a percentage of external debt payments. It indicates refinancing debt through new issuance, represented by a turnover ratio. An increase in the ratio above 100 signifies that debt is not being financed by new borrowing. (Muash, 2020, p. 8)

Chapter Four: General Budget

4-1 Concept of the General Budget:

RoLand Sturm and Markus M.Muller : public –³
deficits a comparative study of their economic and
political consequences in Britain,Canada
,Germany,and the united states, Longman, Newyork,
U.S.A 1999,p.7.

Roland sturm and markus M.Muller : pubic – ⁴
deficits...op.cit.p.6.

The French law defines the general budget as "the legislative formula by which a state's burdens and revenues are estimated, decided upon by the parliament, and guided by a law reflecting the state's economic and financial objectives."

The general budget involves a detailed and approved estimation of public expenditures and revenues over a future financial period, often a year. It serves as the primary tool for fiscal policy to achieve welfare, economic growth, and social justice. (Khadija Al-Asr, undated, p. 223).

The general budget is an estimated plan for state expenditures from annual revenues over an upcoming period. The government is accountable to the legislative authority. In Iraq, Law No. 28 of 1940, known as the Budget Law, defines the general budget as tables and statements that include estimates of revenues and expenditures for one fiscal year. It is prohibited to allocate unified appropriations in the budget that are not fully disbursed or partially disbursed during the relevant fiscal year; such appropriations become void at the end of that year. (Dr. Adel Falahe Al-Ali, 2007, p. 515).

It is also defined as a task performed by the executive authority (Ministry of Finance) and contains estimates for both revenues and expenditures. (Hamoud Al-Qaisi, 2007, p. 89).

From the above definitions, it is evident that the concept of the general budget encompasses plans for state spending and the means of financing. Therefore, it serves as a tool for coordinating fiscal policy objectives and instruments.

4-2 Principles of General Budget Preparation:

Several principles are followed in the preparation of the general budget, including:

4-2-1 Budget Unity:

This principle involves consolidating public revenues and expenditures into a single budget instead of multiple budgets. Unifying the budget makes it easier for legislative authorities to understand the budget's content and have a clear view of the state's financial program. Adhering to this principle provides the executive authority with a clear idea of the financial situation and helps interested parties understand the true financial position of the state. It determines whether the state is facing deficits or surpluses and assists in reducing borrowing and covering some budget expenses. (Hamoudi Al-Qaisi, 2007, p. 108). Despite its many benefits, this principle is sometimes not applicable to certain economic and social management that requires funding from the state. Budget procedures can be complex and involve a



lengthy series of steps. Exceptions are made for such entities, including:

A- Independent Budget:

This refers to the budget granted to certain public and independent institutions that have legal status, such as public utilities with economic, social, and educational characteristics. These institutions enjoy autonomy, and their independent budgets are not subject to the rules, procedures, and principles of the general budget. Financial supervision is exercised on them only if otherwise stated. Their budget is not tied to the end of a fiscal year or the beginning of another. They have independent financial regulations, and legislative authorities do not intervene or debate their texts. Their financing methods are often self-generated.

B- Subsequent Budget:

This includes the expenditures and revenues of some public bodies and institutions that have economic, educational, or social characteristics. These entities have an independent schedule containing the expenses and revenues of public facilities. This type differs from the independent budget since it adheres to the rules and procedures of the general budget. Financial supervision is exercised on them.

1- Universality of the Budget:

This refers to the extent to which the legislative authority relies on expenditures. It should not be total but rather allocated to guide economic materials to society and achieve their optimal use. The net output method obscures from the legislative authority all details related to the expenses of public facilities. It only shows the balance of these facilities in the budget, either as a credit or a debit. Financial considerations include combating government extravagance.

2- Preparation of the Annual Budget:

This principle is followed to prepare and put forth a general annual budget for the state for the coming year, considering political, economic, social, and technical factors. This approach can enable the national economy to overcome the current stagnation and utilize labor to the maximum extent. This method of funding the budget deficit is primarily based on issuing currency. The controlled deficit theory suggests that there should be no fear of inflation in this case, especially as long as the national economy is below full employment. This implies the presence of unused production capacity that only requires a demand for its products. Deficit spending can help stimulate economic activity. The state's means of funding the budget

deficit is primarily by issuing currency. (Suzi Adli Nashat, 2009, p. 248).

4-4-3 General Budget and Financial Statements:

Legislative authorities sometimes exercise oversight called the "financial statement" to present the actual expenditures and revenues of the state for the previous time period, typically the past fiscal year. This aims to determine whether there were differences in terms of deficit or surplus, also known as an actual deficit or surplus. This helps evaluate the performance of the previous budget and whether expenses were properly disbursed or revenues were correctly collected in the previous year. This form of oversight is akin to post-audit, aimed at ensuring no violations occurred during the stages of the budget.

The financial statement of the government includes the actual expenses that were incurred and the actual revenues that were collected during a concluded financial period. It contains actual figures and is different from the general budget of the state, which includes estimated figures. Each general budget has a corresponding financial statement, and by comparing the figures of the general budget with those of the financial statement, one can assess the accuracy of the general budget estimates and their alignment with reality. (Khadija Al-Asr, p. 225).

While the budget is a prospective view of a future period, the financial statement of the budget is a retrospective view of a past period. Both involve revenues and expenditures, but the general budget makes projections of the collection and disbursement of revenues and expenditures, while the financial statement records what has been collected as revenues and what has been expended as expenses.

Thus, both are statements and numerical data, and the data is presented in the same manner. The general budget, until approved by the legislative authority, is considered a budget proposal and is adopted for an upcoming fiscal year. On the other hand, the financial statement is prepared for a concluded fiscal year and clarifies what has been disbursed and the amounts allocated as expenses. Any unspent amounts are carried forward to the next budget, and they are added to the upcoming general revenues as a surplus from the previous budget. (Dr. Ibrahim Abdul Kareem Al-Ghazi, 1970, p. 99).

Chapter Five: Analysis of Indicators of Public Expenditure in the Iraqi Economy

5-1 Components of Public Expenditure:

Achieving economic stability and growth in a country is often linked to analyzing public expenditure to fulfill



economic objectives. The challenges faced by a state can lead to budgetary issues, deficits, public debt, inflation, unemployment, and political and security conditions. All of these factors have compelled public expenditure policies to focus on specific objectives such as macroeconomic stability and stimulating economic growth.

Public expenditure comprises two components: investment expenditure and consumption expenditure. Investment expenditure is of significant importance as it determines the general investment demand, including spending on capital goods by the

government on its institutions and public facilities. (Mohammed Sheikhi, 2012, p. 132).

Consumption expenditure includes services provided by the government, such as government purchases and essential expenses like employee salaries, military expenditures, and transfer payments. The composition of public expenditure in Iraq after 2003 was marked by an increase in consumption expenditures at the expense of investment expenditures, burdening the government financially and significantly impacting the general budget. (Marwa Fathi Al-Sayed, 2012, p. 45).

Table (1), the components of public expenditure in Iraq at current prices for the period 2005-2020 are presented.

Investment Expenditure / Total Expenditure	General Consumption Expenditure / Total Expenditure	Investment Expenditure	General Consumption Expenditure	Total Public Expenditure	Years
17.33%	82.66%	\$4,572,018	\$21,803,175	\$26,375,175	2005
17.99%	82.00%	\$6,027,680	\$27,460,197	\$33,487,877	2006
23.02%	76.97%	\$7,723,044	\$25,822,100	\$33,545,144	2007
20.00%	76.63%	\$11,880,675	\$45,522,700	\$59,403,375	2008
20.00%	80.00%	\$10,513,405	\$42,053,620	\$52,567,025	2009
30.25%	69.74%	\$19,472,000	\$44,879,984	\$64,351,984	2010
19.56%	80.43%	\$13,623,000	\$56,016,523	\$69,639,523	2011
22.96%	77.03%	\$20,756,000	\$69,618,783	\$90,374,783	2012
32.41%	67.58%	\$34,647,000	\$72,226,027	\$106,873,027	2013
29.83%	70.16%	\$24,931,000	\$58,625,226	\$83,556,226	2014
26.37%	73.62%	\$18,564,670	\$51,832,845	\$70,397,515	2015
23.69%	76.30%	\$15,894,000	\$51,173,437	\$67,067,437	2016
21.81%	78.81%	\$16,464,461	\$59,025,654	\$75,490,115	2017
76.46%	85.43%	\$24,489,320	\$79,508,870	\$103,997,900	2018
71.43%	80.54%	\$22,545,600	\$75,987,400	\$952,123,400	2019



68.54%	77.12%	\$19,324,700	\$72,342,200	\$982,873,200	2020
--------	--------	--------------	--------------	---------------	-------------

Source: Central Bank of Iraq, General Directorate for Statistics and Research, Annual Economic Report, Various Years.

In 2005, the value of the general expenditure reached 26,375,175 million Iraqi dinars, with consumption expenditure being 21,803,175 million Iraqi dinars, accounting for 66.82% of the total expenditure. Meanwhile, investment expenditure was 4,572,018 million Iraqi dinars, constituting 33.17% of the total expenditure.

Moving to 2006, the general expenditure increased to 33,487,877 million Iraqi dinars, with consumption expenditure reaching 27,460,197 million Iraqi dinars. The investment expenditure amounted to 6,027,680 million Iraqi dinars. The increase in general expenditure was primarily due to the rise in consumption expenditure, which can be attributed to increased salary expenses, infrastructure rehabilitation, and military conditions during that period. (Baqir Karaji Habib al-Jubouri, 2015, pg. 155)

In 2007, the general expenditure reached 59,403,375 million Iraqi dinars, while consumption expenditure accounted for 25,822,100 million Iraqi dinars, representing 76.97% of the total expenditure. Investment expenditure was 7,723,044 million Iraqi dinars, comprising 23.02% of the total expenditure.

In 2008, consumption expenditure was 33,545,194 million Iraqi dinars, making up 76.63% of the total expenditure. Investment expenditure amounted to 11,880,675 million Iraqi dinars. The year 2009 witnessed a decrease in both types of expenditure, with general expenditure being 52,567,025 million Iraqi dinars, of which consumption expenditure constituted 42,053,620 million Iraqi dinars, accounting for 80% of the total expenditure. Investment expenditure was 10,513,405 million Iraqi dinars, representing 20% of the total expenditure, attributed to the global financial crisis.

Throughout the years 2010 to 2013, consumption expenditure continued to rise, while investment expenditure remained relatively stable. However, in 2014, the general expenditure dropped to 83,556,226 million Iraqi dinars, with consumption expenditure being 58,625,226 million Iraqi dinars, accounting for 70.16% of the total expenditure. Investment expenditure was 24,931,000 million Iraqi dinars, constituting 29.83% of the total expenditure, mainly due to the absence of a 2014 budget.

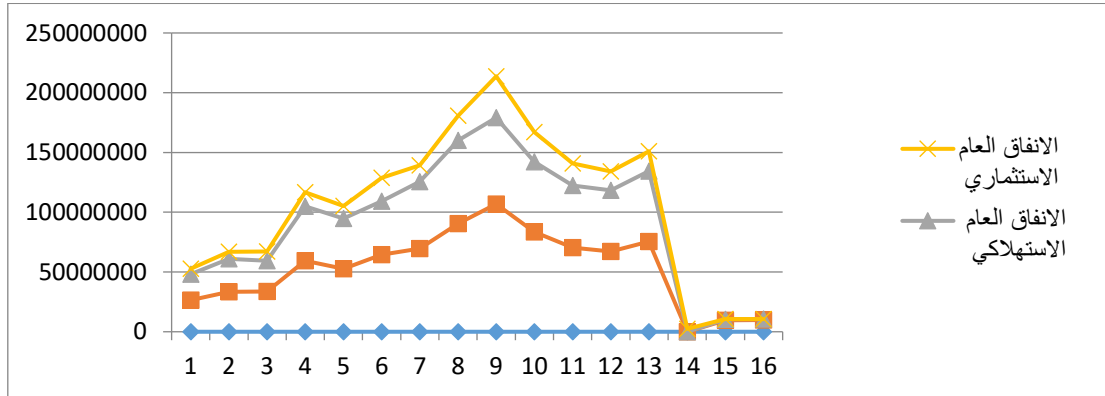
In 2015, both general and consumption expenditures decreased, with the former reaching 70,397,515 million Iraqi dinars and the latter being 51,832,845

million Iraqi dinars, accounting for 73.62% of the total expenditure. Investment expenditure was 18,564,670 million Iraqi dinars, making up 26.37% of the total expenditure. The decline was attributed to falling oil prices and security concerns⁵.

In 2017, the general expenditure increased to 75,490,115 million Iraqi dinars, with consumption expenditure being 59,025,654 million Iraqi dinars, comprising 78.81% of the total expenditure. Investment expenditure was 16,464,461 million Iraqi dinars, representing 21.81% of the total expenditure.

In 2019, the general expenditure further decreased to 952,123.4 million Iraqi dinars, with consumption expenditure accounting for 75.9874% and investment expenditure constituting 22.5456% of the total expenditure. The decline was influenced by the global COVID-19 pandemic and declining oil prices.

⁵- Jlidoon Saadoun, Hashem 2013, Global Financial Sustainability 2013 <http://www.aleqt.com> accessed 7/1/2023.



Source: Compiled by the researcher based on data from Table (1).

5-2 Contribution of General Expenditure and its Main Components to Gross Domestic Product (GDP)

Economic theories indicate a relationship between public expenditure and gross domestic product (GDP), yet the nature and direction of this relationship remain subject to economic debate. In this context, we will delve into the proportions of the main components of general expenditure in the overall GDP. The study relies on economic theories grounded in available data

and information regarding the phenomenon. These data were collected based on current prices and the growth rate of GDP at current prices, sourced from official references, to determine the causative relationship between the growth rate of government expenditure at current prices and the growth rate of public revenues. (Al-Ghalbi, Karim Salem Hussein, 2017, p. 220).

Within the dataset attained by the researcher, and through the data from Table (2),

Investment Expenditure as % of GDP	Investment Expenditure	Consumption Expenditure as % of GDP	Consumption Expenditure	General Expenditure as % of GDP	General Expenditure	Gross Domestic Product	Year
6.21	4572018	29.65	21803175	35.86	26375175	73533598.6	2005
6.3	6027680	28.72	27460197	35.03	33487877	95587954.8	2006
6.92	7723044	23.16	25822100	30.09	33545144	111455813.4	2007
7.56	11880675	28.99	45522700	37.83	59403375	157026061.6	2008
8.04	10513405	32.18	42053620	40.23	52567025	130643200.4	2009
12.01	19472000	27.69	44879984	39.7	64351984	162064565.5	2010
6.26	13623000	25.77	56016523	32.04	69639523	217327107.4	2011
8.16	20756000	27.38	69618783	35.54	90374783	254225490.7	2012
12.66	34647000	26.39	72226027	39.06	106873027	273587529.2	2013
9.35	24931000	22	58625226	31.36	83556226	266420384.5	2014
8.93	18564670	24.93	51832845	33.86	70397515	207876191.8	2015
8.08	1589400	26.03	5117343	34.12	67067437	196536350.	2016



	0		7			8	
7.28	1646446 1	26.11	5902565 4	33.33	75335955	225995179. 1	2017
9.12	1893264 3	28.65	6321983 0	35.1	78352165	243665733. 2	2018
7.1	1783215 7	26.13	6187432	33.23	76428146	216558095. 9	2019
5.76	1534567 4	23.54	5934354	30.64	75321345	215421287. 8	2020

Source: Prepared by the researcher based on data from the Central Bank of Iraq.

Through the data provided in the above table, it is evident that the average percentage of general consumption expenditure to Gross Domestic Product (GDP) for the period (2005-2020) is approximately 27.30%, compared to the investment expenditure to GDP, which is around 7.62%.

We observe that starting from the year 2010 and onwards, the percentage of general expenditure as a share of GDP began to rise. In the year 2010, it constituted 39.7%, while consumption expenditure as a share of local GDP was 27.69%, and the percentage of investment expenditure as a share of GDP was 12.01%. The gradual increase continued from 2011 to 2013, reaching 36.06% in 2013. However, the general expenditure ratios declined relative to GDP in the years 2014-2017, reaching 33.86% in 2017 due to the decrease in oil prices. In the years 2018-2019, there was a slight increase, reaching 31.45% in 2019, followed by a decline due to the COVID-19 pandemic.

On the other hand, the ratios of consumption expenditure as a share of GDP gradually increased, while the ratios of investment expenditure as a share of total GDP decreased gradually, reaching 6.15% in the year 2020. This fluctuation in consumption and investment ratios can be attributed to Iraq's experiences, including the impact of the war with ISIS, which led to increased government spending on military efforts, causing consumption to outpace investment. Additionally, the global crisis caused by the spread of the COVID-19 pandemic significantly affected general expenditure and investment, clearly reflecting the importance of public expenditure, as discussed in terms of investment and consumption, in

achieving economic development, growth, and rectifying the Iraqi economy.

From the provided data, it becomes apparent that there is a relationship between government expenditure and Gross Domestic Product (GDP). This relationship highlights the expansion of public expenditures, revealing the role of the state and its intervention in economic and social life. The indicator of the relationship between public expenditures and GDP is one of the indicators used to determine this role. It also reflects the extent to which public needs are satisfied by the government and the success of fiscal policy in redistributing national income.

The contribution percentage to total GDP is higher than the contribution of both the agricultural and industrial sectors to total GDP. This increase is due to the magnitude of the public sector in the Iraqi economy, as well as the enlargement of public expenditure due to increased oil revenues, particularly post-2005. The oil sector stands as the highest contributor to GDP, signifying the resource-dependent nature of the Iraqi economy. The services sector follows, ranking second in terms of contribution to total GDP due to the size of the public sector and the growth of public services provided by the government. However, the agricultural sector witnessed a decline over the mentioned years due to challenges it faced, and despite the potential for economic development, the industrial sector's contribution to GDP is minor due to its limited scale. (Sundus Jasim Shuaib, 2016, p. 94.)

Table (3) represents the contribution percentages of sectors to GDP for the period (2005-2020).

Other Services	Industrial Sector	Agricultural Sector	Oil Sector	Years
8.85	1.32	6.88	57.83	2005
11.22	1.54	5.82	55.47	2006
12.83	1.63	4.92	53.18	2007



12.41	1.49	3.45	55.98	2008
17.86	2.4	4.38	40.12	2009
15.9	2.3	5	42.8	2010
13.1	1.83	4.15	54.41	2011
14.8	1.7	4.1	52.4	2012
16	2.7	4	46.5	2013
14.8	2.9	4.1	46.1	2014
22.48	1.81	3.92	29.83	2015
23.8	2.2	5.1	30.4	2016
23.10	2.3	4.22	31.2	2017
20.1	2.4	3.82	32.21	2018
21.43	2.1	5,4	33.2	2019
20.3	1.9	4,3	33.6	2020

Source: Compiled by the researcher based on data from the Central Bank of Iraq.

5-3 Contribution of the Public and Private Sectors

The public sector is one of the most important aspects of increasing Iraq's income imports, as it primarily relies, as observed in the previous section, on the oil sector, which significantly contributes to increasing the income of the public sector (Dr. Salem, 2014, p. 262). The public sector dominates the Iraqi economy, and there have been fluctuations in the extent of the private sector's contribution, formed by private capital, from 2005 to 2020. This is due to the fact that most private projects were nearly absent during the periods between 2005 and 2008, due to the political conditions the country faced during that period. This led to the flight of capital owners outside the country and instability resulted in the draining of funds abroad, clearly impacting the private sector's output, which

reached a contribution rate of 0.5% in 2008. After 2010, and with the stabilization of the country's situation, the contribution rate increased. In 2015, the private sector's contribution reached its highest levels at 34.7%, which decreased in 2019-2020 to 21.9%, due to the COVID-19 pandemic and the resulting global crisis (Ministry of Planning, 2019, p. 12).

It is evident that reliance on the public sector is characterized by control and a significant contribution to increasing the local production index. The increase in the private sector's share mainly represents construction and real estate investment, as the Iraqi private sector primarily seeks secure and profitable investment opportunities (Hussein Ali Abd, 2017, p. 45), as it avoids venturing into long-term, risky investments. Foreign investment has significantly decreased due to the absence of security and stability.

Table (4) Private Sector Contribution as a Percentage of GDP for the Years (2005-2020)

Percentage of Private Capital Formation	Percentage of Public Capital Formation	Private Capital Formation n	Public Capital Formation	Years
15.93	84.06	782498.1	4127152	2005
4.31	95.68	438885.1	9743477.1	2006
8.88	91.11	669364.6	6861039.9	2007
3.37	96.62	785436	22455103.1	2008
10.3	89.69	1387679.7	12083562.6	2009
7.92	92.07	2079290.5	24173486.3	2010
8.89	91.1	2511907.9	25723084.7	2011
12.75	87.24	4865507.5	33274363.5	2012
18.07	81.92	9950129.9	45086546.3	2013



24.97	75.02	13947787.4	41889615.5	2014
35.97	64.02	16803774.6	29904941.4	2015
27.04	72.95	17820335.2	48078428.5	2016
12.95	87.04	46708716	55837402.9	2017
4.31	95.68	13471242.3	65898763.7	2018
18.07	81.92	38139871	55036676.2	2019
7.92	92.07	26252776.8	28234992.6	2020

We note that private capital formation has gradually increased over time, but it has remained lower compared to public capital formation due to the dominance of individual and small companies in the private sector. On the other hand, public sector capital formation has maintained higher proportions throughout the aforementioned period. This indicates the significant role of the public sector and the leadership of the oil sector in Iraq's economy as a whole. The persistence of the public sector remains the cornerstone of the state.

It can also be said that the increase in total fixed capital formation for the public sector does not

necessarily represent genuine growth, but rather compensatory and reconstruction efforts for sectors that faced decline due to the prevailing conditions in Iraq. The Iraqi government has also failed to support and empower the private sector to play a leading role in development and economic management. The private sector in Iraq seeks profitable investment opportunities, and therefore, it tends to avoid ventures with long-term returns. Additionally, foreign investments have significantly declined due to the security situation the country faced, as well as the impact of the COVID-19 pandemic in the recent period from 2019 to 2020.

Table (5) represents government revenues and expenditures.

Total Revenues	Other Revenues	Tax Revenues	Oil Revenues	Years
40502890	491.9	495282	39480069	2005
49055545	1801.1	591229	46534310	2006
54599451	1787.3	1228.3	51701300	2007
80252182	3358.2	985.8	75358291	2008
55243526	3002.8	2050.5	48871708	2009
70178223	5080.5	1503.5	66819670	2010
108807392	8157.6	2408.2	98090214	2011
119817224	6179.9	2311.1	116597076	2012
113767395	5870.7	2518.7	110677542	2013
105386623	1960.7	2527	97072410	2014
66470252	12534.7	2623	51312621	2015



54409270	5611.2	4531	44267060	2016
77335955	59657	6298	65071929	2017
32158496	2637.6	5145.8	3.247690	2018
2328009.9	2724.6	5273.3	277884.9	2019
12237754	2093	5651	198774.3	2020

It is noteworthy that the proportion of general revenues witnessed a significant decrease in the year 2009, reaching the value of (55,243,526) million dinars, as shown in the above table, due to the decline in oil revenues to (75,358,291) Iraqi dinars.

As for the years 2010 to 2012, we observe a return of general revenues with an increase due to the rise in oil revenues during those years. Indeed, they constitute the largest proportions of the total revenues, while tax revenues and other revenues remained low as they represent a very small part of the general revenues. (Mohammed Shahab Ahmed, 2017, p. 113)

Despite the declines and fluctuations in general revenues, it can be noted that they started to rise in the year 2015 with a percentage increase of (19.77%), the highest rate during the mentioned period. This increase is attributed to the government's adoption of several measures to boost its revenues due to the sharp decrease in oil revenues. This included increasing tax revenues, customs duties, and other types of revenues.

In the year 2017, they reached 84.14 million dinars and then decreased in 2018 to around 6.7839 million dinars compared to the estimated 8,496 million dinars in the 2018 budget. The total public spending in 2018 amounted to about 3.8567 million dinars, compared to the estimated 3.9019 million dinars in the 2018 budget. Consequently, the financial deficit after grants reached about 6.727 million dinars, equivalent to 4.2% of the gross domestic product, compared to the estimated 3.523 million dinars in the 2018 budget, equivalent to 7.1% of the gross domestic product.

In the year 2019, the total general revenues amounted to about 3.7754 million dinars, compared to the estimated 9.8609 million dinars in the 2019 budget. The total public spending in 2019 was about 7.8812 million dinars, compared to the estimated 5.9255 million dinars in the 2019 budget. As a result, the

financial deficit after grants reached about 4.1058 million dinars, or about 4.3% of the gross domestic product, compared to 6.645 million dinars estimated in the 2019 budget, or about 1.2% of the gross domestic product.

Other Revenues:

Regarding the other revenues during the study period (2005-2020), they included transfer revenues, fees, the government's share of public sector profits, capital revenues, and others. These revenues constituted a small proportion of the overall federal budget revenues in Iraq compared to oil revenues. Their contribution ranged from (0.001 - 19.7) for the study period (2005-2020). It is notable that other revenues had a size of (527,539) million dinars, with a contribution rate of (13%) in 2005. Then, they gradually increased in the years following 2005, reaching (3,908,054) million dinars with a positive growth rate of (49.5%) and a contribution rate of (4.8%) in 2008.

In 2011, other revenues reached (8,933,585) million dinars with a positive growth rate of (3892%) and a contribution rate of (8.2%). This is a significantly high proportion compared to previous years. However, they started to decline until reaching their lowest level for the studied period, estimated at (212,997) million dinars, with a negative growth rate of (-65.4%) and a contribution rate of (0.1%) in a year. Then, they increased again to reach their peak in 2015, reaching (13,142,621) million dinars with a positive growth rate of (104.4%) and a contribution rate of (19.7%) due to the collapse of oil prices and the decrease in oil revenues. However, this increase in other revenues did not last long, as they recorded a rapid decrease in the subsequent years (2016, 2017, 2018, 2019, 2020) with a combined decline of (4,336,151) million dinars, a growth rate of -17.6%, and a contribution rate of 4% for the year 2020.

Table (5) provides a comparison between the public debt-to-GDP ratio for the years 2005-2020.

Budget Deficit Ratio	Annual Change Rate	Budget Deficit	Public Debt Ratio	Change Rate	Total Public Debt	Gross Domestic Product (GDP)	Years
19.21	Zero	2635767	151.85	-	2083221	1371901	2005



		7			64	54	
10.72	28.65	1880525 9	91.08	23.32	1597493 61	1753912 15	2006
13.97	15.95	2180422 8	69.36	32.23	1082680 52	1561005 79	2007
13.28	18.93	2593135 2	37.65	32.09	7352504 1	1953054 34	2008
2.02	88.31	3030193	46.77	4.70	7007064 1	1498207 47	2009
0.03	98.37	49298	39.97	3.52	7253979 4	1814825 72	2010
13.83	64539.8	3186609 2	27.74	11.87	6392671 2	2304635 29	2011
5.77	53.94	1467764 9	22.85	9.14	5808355 3	2542254 91	2012
1.96	135.66	5234532	19.80	8.93	5289438 2	2671753 21	2013
2.56	27.96	6698330	22.49	11.45	5895264 1	2621384 40	2014
2.03	43.34	3795445	43.55	38.28	8152001 1	1871932 42	2015
6.43	220.37	1215962 2	50.58	17.36	9567453 9	1891682 44	2016
0.83	114.55	1769736	54.51	21.09	1158506 58	2125270 47	2017
9.56	1286.82	2454311 8	33.63	25.43	8638844 1	2568470 62	2018
1.50	116.21	3977539	48.19	48.33	1281439 05	2659185 35	2019
6.48	204.98	1213065 3	96.03	40.27	1797443 52	1871697 98	2020

Source: Prepared by the researcher based on the Iraqi Central Bank report and data from the Iraqi Ministry of Planning for the years 2005-2020

Through the data in Table (9), it can be observed that the years (2005-2013) witnessed a decrease in the overall volume, while the general budget did not experience a deficit during this period but instead had a surplus. This was a result of Iraq's liberation from imposed restrictions and the lifting of the economic blockade that was in place before 2003. Economic stability was achieved, along with Iraq's commitment to repaying loan principal and accrued interest payments on time due to increased oil exports. Some countries also waived their debts, and the Paris Club Agreement played a significant role in reducing Iraq's external debt by 80%. The public debt reached 208,322,164 million dinars at constant prices, with its ratio to GDP at constant prices being 151.85% in 2005. The general budget for that year showed a surplus of 26,357,677 million dinars at constant prices, with its ratio to GDP at constant prices being 19.21%.

The public debt continued to decrease and the general budget maintained a surplus until 2010. However, by 2010, the public debt increased to 72,539,794 million dinars at a yearly growth rate of 3.52%. Simultaneously, the surplus in the general budget decreased to 49,298 million dinars, with a negative annual growth rate of 98.37%. This was due to the global crisis, the decline in oil revenues, and the impact of the war on terrorism.

The public debt saw negative annual growth rates in 2011, 2012, and 2013 (11.87%, 9.14%, and 8.93% respectively), while the general budget surplus had a substantial positive annual growth rate in 2011 (64,539.89). However, the surplus turned negative in 2012 and 2013 (-53.94% and -135.66% respectively) due to increased public spending, particularly on salaries, resulting in a deficit of 5,234,532 million dinars in 2013.

From 2014 to 2020, there was an increase in public debt and a rise in the general budget deficit due to



Iraq's deep economic recession since 2014. This was driven by plummeting oil prices, ongoing price fluctuations, security concerns, and the war on terrorism. The public debt reached 95,674,539 million dinars in 2016, with a negative annual growth rate of 25.43%, and its ratio to GDP at constant prices was 33.63%. The general budget showed a surplus of 24,543,118 million dinars in 2018, with a staggering positive annual growth rate of 1,286.82%, and its ratio to GDP at constant prices was 9.56%.

In 2019 and 2020, the public debt further increased to 128,143,905 million dinars and 179,744,352 million dinars respectively, with annual growth rates of 48.33% and 40.27%, and their ratios to GDP were 48.19% and 96.03% respectively. The general budget, however, experienced deficits of 3,977,539 million dinars and 12,130,653 million dinars, with negative annual growth rates of 116.21% and 204.98% respectively.

The trend of increasing public expenditure, often characterized by significant jumps in figures, doesn't necessarily indicate successful fiscal policy. Public spending is primarily determined by available revenues, and the role of fiscal policy is limited. The correlation coefficient between public expenditures and GDP was 945, while the correlation with general revenues was higher at 987, during the period from 2005 to 2020.

The continuous expansion of public expenditure and its ongoing increase in volume results in a change in its structure (i.e., the relative share of each type of expenditure in the total expenditure) due to the changing relative importance of each function in relation to other functions performed by the state.

In general, Iraq adopted a unified state budget system consisting of an operational budget that includes current expenditures (employee salaries, commodity and service supplies, grants, assistance, and social benefits), and an investment budget that covers capital expenditures at the level of ministries, non-ministerial entities, as well as provinces and the Kurdistan region.

Looking at the final accounts and the executed current and investment expenditures illustrated in Table (4), the following observations can be made:

1. Despite the clear upward trend in public expenditures, there is no clear corresponding trend in the change of current and investment expenditures (ascending or descending). Fluctuation is the predominant characteristic during the years 2005–2020 for both types of expenditures.

2. In most of the years under review, current expenditures constituted more than three times the investment expenditures. The latter did not exceed a ratio of 30% in any year, while current expenditures exceeded 80% of the total public expenditures in over half of the time series.

A strong positive correlation is observed between the fluctuations of expenditures, GDP, and general revenues, which serves as strong evidence that fiscal policy is not actively used for achieving economic stability or redistributing income. The government expenditure is primarily determined by the availability of funding, particularly oil revenues. When oil revenues increase, the influx of foreign currencies into the country leads to a growth in government deposits, strengthening the government's monetary position. This, in turn, leads to an increase in government spending.

During periods of expenditure pressure, such as the global financial crisis in 2009, the trade-off between current and investment spending typically leans toward sacrificing the investment side in favor of consumption. The latter is directly tied to salaries and wages and is often protected. Therefore, investment expenditures are often sacrificed, as they involve government programs that can be relinquished, and their impact on society is less direct and palpable compared to reductions in current expenditures affecting individuals. This situation is easier to manage during times of revenue growth and escalating expenses when both types of government expenditure (consumption and investment) are increased.

Iraq's clear inclination towards favoring the operational budget over the investment budget does not contribute to solving the country's unemployment problem. Unemployment is one of the most complex economic crises faced by policymakers, and its resolution cannot be achieved solely by a few thousand employment opportunities annually provided by the general budget. Instead, the solution, in our view, lies in rationalizing and increasing the productivity of expenditure to channel funds toward investment. This could be government or private investment, as long as the state supports and ensures its success. This would contribute to creating extensive job opportunities and effectively addressing the unemployment issue.

It's well known that increasing investment spending and consequently increasing capital accumulation contributes to raising economic growth rates in any country. However, this advantage cannot be achieved



in Iraq given the low level of public expenditure directed towards investment.

Section 6 / Conclusions and Recommendations

6-1 Conclusions

1. The concept of public expenditure focuses on the profitability and type of expenditures, aiming to enhance individual well-being and societal development. Effective utilization of resources by the state is necessary to make public expenditure productive. Achieving this requires clear objectives and enhancing financial transparency within the framework of the general budget.
2. Poor distribution of public expenditure during the fiscal year is a significant factor leading to gradual decreases in the productivity of public expenditure. Lower percentages of public expenditure mean higher productivity in the first quarter. Similarly, an inflated volume of public expenditure at the year-end leads to decreased productivity.
3. The emergence of stability and economic growth in the country, especially after the lifting of sanctions imposed on Iraq before 2003, resulted in the flow of Iraqi oil to global markets. The oil sector significantly impacts Iraq's economy, making oil a primary and vital source of government revenues. Thus, maximizing oil revenues for the balanced development of the Iraqi economy is crucial.
4. Economic sustainability differs from financial sustainability, as it focuses on economic variables.
5. Iraq heavily relies on oil revenues to finance its public expenditures. Fluctuations in crude oil prices directly affect oil revenues and, consequently, the size of public expenditures. This affects the sustainability of economic growth.
6. Standard results indicate that the optimal size of current public expenditure reached around 19.42% of the Gross Domestic Product (GDP) during the study period, which is lower than the average expenditure of approximately 26.88%. The observation that current public expenditure in most years exceeded the optimal size negatively impacts economic growth. While the Iraqi economy experiences significant increases in public expenditures, these increments are often not directed towards investment projects or economic sectors due to financial corruption prevalent in many government facilities.

6-2 Recommendations:

1. Urgent action is needed to achieve sustainable economic growth in Iraq due to its economic recession, halted economic and service projects, and deteriorating infrastructure.

2. Develop a modern and advanced approach for budget preparation that links expenditure with achieved objectives. This approach would shed light on achievements and evaluate the integrity of government units in fulfilling set goals.
3. Shift the focus from merely increasing public expenditure to optimizing, economizing, and rationalizing it. Attract foreign direct investment to avoid general price level hikes (inflation), escalating budget deficits, and accumulating external debt.
4. Work towards repairing and improving fiscal policy performance to create an investment-friendly environment that can attract more foreign direct investment, thus elevating economic activity.
5. Iraq needs to raise its economic growth rates to tackle unemployment and overcome the economic recession crisis.

REFERENCES

1. Mr. Abdul Mawla. Public Finance. Cairo: Arab Thought House, n.d.
2. Dr. Ibrahim Abdul Karim Al-Ghazi. Financial Legislation in the General Budget. Baghdad, 1970.
3. Mohamed Shahab Ahmed. Financial Rules between Discipline Requirements and Financial Realities in Iraq 2004-2016. *Al-Mustansiriya Journal of Arab International Studies*, Issue 62, 2017.
4. Moa'ad Mohammed. Methodology for Calculating the Fiscal Sustainability Indicator: Case Study of Some Arab Countries. Arab Monetary Fund, 2020.
5. Mahmoud Saleh Al-Attiyah. Causes of Public Expenditure Increase between Traditional and Modern Thought with Reference to Iraq. *Diyala Journal*, 2005.
6. Dr. Adel Falih Al-Ali. Public Finance and Tax Legislation. Amman, Jordan: Dar Al-Hamed for Publishing and Distribution, 2007.
7. Zeinab Jabbar Al-Daami. Productivity of Public Expenditure in Iraq and Temporal Variability during the Fiscal Year 2018. Master's thesis, University of Karbala, Iraq, 2018.
8. Mohammed Ali Al-Huwaini and Abu Jabil. Introduction to Economics. Publications of the Center for Economic Science Research, National Research Authority, Vol. 1, 1995.
9. Iktafaa Azab Zagheer. Relationship between General Expenditure, Gross Domestic Product, and Sectors for the Period (2004-2015). Iraqi Ministry of Planning, 2017.



10. Al-Ghalebi, Karim Salem Hussein, Kazem Nwars Atiyah. Causal Relationship between Public Expenditure and Economic Growth. *Al-Qadisiyah Journal of Administrative and Economic Sciences*, Vol. 19, No. 3, pp. 220-232, 2017.
11. Baqir Kargi Habib Al-Jubouri. Economic Effects of Delaying the Approval of the General Budget on the Iraqi Economy. *Al-Qadisiyah Journal of Administrative and Economic Sciences*, Vol. 17, No. 3, 2015.
12. Shakir Al-Wasti. *Financial Economics*. Baghdad, 1973.
13. Tarek Quduri. Contributions of Rationalizing Government Expenditure to Achieving Economic Development in Algeria (1990-2014). Ph.D. dissertation, University of Algiers, 2016.
14. Omar Mohamed Mahmoud Suleiman. *Public Debt Management: Transition from Sustainability to Economic Sustainability Concept*. Faculty of Commerce and Business Administration, Cairo, Egypt, 2014.
15. Marwa Fathi Al-Sayed Al-Baghdadi. *Sustainability Indicators and the Risks Threatening Them in Egypt*. University of Mansoura, Faculty of Law, Department of Economics and Finance, Egypt.
16. Khadija Al-Asir. *Public Finance Economics*. Cairo University, Faculty of Economics and Political Science, no publication year.
17. Aa'd Hammoud Al-Qaisi. *Public Finance and Tax Legislation*. Amman, Jordan: Dar Al-Thaqafah for Publishing and Distribution, 2007.
18. United Nations, *Our Common Future: Report of the World Commission on Environment and Development (Brundtland Report)*. 1987.
19. Salem Basheer Dheib and Saleh Abdul Salam Darras. Causal Relationship between Public Expenditure and Economic Growth in Libya. *Journal of Economic and Political Sciences*, No. 13, 2019.
20. Mohammed Sheikhi. *Quantitative Economic Methods*. Dar Al-Hamed for Publishing, Amman, 2012.
21. Hussein Ali Abd. "The Private Sector in Iraq: Reality, Obstacles, Reforms." *Al-Kufa College of Education Journal for Humanitarian Sciences*, Vol. 11, No. 20, 2017.
22. Sondos Jassim Shaaib. *Analytical Study of Reasons for Not Approving the General Budget in Iraq for the Year 2014*. *Al-Muthanna Journal of Administrative and Economic Sciences*, University of Al-Muthanna, Vol. 6, No. 1, 2016.
23. The Policy Development and Review Department. *Assessing Sustainability*. INTERNATIONAL MONETARY FUND, 2002.
24. Craig Burnside. *Assessing New Approaches to Fiscal Sustainability Analysis*. World Bank Latin America and Caribbean Departments report, 2004.
25. Jalidoun Saadoun, Hashim. (2013). *Global Financial Sustainability*. Retrieved from <http://www.aleqt.com> Accessed on 1/7/2023.