AMERICAN JOURNALS
Open Access, Peer Reviewed Journals
American Journal of Business Management, Economics and Banking
ISSN (E): 2832-8078 Volume 22, | March - 2024

ASSESS THE REALITY OF FISCAL SUSTAINABILITY BETWEEN THE REQUIREMENTS OF FINANCIAL DISCIPLINE AND THE FINANCIAL IMBALANCE IN IRAQ-ANALYTICAL STUDY FOR THE PERIOD 2010–2020

Asst. Prof. Dr. Ahmed. H. Al-Husayny
Al-Mustansiriyah University Administration and
Economics College Banking and Financial Sciences Department
dr.ahmad_hamdy@uomustansiriyah.edu.iq

A B S T R A C T

The major goal of the current study is to evaluate the financial sustainability of Iraq by looking at financial discipline guidelines on the one hand. However, to recognize and examine the root causes of the financial imbalance, it is common knowledge that nations like Iraq, which rely on a single resource to finance their economic operations, are developing financial sustainability policies and strategies by creating an agreement policy that will address both internal and external shocks. Increasing economic diversity through diversifying income sources, which promotes budgetary restraint and lowers budget deficit rates, enables organizations to better withstand shocks in the future. The study had two objectives, the first of which addressed the notion.

K E Y W O R D S

Fiscal Sustainability, financial discipline, financial imbalance, internal and external shocks, financial imbalance, deficits in public budgets.

Introduction

Financial sustainability is a broad area of economic theory, and scholars with a variety of philosophical philosophies and orientations have taken an interest in it, particularly in the final decade of the third millennium. The many dramatic events that took place during this period, including the decline in oil prices that started in 2015, the general lockdown caused by the coronavirus pandemic in 2020, and the crisis of the Ukrainian-Russian war, all had a direct impact on the worsening of public budget deficits, which in turn caused the financial imbalance to widen. This has prompted numerous nations to implement financial reform policies by enacting budgetary

Iraq is a recent country to adopt fiscal sustainability strategies because of its particular circumstances after the events of 2003 and the subsequent worsening of public debt and its benefits as a natural consequence of the war's devastation of this infrastructure. Not to mention the imbalance in the structure of public budgets dependent on oil rents as an almost sole source of financing for increased public expenditure due to the high proportion of government employment on the other hand, all of which has made public indebtedness increase year after year, posing a real threat to financial sustainability. Not to mention the stalemate of the Iraqi productive apparatus, which has exacerbated the imports. Therefore, Iraqi fiscal policymakers must consider a systematic strategy for financial sustainability that would reduce the financial burden of the State's general budget and gradually correct the fiscal imbalance.

- **The importance of research**: The importance of research is highlighted by the fact that the subject of financial sustainability is the focus of fiscal policy design and implementation and is intended to strengthen financial sustainability. On the one hand, a procedural program must be designed to apply the requirements of fiscal discipline to address the causes of deficits in public budgets. On the other hand, it presented a vision that would correct the financial imbalances caused by poor management of financial resources without establishing clear policies to correct the structural imbalance in the general budget structure.
- **Research Objective:** The research aims to assess the financial sustainability of Iraq for the period 2010–2020 through a realistic assessment of Iraq's financial sustainability by reviewing the most prominent rules of fiscal discipline and analyzing the most prominent cornerstones in the financial pathways to identify and diagnose the causes of the imbalance and propose effective solutions to it.
- **Research problem**: The research problem is to assess the ability of the Iraqi financial authority to achieve financial sustainability requirements based on the concept of fiscal discipline and to assess the ability of Iraq's fiscal policy to address financial imbalances.
- **Research hypothesis**: The research is based on a hypothesis (due to the righteousness of the Iraqi economy because it relies on an almost lonely resource to finance the public budget and economic activity, it is expected that fiscal sustainability will not be achieved and fiscal imbalances in the general budget structure will deepen).
- **Research Methodology**: The research methodology was based on the analytical descriptive method supported by data from several sources, which will assess Iraq's financial sustainability for the period 2010–2020, indicate whether the conditions for financial discipline have been met or not, analyze the structure of financial imbalances, and identify their causes.
- **Spatial and temporal dimensions**: The spatial dimension of Iraq's research is the time dimension. The time limit between 2010 and 2020 has been adopted, according to available data on financial sustainability indicators and financial statements in general.
- **Previous studies**: There are numerous studies and research that have attempted to demonstrate the nature of the relationship between public debt, public debt service, and financial sustainability, including:

• **Study of Adel Sobhy Abdelkader Al-Basha and Mekdad Ahmad Al-Naimi**: The researchers examined their tagged study (the impact of using financial sustainability to reduce the problems of general budgeting). In their studies, the researchers emphasized that the subject of financial sustainability occupies a wide area of interest for researchers because financial sustainability expresses the government's ability to implement its programs for various activities without undermining its future ability to spend. The study found recommendations, the most important of which was the need to raise awareness about the importance of fiscal sustainability, indicating its role in preparing the State's public budgets, and assess the extent to which the Government can continue to implement its economic policies without being exposed to deficits and fiscal deficits when paying by fiscal sustainability.

• **Hamdi Ahmed Ali Al-Hindawi study**: The researcher addressed in his tagged study the relationship between public debt and economic growth... (Is there a standard critical level of public debt?) In his study, the researcher analyzed the nature of the relationship between economic growth and public debt. Theoretical and applied economic literature confirms that there is a negative impact of public debt on economic growth that begins to emerge at a certain point when public debt reaches its critical level. The study concluded that how public debt affects economic growth is not necessarily linked to the size of the debt itself. Or relative to GDP, but depend on multiple factors within the economy that vary from country to country and vary depending on their critical level of public debt. The most important factors are the efficiency of economic institutions and policies, the structure of public debt, the way public loans are spent, and the level of democratic practice.

• **Hajir Adnan Zaki and Zainab Mohammed Rashid study**: The tagged study (Sustainable financial dimension of development approaches to indicators in Iraq's economy) "The most important economic indicators that can be relied upon in assessing economic sustainability, from which financial sustainability derives The study found important findings on the role of public debt and its positive effects if it is directed towards financing income-generating projects and the negative role of public debt if it is directed towards financing current consumer expenditure.

• **Study by Mayah Habib Al-Shammari and Ali Khalid Abdullah** (Analysis of Financial Sustainability Indicators in Iraq for the Period 2003–2017): The study explains that the development of the State from its classic concept of non-interference in economic activity, where the role of the State is limited to key functions (Security, Judiciary, and Defense), to the concept of an interventionist state by the Keynesian vision, which has expanded its scope of action to interfere in the issues of education, health, social security, basic projects, and infrastructure, As most countries embrace Keynesian thinking, the concept of financial sustainability is linked to the concept of an interventionist State by assessing the State's ability to carry out its functions under government intervention in economic activity. The study found that the Government's failure to perform those functions reflected the Government's fiscal unsustainability.

• **Study of Khadir Abbas Hussein Al-Waili and Zainab Hadi Nimah**: Tagged (Iraq's indebtedness and opportunities for financial sustainability), In their study, the two researchers emphasized that the dependence of the Iraqi economy on the oil supplier to form public revenues to finance the general budget will inevitably lead to a deficit in the general budget and that this deficit is financed by borrowing. The study found that financial sustainability indicators such as the debt ratio of GDP exceeded the security limits in recent years due to the decline in global oil prices, on the one hand. On the other hand, the ratio of the general budget deficit to GDP exceeded the allowable limits.

1-First Topic

Financial sustainability: concept, formation, and rules of financial discipline

1.1 Concept of financial sustainability and its emergence:

Financial sustainability has diversified through diversified economies and diversified government trends. Most economies may be exposed to economic shocks and financial crises. These economies are more concerned with financial sustainability. (Fiscal Sustainability) to "the ability of the State to service public debt in the medium and long term without creating financial crises or pressures on the structure of public finance" ((Kavanagh et al., 2017)).

Some financial literature indicates that fiscal sustainability is a situation where the Government is represented by its fiscal authority and has the potential to implement its government programs without affecting its future fiscal capacity or its fiscal solvency. (Al-Wassalah, Kamal Amin.,2016)

The International Monetary Fund (IMF) views financial sustainability as a state's ability to meet its current and future financial obligations without the need to reschedule public debt.

It is worth noting that the concept of fiscal sustainability differs from one economy to another and is based on the country's economic development and growth((Croce & Juan-Ramon, 2003)). For example, in developed countries, fiscal sustainability is seen as the ability of the economic system to achieve intergenerational justice ((Jaimovich & Panizza, 2006)), meaning that the concept of fiscal sustainability has gone beyond the concept of resilience to fiscal liabilities. In developed economies, an evolving concept of fiscal sustainability emerges based on the idea that the fiscal value of current-generation taxes equals the future value of the benefits they will receive.

The roots of the term "fiscal sustainability" date back to the mid-1990s, and the concept revolved around Governments' ability to continue to face long-term shocks and financial crises through harmonized fiscal policies that create a kind of alignment between public expenditures and revenues. This concept was active in the subsequent few years, specifically in 1997 when a report was issued. The Brundtland Report, published on behalf of our common future, was concerned with environmental sustainability, and the term "financial sustainability" shifted to the economic side (Al Hawi, Mohammed Ahmed., 2015).

The concept of financial sustainability is partly linked to the concept of fiscal deficit in the general budget. Financial sustainability has to do with the concepts of public debt and taxation, both of which affect financial sustainability. For example, Governments do not overstate tax rates in times of fiscal deficits. Because continued taxation is directly aimed at saving, it expands consumption and increases consumption rates on the one hand. On the other hand, the imbalance in financial sustainability is not related to the level and quantity of public debt. As long as public debt funds are invested and used in income-generating areas, there is no problem, especially since it does not affect the levels and rates of economic growth, especially if borrowed funds help in real additions to the national productive system and infrastructure development, thereby contributing to increased economic growth rates. In this case, the sustainability of public debt is desirable even if the ratio of public debt to GDP is as high as in developed countries.

2.1 Rules of financial discipline:

Before entering the rules of fiscal discipline, it must be pointed out that there is a relationship of some kind between the credibility of fiscal policy and its ability and efficiency to positively influence income levels, operations, and financial stability through the application of fiscal discipline rules. (The Government's ability is represented by its fiscal policy and instruments to implement and maintain fiscal operations in a streamlined manner that ensures long-term fiscal integrity and financial prosperity.) (Krejdl, 2006).

Fiscal discipline is concerned with designing appropriate economic and social systems with the task of protecting the financial system as a whole from the risks of shocks and financial crises and maintaining financial stability through the design of government programs with the task of reducing the fiscal deficit and achieving a fiscal surplus in the general budget. Governments can achieve fiscal discipline by following several conditions:

1. Controlling public expenditure in line with public revenues by designing programs to curb the fiscal deficit and trying to minimize it to the least in times of financial prosperity; not overextending public expenditure to exacerbate public debt; and not being able to assume financial responsibility to repay and service those debts.

2. Design fiscal-monetary policies responsive to economic and financial shocks in the medium term, capable of absorbing costs in a balanced manner without affecting basic spending to finance the public spending priorities of the government apparatus.

3. The root of the rules of fiscal discipline is to achieve economic stability by designing a fiscal policy responsive to all economic conditions and data. This is achieved by creating a kind of balance and harmonization between the requirements of fiscal sustainability and fiscal flexibility. This is what Japan worked on after the Second World War.

4: Work on designing financial programs and policies that will not burden future generations with current spending burdens by containing the role of the government and not overestimating the ratio of public debt to GDP to achieve current benefits whose financial burden is borne by the future generation.

The design of government fiscal programs based on the previous conditions will enable governments to apply fiscal discipline rules. Thus, they will be able to adapt fiscal policies to meet expected shocks. After this review of fiscal discipline conditions, fiscal discipline rules can be clarified as approved by the International Monetary Fund (Central Bank of Iraq, various annual bulletins):

1- **Budget Balance Rule**: By this rule, governments should design a policy aimed at reducing the fiscal deficit to acceptable levels. This is done through the implementation of programs that control spending operations, take into account the efficiency element of public expenditure, and try not to exceed the total deficit barrier. (3%) of GDP as approved by the Convention of Maastricht, and achieving this goal will serve the requirement of financial sustainability. (Financial Sustainability), the aim of which is to increase the proportion of the fiscal deficit, will eliminate the impact of public spending, or lower tax rates on this aggregate demand, on the one hand. On the other hand, exceeding the established deficit rate will create a disruptive environment for the work of the private sector, leading to the so-called impact of crowding (the Crowded Effect). The bottom line will be to restrict fiscal policy and limit its effectiveness in reaching the goal of financial and economic stability.

2- **Debt rule**: Under this rule, IMF experts believe that the public debt/GDP ratio should not exceed 60%, bearing in mind that this ratio is not very ideal and cannot be adopted anyway; this proportion is determined by several factors and variables, primarily the nature and rules of the country's tax systems. Depending on the size of the national income, inflation rates, and other factors, the rule aims to try to formulate policies that will adapt public debt in a way that society can afford and that will not adversely affect economic growth rates.

Spending base: According to this rule, governments must design conventional policies targeting overall expenditure and operational expenditure in particular as a proportion of GDP or as an absolute number in terms of value, bearing in mind that the design of such policies must be in a time frame ranging from (3-5) years, and those policies formulated by Governments aim to invest them as influential tools to reduce the public debt gap.

3- **Revenue base:** According to this rule, the financial authorities of the countries must determine the minimum and highest levels of expected public revenues. The aim is to reduce the potential fiscal burden of taxes. That goal is achieved through the design of fiscal programs aimed at improving access to actual fiscal revenues as a proportion of GDP.

4- **Golden Rule:** Under this rule, investment financing operations are made through borrowing. It should be noted that countries with natural resources face several challenges, such as the Dutch disease. Or lack of access to international capital markets, or it suffers from short-term fiscal policies due to the price fluctuations of depleted resources in global markets, such as those affecting global oil prices.

2- Second Topic

Iraq's financial imbalance... analytical insight

Iraq's fiscal policy has suffered many disruptions and shocks, resulting in a structural imbalance in the fiscal structure, beginning with the form and content of the general budget and its preparation plans, through the need to achieve the interests of the various economic sectors, and ending with the achievement of the final objectives of the budget, namely the coverage of public expenditure resulting from the provision of public services.

By analyzing certain general budget items during the duration of the study (2010–2020), Iraq's financial policy shows that it suffered from a financial imbalance, especially in 2014, as a result of the fact that some Iraqi governorates fell under the weight of ISIS's terrorist occupation on the one hand. On the other hand, public spending pressures, especially military expenditures, are generated to finance the hostilities. (39.2) $/barrel, which generated additional pressure on the general budget and subsequently deepened the fiscal deficit. The table shows the extent of the financial imbalance between general income and general expenditure.

Table (1) Total general income and expenditure, deficit and surplus in the general budget (2010-2020) ($1 billion)

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020*
Oil Revenues	53.044	86.562	93.218	92.902	81.624	58.051	37.199	54.682	64.300	78.11 7	89.185
Non-oil revenues	6.937	6.435	9.240	4.576	8.902	2.912	8.523	10.306	12 .069	9.857	11 .236
Total general revenues	59.981	92.997	102.458	97.478	90.526	60.963	45.722	64.988	76.369	87.974	100.421
Total general expenditure	59.943	67.314	90.171	102.167	94.437	69.591	61.824	63.437	86.798	11 0.923	153.488
Deficit/surplus	0.38	25.683	12 .287	(4.689)	(6.792)	(8.628)	(10.637)	1.551	(10.429)	(22.949)	(53.067)

- **Source:**

1: Ministry of Planning, Central Bureau of Statistics, Directorate of National Accounts

2: Ministry of Finance, General Budget Department, Different Years

The figures in parentheses represent the state of the fiscal deficit in the general budget.

(*): Preliminary statements not ratified by the House of Representatives as of the date of preparation of this study

From the observation of the figures in the previous table (1), it appears that Iraq relies in a significant proportion on oil revenues to cover public expenditures, and from the previous table, it appears that Iraq has achieved financial surpluses for the duration (2010–2013). This is due to the relative rise in crude oil sales and export prices, either in confined duration (2013–2016) or Iraq achieved a fiscal deficit in the general budget that reached its highest level in 2016, as the fiscal deficit in the general budget reached $10.637 billion. This indicates a financial imbalance in the inability of public revenues to cover public expenditure due to lower global oil prices and lower oil revenues of $37.199 billion in 2016.
The chart shows the imbalance between oil revenues and total public expenditure for the period 2010–2020.

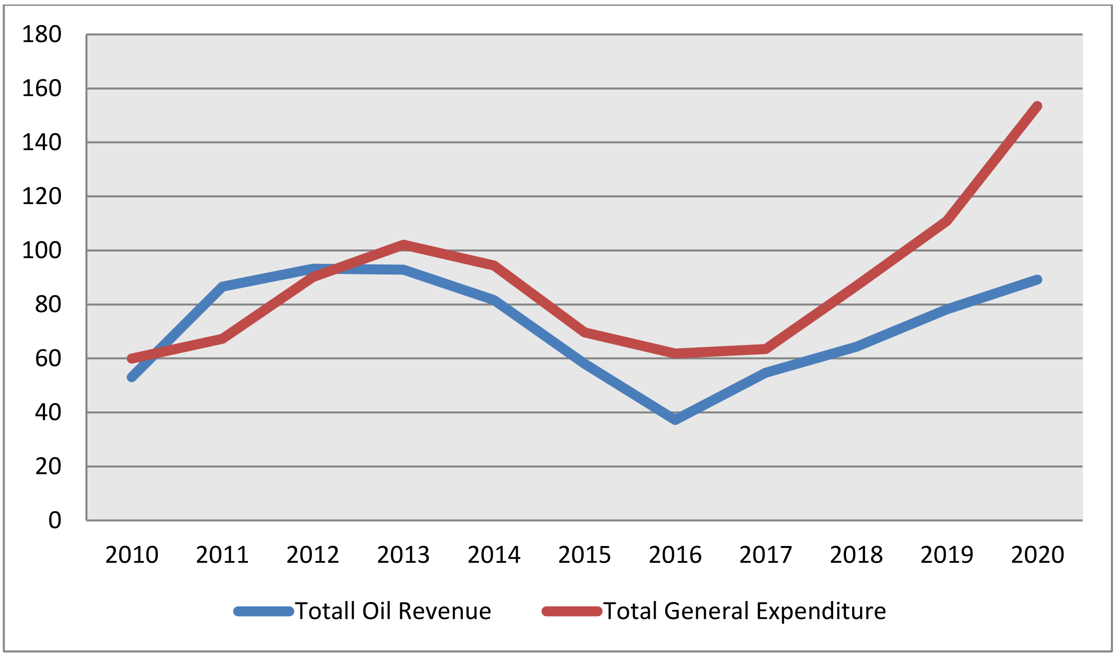

Figure (1) Total oil revenue and general expenditure for the duration (2010-2020) (USD billion)

Source: Researcher's preparation based on data in table (1)

The previous figure shows that the severity of the dependence of the Iraqi economy on a single financial resource to finance economic activities, the oil resource, has exacerbated the imbalance between public spending and oil revenues. Moreover, Iraq's fiscal policy is far removed from the application of the above five rules of fiscal discipline. About the balance rule, which emphasizes that the total deficit shall not exceed 3% of the gross national product (GNP), Iraq's fiscal deficit for the duration (2013–2020) exceeded that of the year 2017, in which Iraq achieved a financial surplus of 1.155 billion dollars as a result of the recovery of global oil prices and markets. The table shows the rates of development of the fiscal deficit for the years (2013–2020) as a proportion of GDP.

Table (2) The ratio of fiscal deficit to Iraq's GDP for the period 2013-2020 (%)

Years	2013	2014	2015	2016	2017	2018	2019	2020
GDP Billion Dollar	234.6	234.7	171.1	172.5	000	227.5	235.1	168.2
Financial deficit	4.698	6.792	8.628	10.637	000	10.429	22.949	53.067
Deficit/GDP	0.02	0.02	0.05	0.06	000	0.04	0.09	0.31

- Source: Ministry of Finance, General Budget Service. Quarterly estimates of GDP, miscellaneous years

- Table 1 Data

From Table 2, Iraq's move away from the budget balance rule is evident. This is due to unplanned agreed policies due to the severity of operational expenditure at the expense of investment expenditure as a result of unexamined government operating policies, on the one hand. On the other hand, dependence has sharpened on one resource to finance the spending activity, namely the oil supplier. Table 2 notes that the ratio of fiscal deficits to the gross domestic product is starting to exceed the established ratio of 3%. Since 2015, the percentage (5%) has reached its highest in 2020 (31%).

As for the second rule of fiscal discipline, which is the rule of public debt, Iraq has its position on both internal and external public debt. Iraq is subjected to terrorist aggression, deepening the fiscal imbalance in the general budget, especially since that imbalance was accompanied by the decline in global oil prices during the period. (2013-2016) Oil revenues decreased as an essential resource for financing diversified economic activities, as shown in the following figure:

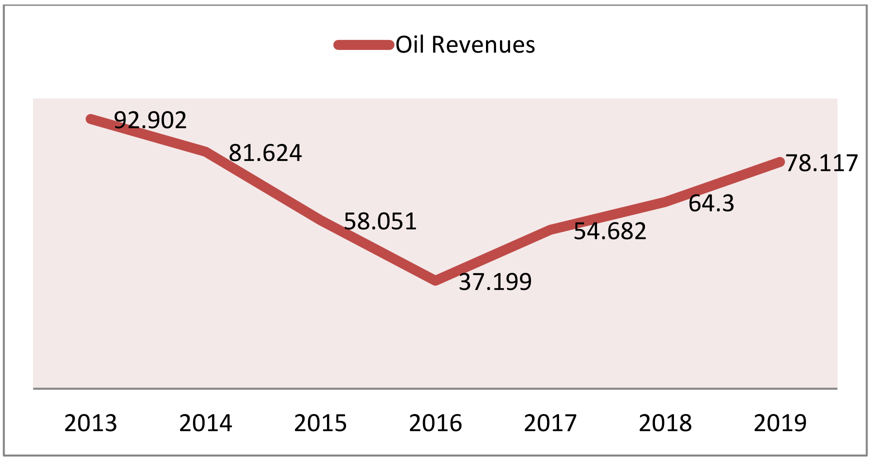

Figure 2 Oil revenues for the period (2013-2019) (USD billion)

Source: Researcher's work based on Table (1) data

According to the public debt base, the ratio of public debt to GDP should not exceed 60%. The following table shows the total public debt for the period 2010–2020 and its ratio to GDP.

Table (3) The ratio of public debt to gross domestic product for the duration (2010-2020) ($1 billion)

Years	GDP	Internal Dept.	External Dept.	Total Public Debt.	Public Debt Ratio/GDP (%)
2010	138.5	9.2	75.2	84.4	60.9
2011	185.7	10.5	62.1	72.6	39.08
2012	218.03	9.9	47.9	57.8	26.51
2013	234.6	7.2	35.2	42.4	18.07
2014	234.7	17.3	36.3	53.6	22.8
2015	171.1	25.5	40.8	66.3	38.7
2016	172.5	26.9	42.7	69.6	40.3
2017	190.6	27.2	44.9	72.1	37.8
2018	227.5	10.3	23.3	33.6	14.7
2019	235.1	9.9	45.8	55.7	23.6
2020	168.2	14.5	60.9	75.4	44.8

- **Source:**

1 Column (2), Central Bank of Iraq, Directorate General of Statistics and Research, Various annual bulletins

2 columns (3, 4, 5), based on Ministry of Finance Reports, Public Debt Service, Various Years Bulletins

3 column (6), by the researcher

From the previous table, it is clear that Iraq's fiscal policy has adjusted the public debt despite its high rates relative to GDP and the country's economic condition. This is evident from the fact that the ratio of GDP to GDP does not exceed 60% except in 2010.

As for the third rule of fiscal discipline, which is the expenditure rule, The financial imbalance between operational and investment expenditure has been a general feature of Iraq's general budgets since 2003. This is due to poor planning by successive governments in Iraq, especially in public employment policies, on the one hand. On the other hand, the weak investment vision regarding the allocation of funds and their orientation towards government investments, as well as high rates of financial and administrative corruption and many other factors, combined and rendered Iraq's investment expenditure useless in practice. The following table shows the imbalance between the two aspects of operational and investment expenditure:

Table (4) Iraq's operating and investment expenditures for the period (2010-2020) ($1 billion)

Years	Operational expenditure	Investment expenditure	Total public expenditure	The ratio of operating expenditure to total public expenditure (%)
2010	59724307	22913533	82637840	72.27
2011	67942559	31217098	99159657	68.52
2012	80241537	37936745	118178282	67.89
2013	84524661	56390472	140915133	59.98
2014	70668969	48572473	119241442	59.26
2015	79399051	40879102	120278153	66.01
2016	80935771	24908006	105843777	76.46
2017	81587343	32166651	113856321	71.72
2018	82700242	31156079	113856321	72.63
2019	84900628	34731142	119631770	70.96
2020	90215476	35183520	125398996	71.94

Source: Researcher's work based on Ministry of Finance data, General Budget Service, and various years' bulletins.

From the previous table, the extent of the financial imbalance between the operational and investment aspects of Iraq's general budget is that the operational aspect dominates most of the general budget, meaning that most of the public debt tends to pay the wages and compensation of employees at the expense of investment. This constitutes an additional burden on the State, particularly in the servicing of public debt and the payment of interest on the debt, which has continued to increase, posing a clear threat to financial sustainability.

Regarding rule IV of the Rules of Financial Discipline, which is the revenue base, Iraq appears to be far from achieving sustainability on the general revenue side since most of the revenues are oil-derived at the expense of other revenues. The figure below shows the extent of the imbalance in the general revenue structure:

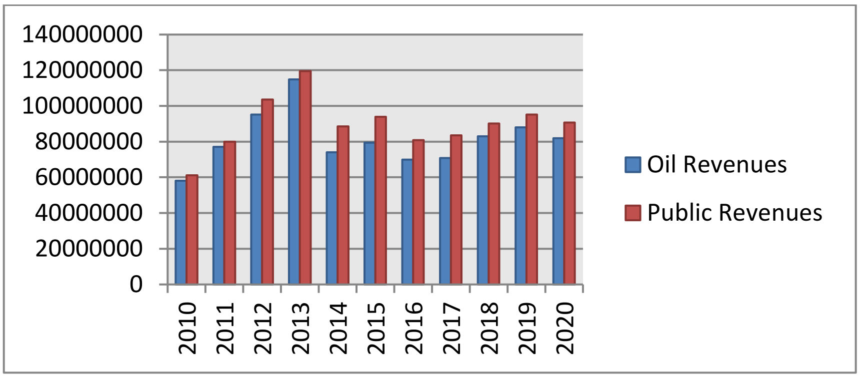

Figure (3) Oil revenues and general revenues for the duration (2010-2020) (USD billion)

Source: Researcher's preparation based on Ministry of Finance data, General Budget Service, Various Years' Bulletins

The fifth and final rule of fiscal discipline is the golden rule, which emphasizes that the financing of investments is through borrowing. Iraq is still unable to achieve that base because of the rationality of its economy, which is almost entirely dependent on the oil supplier, and therefore its economy is subject to the volatility of oil prices in international markets. On the other hand, Iraq's ability to access international capital markets and obtain adequate loans to finance investments is weak. As we have noted, most of the public debt is used to cover current expenditures rather than investment.

Conclusions:

1. From the previous review of the imbalances in the financial structure of the Iraqi economy, the extent of conformity with the research hypothesis (Because of Iraq's economic resilience because it relied on a nearly lonely resource to finance the general budget and economic activity, it is expected that financial sustainability will not be achieved and fiscal imbalances in the general budget structure will deepen) is evident when analyzing the structure of expenditure and general income.
2. Achieving financial sustainability is linked to the form of public spending and the diversification of public revenues. Which enables the State to pay its public debt and service that debt, In Iraq,

the financial authorities still face several challenges in deploying the burden of financial expenditure due to the dominance of operational expenditure over investment expenditure on the one hand. On the other hand, there is a lack of diversification of public revenues and reliance on an almost sole resource to finance public expenditure and diversified economic activities.

3. Deficits in Iraq's general budget continue to constitute relatively high ratios. This runs counter to the principle of fiscal discipline that deficits are not concentrated and that the State has to restructure and prioritize public expenditure so that it can cover its public debt, service, and future benefits.
4. The lack of economic and financial stability during the study period due to the war against ISIS and the volatility of global crude oil prices, not to mention the weakness in the design of fiscal-monetary policies responsive to shocks and other factors, led to the failure to meet the necessary conditions for the achievement of financial sustainability in Iraq as a result of the fiscal deficits achieved in the general budget during the study period.

Recommendations:

1. The need to design harmonious monetary and fiscal policies that are responsive to internal or external shocks to which Iraq's economy may be exposed, especially in times of decline in global crude oil prices, on the one hand, and the other, to address the fiscal deficit in the general budget, thereby reducing reliance on public debt and achieving the conditions for the application of fiscal discipline rules.
2. The need to diversify public revenue sources to create a state of diversity in the composition of GDP by channeling government support to non-oil sectors such as the industrial and agricultural sectors, and the need to design government programs to increase sovereign financial resources away from oil financial resources to achieve the principle of financial sustainability.
3. The need to establish a sovereign fund under the joint administration of the Ministries of Finance and Planning, which will prepare a strategy for financial sustainability, this is done by allocating the proportion of oil revenues that do not affect subsequent generations to create an environment suitable for economic diversification to achieve sovereign revenues of the State (non-oil) that serve as the main pillars for creating financial sustainability.

References

1: Kavanagh, S., Pisano, M., Tang, S. Y., McGrath, M. F., Linkhart, D., Hudson, M., & Colon, E. (2017). Financial Sustainability Index: A Self-Assessment Tool for Financial Sustainability. Lincoln Institute of Land Policy.

2: Al-Wassalah, Kamal Amin, Egypt's economy between the hammer and the van (public debt crises and the deficit in the public budget), Ibn Rushd al-Masri, Cairo, 2016, I. 1, p. 82.

3. Croce, M. E., & Juan-Ramon, M. V. H. (2003). Assessing fiscal sustainability: A cross-country comparison. International Monetary Fund.

4. Jaimovich, D., & Panizza, U. (2006). Public Debt around the World: A New Dataset of Central Government Debt", IDB Research Department Working Paper Nr. 561.

5: Al Hawi, Mohammed Ahmed, Analysis of Public Financial Sustainability in Yemen Under the Decline in Oil Production, Journal of Social Studies, University of Technological Sciences, Yemen, No. 44, 2015, p. 278.

6: Krejdl, A. (2006). Fiscal sustainability: definition, indicators and assessment of Czech public finance sustainability. Czech National Bank, Economic Research Department Na Příkopě.
7: Central Bank of Iraq, General Directorate of Statistics and Research, various annual bulletins
8: Ministry of Finance, Department of Public Debt, annual bulletins, and various reports
9: Ministry of Finance, General Budget Department, various annual bulletins
10: Ministry of Finance, General Budget Department Quarterly estimates of GDP, sporadic years.