

Analysis of the reality of fiscal space and the Composite Fiscal fragility index in Iraq for the period 2004-2024

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Abstract:

Fiscal space is a crucial factor in determining the speed and effectiveness of a government's response to a major shock, Fiscal space policy can mitigate the fragility of public finances in Iraq, in light of recent economic literature and the objective realities of the Iraqi economy, particularly the phenomenon of public fiscal fragility characterized by excessive reliance on oil revenues, revenue volatility, and a lack of diversification in funding sources, The aim of this study is to identify the potential of available fiscal space that can be utilized to enhance sustainability and address fragility in Iraq ,The research problem can be summarized as understanding the impact of fiscal space on public finance fragility?

The research confirmed the hypothesis that there is a direct relationship between fiscal space and fiscal fragility, making fiscal space in Iraq "temporary" rather than "structural." This exacerbates the fragility of public finances, especially when oil revenues decline ,The research recommends implementing well-considered spending and tax reforms that

are fair, economically efficient, and within the fiscal capacity of taxpayers. This would contribute to increasing and sustaining fiscal space , The research also recommends prioritizing public spending reform and directing it towards investment before increasing taxes, as tax increases are only effective during periods of fiscal stability, which Iraq has not experienced, This leads to direct social and economic instability.

Keywords: Fiscal space, Fiscal fragility, Iraqi economy, fiscal reform

JEL Classification: E5 , E6 , H71 .

1. Introduction

Fiscal space is a crucial tool for assessing a state's ability to implement fiscal policies without negatively impacting macroeconomic stability, particularly in rentier and fragile economies like Iraq's. The fragility of Iraq's public finances is manifested in a lack of diversification in revenue sources, near-total reliance on oil revenues, and high levels of deficits and public debt, This limits the state's capacity to respond effectively to economic shocks or implement sustainable development policies.

The problem lies in the structural vulnerability of Iraq's public finances to external and internal shocks, especially fluctuations in oil prices and the resulting decline in public revenues. This creates a state of persistent fragility that threatens financial and economic stability, The problem is reflected in the following questions: To what extent does fiscal space affect the fragility of Iraq's public

finances? It is assumed that building a fiscal space policy based on sound fiscal principles contributes significantly to reducing the levels of public finance fragility in Iraq. Efficiently managed fiscal space acts as a strategic buffer, preventing revenue crises from impacting essential government expenditures and obligations, thus enhancing long-term financial stability. This research aims to analyze the role of fiscal space as a strategic tool for addressing the vulnerabilities in the Iraqi financial system. It examines the actual size of available fiscal space and the factors influencing its expansion or contraction, such as the efficiency of public spending, tax reform, public debt control, and sound investment planning. The research also seeks to offer practical approaches to expanding fiscal space, enabling the government to have greater flexibility in financing development and reducing reliance on volatile oil revenues.

The research focuses on the quantitative and qualitative analysis of fiscal space and financial fragility indicators in Iraq and provides recommendations to Iraqi policymakers to strengthen the resilience of public finances to shocks and achieve a sustainable balance between expenditures and revenues.

2. Fiscal Space

2.1. The concept Fiscal Space

Since the global financial crisis and the COVID-19 health crisis, fiscal space has become a central issue in economics,

Scarcity of resources and high debt have limited countries' ability to respond effectively to economic shocks and finance key sectors such as development and social protection (Dao, A. et al, 2025).

"Fiscal space is defined as the government's capacity to finance its public expenditure without compromising its ability to service its current or future debt obligations. It represents the upper limit of the public debt level that the government can reach without jeopardizing its creditworthiness or risking its loss", (Pater S.Heller, 2005). Park (2012) defined fiscal space as the ability to generate revenue, i.e., the "difference between the current level of tax revenue for the state and the maximum tax revenue that can be collected (the peak of the Laffer curve)" (Park, S.G.2012) , The concept of fiscal space is also defined as the creation of additional resources for public spending by governments in the medium and long term without compromising budget sustainability and financial stability, (Heller, P.S. 2007).

The concept of "fiscal space," which also includes the meaning of "gap" in its literal sense, indicates that although countries are able to generate revenue or mobilize additional resources to provide services, there is a gap that must be taken into account in this area. Thus, the additional spending capacity (resources) that will emerge from assessing these gaps represents the concept of fiscal

space, The main reason for creating fiscal space is to bridge the funding gap resulting from increased government spending, through the additional resources that this space provides ,(Karaca, C. 2012).

Countries burdened with high debt also have limited options as a result of shocks, development projects, or fiscal policies that negatively affect economic investment. These countries often resort to increasing borrowing, which increases their financial fragility,(Presbitero, A.F., 2012).

2.2.the importance of fiscal space:

The lack of sufficient fiscal space in many countries, especially developing countries, leads to significant financial burdens. If this fiscal space cannot be provided, countries will resort to financing their development by borrowing at higher amounts and interest rates, Therefore, fiscal space is essential to provide the necessary funding for long-term recurring expenditures that countries are obligated to pay (such as spending on infrastructure, building hospitals and schools, etc.), Thus, if fiscal space is not provided to secure funding for expenditures in the coming years, these essential expenditures may be disrupted. The importance can be illustrated as follows, ,(Heller, P.S. 2005):

- Fiscal space allows governments to intervene during economic and financial crises by adopting expansionary fiscal policies without

compromising fiscal sustainability, thereby supporting aggregate demand and protecting vulnerable groups in society.

- Fiscal space is linked to economic reforms, such as improving the tax system, rationalizing public spending, and increasing the efficiency of public debt management. This enhances the effectiveness of fiscal policy and reduces economic vulnerability.
- It ensures the continuity of government programs to finance future expenditures related to government projects, such as the operating and maintenance costs of hospitals, schools, and infrastructure, as well as financing current expenditures.
- Fiscal space requires governments to adopt a medium-term spending framework, which helps prioritize and avoid arbitrary or short-term fiscal decisions.
- Fiscal space helps governments choose between different areas of spending, preventing the concentration of resources in one sector at the expense of others and reducing crowding out of government spending to achieve balance across economic sectors.
- Fiscal space is used to finance productive and investment projects, contributing to higher economic growth rates and increased public revenues in the future, This gives the government the flexibility to deal with

unforeseen challenges, such as economic crises, disasters, or changes in public revenues.

- Fiscal space helps manage aid and external flows in a way that ensures they do not become future obligations that burden the public budget, thus improving the management of external resources.

2.3.Fiscal space indicators

Aizenman and Jinjark (2010) calculated fiscal space as the number of years of tax revenue needed to pay off a country's debt. They measured the outstanding public debt relative to the effective tax base of 75 countries during the periods 2000-2006 and 2009-2010, and concluded that countries that had greater effective fiscal space before the global crisis were more able to provide fiscal incentives during the period 2009-2010 (Kasal, S. & Ö. Özpençe , 2020).

Fiscal space represents the margin of maneuver that allows a state to finance its priorities without risking excessive deterioration in its public finances. Fiscal space increases as governments are able to increase revenues, reduce waste, lower debt service burdens, obtain concessional financing, or readjust and rationalize government spending. Conversely, fiscal space shrinks when debt obligations rise, revenues fall, or borrowing conditions deteriorate. Therefore, a close relationship can be shown between fiscal space and budgetary constraints, as follows, (Abubakarr, B. 2026):

The budget constraint can be expressed as :

$$FS = R - (DS + W + O)$$

Where :

FS = fiscal space

R = total revenue

DS = debt service

W = wages and salaries

O = other mandatory expenditures

An increase in debt service mechanically reduces fiscal space

$$\partial FS / \partial DS < 0$$

High debt servicing reduces the resources available for development spending. According to the World Bank (2023), public debt servicing currently consumes more than 20% of government revenues in more than a third of low-income countries. Fiscal space constraints reflect the limited fiscal space available due to high levels of public debt, which puts the country at risk of losing access to markets. When a temporary budget deficit occurs and sufficient fiscal space is not available, the country is forced to borrow and take on debt. Fiscal space can be measured through multiple monetary and financial indicators, as follows, (Fabiano .B. and Emilio. P. 2013):

- a. Tax revenue-to-GDP ratio indicator.
- b. Oil revenue-to-GDP ratio indicator.
- c. Savings rate-to-GDP ratio indicator.
- d. Foreign reserves-to-GDP ratio indicator.
- e. Budget balance-to-GDP ratio indicator.

Fiscal space analysis is used to detect fiscal discipline and ensure the credibility

and transparency of financial information.

3. Fiscal Fragility

3.1. The Concept of Fiscal Fragility

Fiscal fragility refers to a state of structural weakness and inflexibility that renders the financial system unable to absorb severe shocks or adapt to fundamental changes in the economic environment. This fragility manifests itself in the inability of a state or institution to adjust its financial policies to cope with sudden fluctuations, whether, (Morten.R, et al, 2012):

- Market fluctuations: such as the collapse of commodity prices (like oil).
- Policy changes: such as sharp adjustments in exchange rates or interest rates.
- Emergency crises: such as global financial crises or pandemics.

3.2. Causes of Financial Fragility

Institutions often fall into the trap of fragility as a result of the convergence of three main factors:

- Weak financial governance: The absence of strategic planning and poor financial management of available resources, represented by the lack of efficiency in collecting revenues and the accumulation of debts, as well as the spread of financial and administrative corruption and the misallocation and distribution of government spending in ineffective or unproductive projects and sectors,

leads to the loss and waste of public money instead of its optimal exploitation (Nawras Al-Sharifi, 2021).

- Debt dependence: Unplanned expansion in borrowing raises debt servicing costs and restricts the ability to spend on development, thus increasing the financial burden and reducing the state's ability to meet its financial obligations, especially if the spending is unproductive, This will enhance the fragility of public finances, as debt and its high interest rates lead to a vicious cycle in which the government is forced to borrow again to meet its obligations (Nicola. G. et al , 2015) .
- Rentierism and the decline of non-oil revenues: Excessive reliance on limited and unstable sources of income for collecting public revenues makes financial stability hostage to circumstances beyond control and makes the economy more fragile. The fragility of public finances increases with the degree of dependence on oil revenues , (Douglas .D. & Philip .D, 1993).

3.3. Methods for Addressing Fiscal Vulnerability and Creating Fiscal Space

Governments can address fiscal vulnerability and create fiscal space in various ways to generate additional revenue and ensure the provision of

public services without compromising fiscal sustainability, as follows:

• Tax Reform

Expanding the tax base, improving the efficiency of tax collection and administration, streamlining government employment policies and social security systems, and developing effective management of public spending are effective methods that can be applied to achieve balance and reduce deficits. These reforms contribute to addressing fiscal vulnerability and providing additional fiscal space to finance development and productive investments. Governments have two options for increasing budget revenues and obtaining additional income , (World Bank, 2007) :

Option 1: Imposing additional taxes and raising existing tax rates is a good option for maintaining external borrowing at a certain level and achieving debt sustainability, However, it should be noted that increasing the tax burden could harm private investment and lead to capital flight.

Option 2: Enhancing the effectiveness of the existing tax system. The effectiveness of tax administrations plays a crucial role, particularly in the selection and quality of revenue-generating measures, In the short term, it is essential to develop an effective management system ,An effective tax administration must be capable of educating taxpayers, collecting taxes fairly and accurately, possessing an organizational structure

with high levels of knowledge and skills in information technology, and conducting regular and periodic audits.

Instead of a complex tax structure that includes numerous exemptions, exceptions, and deductions, a simple tax structure free of legal loopholes can increase budget resources and create additional fiscal space for governments. The significant abuses, inefficiencies, and taxpayer erosion caused by the current tax system can only be eliminated through a simpler tax system, Furthermore, high taxes on wages lead to increased informal employment and unemployment ,(Karaca, C., 2012).

Because tax revenues constitute the largest share of total public budget revenues, countries must adopt a more sensitive approach to tax policies to reduce tax evasion and address fiscal fragility, Transactions in the informal economy related to taxes are much higher in developing countries, where the informal economy represents 37% of GDP, while this percentage is only 15% in OECD countries ,(Gordon ve Li, 2009).

• Reforming Public Spending

Imposing restrictions on existing support programs, such as defense and internal security expenditures, foreign visits and embassy expenditures, and grant expenditures for external support, and rationalizing the quality and number of inefficient public employees. Policies that reduce corruption and improve governance are also important policies

for addressing fiscal fragility and providing additional fiscal space, (Heller, S. 2005). Policies such as revenue-generating reform programs or prioritizing spending can be an effective means of increasing public investment, particularly in countries with high public debt-to-GDP ratios,(Akitoby, 2007).

• **Productive Borrowing**

In countries with a lack of savings, securing savings from external sources is an effective policy option to create additional fiscal space to promote economic growth and meet the requirements of development and its sustainability, Therefore, the cost of borrowing should be assessed taking into account the return on spending that is covered by this cost, which the state is forced to bear, whether domestic or foreign, and entails an obligation to repay, Therefore, the question of whether the return on spending covers the cost of borrowing becomes crucial to justifying borrowing (Heller, 2005).

• **Public-Private Partnerships**

Since most developing countries suffer from persistent fiscal deficits due to increased financial obligations, particularly high operating expenses at the expense of investment spending necessary for economic growth, they resort to partnership models, especially in the services sector, to increase fiscal space, These partnerships allow for investment by enabling domestic and foreign capital, thus reducing pressure on and reliance on public budget resources.

Such partnerships enable governments to(Akitoby, 2007):

- Implement projects without directly burdening the budget
- Transfer some risks to the private sector
- Maintain fiscal sustainability

The failures encountered in public-private partnerships are largely attributed to the flexible legal frameworks established by countries, the lack of necessary analysis to assess infrastructure needs, and inaccurate planning regarding the state's capacity to identify and utilize its existing resources. This hinders optimal resource utilization. Therefore, policies aimed at the effective and efficient use of resources can provide practical guidance on when and how infrastructure needs should be addressed within a sustainable fiscal framework, and on mobilizing public and private sector resources for infrastructure spending to make it more productive. Prioritizing projects with high rates of economic and social return.

• **Foreign Direct Investment**

To create fiscal space in developing countries, they must attract foreign direct investment, which increases production and employment, This is the optimal approach in a country whose environment is characterized by resource scarcity, low productivity, high investment costs due to external debt, and high risks, Foreign investment is essential to contribute to capital accumulation and productive capacity in

the country, Since it is difficult for governments, especially in poor countries, to finance effective investments and productive infrastructure investments from their own resources or through external borrowing due to their low credit rating, some developing countries, in an effort to solve this problem, seek to alleviate the burden on the public budget by encouraging foreign direct investment. Consequently, inefficient government spending on capital and infrastructure investments is eliminated through the efficient spending of foreign investments using their own resources, thus allowing for more rational spending in government budgets (Karaca, 2012).

• Private Sector

Privatization is considered a political tool in developed countries, where half the economy is governed by the rules of the free market, This is because it reduces the state's role in economic life and increases resources by leveraging the dynamics of private sector milk production, Private sector supervisors in these companies may be more efficient than public companies in generating profit, The objectives of private sector investment can be summarized as follows:

developing the capital market, increasing access to capital for the general public, reducing the burden on the public sector and central bank, boosting trading revenue, generating budget revenue, reducing inflation, and mitigating general imbalances in the

public sector, Although the reasons for private sector investment differ between developed and developing countries, it clearly contributes to fragility and creates financial instability in countries through (Karaca , 2012):

- Preventing the waste of resources in the shrinking public sector milk production.
- Ensuring the rational use of resources diverted to private sector milk production, thus increasing production and national income.
- increasing productivity by reducing deficits. Privacy can only enable financial savings by generating sales revenue, freeing economic activities from debt, and collecting taxes on increased production and consumption through efficient production.

4. Analysis and Data

In rentier states like Iraq, non-oil revenues constitute a significant portion of public revenues, as is the case in many other countries, A decline in these revenues exposes public finances to the risk of funding shortfalls, forcing them to resort to borrowing. In developing countries, a decline in these revenues reinforces their dependence on oil revenues and makes them more vulnerable to fluctuations in global oil prices, This weakens fiscal policy and makes it difficult for them to formulate strategic policies due to their inability to control necessary expenditures, This is one manifestation of public finance

fragility, Therefore, excessive reliance on oil revenues as the primary source of funding for the general budget makes it highly susceptible to financial instability. The features of this situation are illustrated by the following points (Moritz Schularick & Alan Taylor , 2012):

- Exposure to external shocks and fiscal imbalances: Iraq's public finances are subject to fluctuations in global oil prices, variables beyond local control, These fluctuations are driven by global demand forces, geopolitical tensions, and international policies, This dependence makes the budget vulnerable to sudden changes. As soon as prices fall, public revenues shrink sharply, leading to a widening fiscal deficit and difficulty in securing the necessary funding for essential expenditures, thus increasing the fragility of Iraq's public finances.
- Accumulation of structural crises and failures of fiscal reform: The Iraqi economy has witnessed the accumulation of the effects of multiple crises, beginning with the decline in oil prices and the fight against terrorist organizations (ISIS), repeatedly impacted by the COVID-19 pandemic, and culminating in the recent popular protests, This succession of crises is accompanied by weaknesses in the adopted economic policies, the absence of fundamental reforms, and the inability to address administrative and

financial corruption. These factors have created fragility, resulting in economic instability, a decline in the private sector's role in creating productive job opportunities, and a decrease in the efficiency of public services provided to citizens (Tito. C. & Harun .O, 2006).

- The decline in non-oil revenues contributes to a deepening fiscal deficit, as it weakens the government's ability to finance its public expenditures without increasing reliance on oil revenues, This decline also negatively impacts the implementation of development and service projects, leading to a slowdown in economic growth and exacerbating social pressures.
 - The weakness of non-oil revenues in Iraq represents one of the main challenges threatening financial stability, necessitating the adoption of comprehensive reform policies, These policies should include developing the tax system, strengthening anti-corruption efforts, diversifying the economic base, and improving infrastructure, Such measures would enhance the resilience of public finances and reduce over-reliance on oil revenues (Hyman Minsky , 1992).
- The data sets available for the period from 2004 to 2024 from the Iraqi Ministry of Planning and the Central Bank of Iraq were used in this research. The factors of the ratio of public revenues to public expenditures, the productivity

of public expenditure, the tax gap, the ratio of foreign reserves to output, and the ratio of total deposits to output are considered as variables of the fiscal space. As for the Financial Fragility Index (a composite index) consisting of

spending to public expenditure, and the ratio of consumption spending to public expenditure) are among the most important factors that were taken into consideration. Table 1 provides a brief overview of these factors , Most modern international studies rely on composite indicators. Financial or economic fragility is a complex economic phenomenon that is difficult to measure with a single variable. It is not a straightforward indicator in itself but depends on many sub-indicators. Calculating a composite index for financial fragility simplifies complex economic phenomena, provides a clear overall picture of the state of the Note that x represents the current value, X min represents the minimum value, and X max represents the maximum value.

Secondly : After standardizing the sub-indicators, we calculated the simple average according to the following formula.

several sub-indices, namely (the ratio of public debt to GDP, the ratio of public expenditures to public revenues, the ratio of tax revenues to public revenues, the ratio of oil revenues to public revenues, the ratio of investment

economy and finance, supports economic decision-making and policies, and reveals the causes of fragility collectively rather than studying them individually. For example, when the fragility index rises, this indicates an increase in financial risks, even if some variables improve individually, and vice versa. We calculated this index according to the following formula(Nardo,M., et al . 2008) :

Firstly : min-max normalization

Because the indicators vary in terms of units and sizes, we used data normalization according to the following formula.

$$Z = \frac{X - X_{min}}{X_{max} - X_{min}}$$

$$FFI = \frac{Z_1 + Z_2 + Z_3 + \dots + Z_n}{n}$$

Table (1) The Relationship between Fiscal space Indicators and Fiscal Fragility in the Iraqi Economy (2004-2024)

	Fiscal Space indicators	
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Year	Total deposits / GDP (%Td)	Public Expenditure Productivity (Go)	Foreign reserves / GDP (%Fr)	Public revenues / Public expenditures (%Rg)	Tax Gap Index (GT)	Fiscal Fragility
2004	16.19	0	18.99	102.69	60.03	0.84
2005	14.65	-2	24.27	153.56	35.19	0.57
2006	17.71	1	27.37	126.41	39.98	0.62
2007	23.50	7	34.43	139.89	33.77	0.51
2008	21.99	1	37.55	135.10	37.20	0.57
2009	29.53	1	39.97	105.03	37.68	0.47
2010	29.59	1	36.57	108.03	38.76	0.52
2011	25.84	3	32.72	143.59	31.22	0.56
2012	24.39	1	31.98	132.19	34.51	0.51
2013	25.17	1	32.93	106.45	38.01	0.43
2014	27.81	-1	28.90	126.13	30.67	0.69
2015	33.05	1	32.58	94.42	35.13	0.35
2016	31.69	0	26.97	81.13	32.10	0.36
2017	30.25	5	26.12	102.45	31.21	0.31
2018	28.59	3	28.27	131.77	27.96	0.44
2019	29.73	0	28.94	96.28	39.00	0.52
2020	39.38	1	36.30	83.07	33.09	0.69

2021	31.60	1	30.43	106.06	32.33	0.56
2022	30.98	3	33.62	138.11	27.13	0.65
2023	37.73	-1	41.06	95.26	38.59	0.58
2024	33.97	0	35.86	93.52	39.76	0.56

Source: The table is the work of the researcher based on data issued by the Central Bank of Iraq, the Iraqi Ministry of Planning, and the Iraqi Ministry of Finance.

4.1. Analysis of the reality of fiscal space in Iraq

4.1.1. Ratio of Public Revenues to Public expenditures :

This ratio indicates the extent to which a state can cover its public expenditures through its revenues and is considered an important indicator in analyzing the state of its fiscal position and space , Data shows that this ratio reached 102.6% in 2004, then rose significantly to 153% in 2005, indicating a clear fiscal surplus. This surplus was likely due to: High global oil prices and increased oil exports. Since oil revenues represent the primary source of public revenue in Iraq, the Iraqi economy was exposed to global fluctuations throughout this period as a result of this increasing dependence ,The ratio then began to gradually decline until it reached 104% in 2010, indicating a decrease in the fiscal surplus due to: Expansion of public expenditures and increased operational and investment spending, in addition to the impact of oil price volatility on

revenues , It is also observed that the index has fluctuated in subsequent years, reflecting the financial instability plaguing the Iraqi economy due to its heavy reliance on the oil sector, This makes public finances highly vulnerable to changes in global oil prices and political and economic conditions, meaning that Iraq's fiscal space is contingent upon the state and volatility of oil revenues. The ratio reached its lowest point during the study period in 2016, at 81.13%, indicating a clear fiscal deficit. This can be attributed to the significant decline in global oil prices following the 2014 crisis, as well as increased military and security expenditures related to the war against ISIS, and the resulting increased financial pressure on the general budget , In 2023 and 2024, the ratio reached 95.2% and 93.5%, respectively, indicating a persistent gap between public revenues and expenditures, despite a relative improvement in oil revenues. This can be attributed to the following: the lack of a diversified and sustainable tax revenue base is a

clear sign of structural fiscal discipline , Also reliance on a depletable resource (oil) makes the budget highly volatile and fragile with fluctuations in oil prices This exposes future generations to a severe financing crisis when oil resources are depleted or lose their relative value, without a robust tax system to finance public services

and investments ,Continued expansion of government spending; increased operational expenses, particularly salaries and subsidies; and weak diversification of non-oil revenue sources , These indicators suggest that public finances in Iraq are characterized by fragility, limited fiscal space.

RG



Figure (1) shows the evolution of Public Revenues to Public expenditures for the period 2004-2024.

4.1.2. Public Expenditure Productivity:

We note from the table that public expenditure productivity is weak in most years, and negative in specific years (2005, 2016, 2019) , This indicator measures the economic and social return per unit of government expenditures , Weak productivity means that government expenditures does not achieve the desired results with the required efficiency (for example, large spending on education and health without tangible improvement in their outcomes, large expenditures on infrastructure but unsustainable) , Negative

productivity, on the other hand, is an economic disaster, meaning that government expenditures destroys economic value rather than creating it. It is often associated with widespread corruption, gross waste, or spending on ineffective or harmful projects, as is evident in the Iraqi economic reality.

This weak or negative productivity means the leakage and waste of financial resources (mostly oil) without achieving fiscal policy objectives or real development. Current generations receive poor services, while future generations inherit a weak economy and depleted resources.



Figure (2) shows the evolution of public expenditure allocation for the period 2004-2024.

4.1.3. Tax Gap Index:

The extremely high tax gap , which tax represents the difference between the tax revenues that should theoretically be collected (based on laws and economic activity) and the actual tax revenues collected. This extreme increase is evidence of:

- Widespread tax evasion.
- Structural weaknesses in the administration of the tax system

(complex laws, corruption, weak collection capacity).

- Informal economy.

The large tax gap deprives the public treasury of essential revenues necessary for sustainability. This increases dependence on oil, exacerbates inequality, and weakens the state's ability to provide services and invest in the future, burdening future generations.

GT



Figure (3) shows the evolution of Tax Gap Index for the period 2004-2024.

4.1.4 Foreign reserves / GDP :

The ratio of reserves to GDP represents a key safety net for the Iraqi economy. A high ratio reflects an expanded fiscal space and the state's ability to withstand external shocks, while a low ratio indicates increased financial risks. This ratio was around 19% in 2004 and rose to 40% in 2009 due to the surge in global oil prices and the restructuring of the financial

system, which provided the state with a comfortable fiscal space. The ratio then fluctuated until it reached 36% in 2024. This demonstrates that, despite the flexibility of the fiscal space, it is unsustainable because it rises and falls with oil revenues. Therefore, economic diversification is necessary to ensure the long-term sustainability of the fiscal space.

FR



Figure (4) shows the evolution of Foreign reserves as a Percentage of GDP for the period 2004-2024.

4.1.5 Total deposits Percentage of GDP

This represents the capacity of the financial and banking sector to mobilize domestic savings. This ratio reflects the size of the available domestic financing pool within the banking system. A high ratio strengthens the government's ability to borrow domestically instead of relying on external borrowing and the associated problems and complexities that limit the use of this resource. The index's low level, as seen in 2004

when it reached 14, and its peak at 37, indicates a continued low level. This reflects weak confidence in the banking system. The increase in this ratio stems from the influx of oil revenues, which manifested as cash liquidity and government deposits within banks. The majority of these deposits are current accounts held by government institutions, not long-term savings deposits from the private sector. This makes their use risky (liquidity risk) and confirms that the domestic financial space remains dependent

TD



Figure (5) shows the evolution of Total deposits Percentage of GDP for the period 2004-2024.

4.2 Analysis of the reality of public fiscal fragility in Iraq

The fiscal fragility index provides us with strong standard evidence about public finances in Iraq and shows us that it revolves in a vicious cycle governed by oil shocks. An improvement in the index (a decrease in the curve) is always associated with oil price booms or harsh and unsustainable austerity policies, while an increase (increased fragility) is associated with a chronic structural imbalance represented by inflated current spending and the absence of non-oil revenues. This confirms the erosion of fiscal space when shocks occur in global energy markets, The causes of fragility can be summarized as follows:

- Weak economic diversification, as other sectors (industry, agriculture, and services) contribute only a small

percentage to the economy compared to the oil sector.

- Reliance on oil, which constitutes approximately 90% of Iraq's government revenues. If oil prices or production declines, revenues decrease significantly, forcing the government to borrow to meet its financial obligations.
- Self-financing and the dynamics of taxes, resulting from tax evasion, weak coalition, and near-total reliance on oil revenues, have been comprehensive in most of the resources and sectors, depriving the state of building internal financial buffers, especially from the contribution of economic cycles.
- Contraction of investment spending: When financial distress occurs as a result of falling oil prices, the

government resorts to reducing the investment budget (capital projects and infrastructure) in order to secure salaries and meet financial obligations. This continuous decline in development spending weakens the productive capacity of the economy and deprives the state of the opportunity to diversify sources of income in the long term.

- The chronic deficit resulting from expenditures exceeding

actual revenues compels the state to resort to continuous borrowing (internally from government banks through pledging deposits and the central bank, or externally). This accumulation of public debt, along with the accompanying debt servicing (principal and interest payments), depletes future available revenues and narrows the government's remaining fiscal space for maneuvering during crises.

FFI



Figure (6) shows the evolution of fiscal fragility for the period 2004-2024.



space (similar to a bank account), from which withdrawals can only be made during deficit years to reduce fragility.

- Well-considered tax reforms should be implemented that take into account fairness and economic efficiency, contributing to financial stability and the sustainability of public finances.
- Redirecting deposits towards productive credit to break the vicious cycle of recycling oil dinars within government banks by activating genuine financial inclusion and stimulating the banking system to convert stagnant current and institutional deposits into long-term credit and investment lines directed towards the private sector and real sectors (industry, agriculture, tourism).
- Enacting laws to prevent the use of foreign reserve surpluses to finance expansion in consumer spending and to direct them towards sovereign wealth funds.

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5. Conclusions and Recommendations :

5.1. Conclusions

- The research hypothesis is valid, demonstrating a direct relationship between fiscal space and fiscal fragility. This suggests that fiscal space in Iraq is "temporary" rather than "structural," which exacerbates public finance fragility, particularly during periods of low oil revenues.
- Excessive reliance on oil revenues, which are themselves subject to external factors such as global supply and demand, has led to budget deficits in most years for the countries in the sample, thus depleting fiscal space and creating fiscal fragility.
- The use of uncontrolled spending policies that increase public expenditure beyond its financial capacity leads to a decrease in fiscal space and an increase in fiscal fragility. Furthermore, high public debt-to-GDP ratios are a primary cause of both reduced fiscal space and increased fiscal fragility.
- Fragility reduces fiscal space, thus depriving the state of sufficient flexibility to address crises. During recessions, the state is unable to increase public spending to stimulate the economy or achieve economic stability through investment projects.

5.2. Recommendations:

- A sovereign wealth fund should be established to act as a reserve for fiscal



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