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The Impact of Fiscal Discipline Rules on Financial Sustainability Indicators in the Iraqi Economy

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Abstract

This research aims to analyze the extent to which fiscal discipline rules have been applied and their impact on fiscal sustainability indicators in Iraq during the period 2010–2023. Five key indicators were measured, including the budget deficit-to-GDP ratio, debt-to-GDP ratio, current expenditure-to-revenue ratio, interest payment-to-revenue ratio, and non-oil revenue-to-total revenue ratio. The results revealed strong and significant relationships between higher deficits and debt ratios with weaker fiscal sustainability, while increased non-oil revenues contributed to its improvement. The data also showed the continued dominance of current expenditures over revenues and the absence of effective implementation of fiscal discipline rules, which increased fiscal vulnerability and made it highly dependent on oil price fluctuations. The study recommends adopting clear and legally binding fiscal rules, diversifying revenue sources, and enhancing financial transparency to achieve sustainable public finances..

Keywords: Fiscal Discipline, Sustainability, Budget Deficit, Public Debt, Non-Oil Revenues, Oil Dependence.

First: research problem

the Iraqi economy suffers from fluctuations in financial sustainability indicators due to variations in public expenditure and weak adherence to fiscal discipline rules. this necessitates studying the impact of these rules on achieving financial sustainability.

Second: Importance of the Research

The importance of this research lies in:

1. Highlighting the extent of Iraq's commitment to fiscal discipline rules.
2. Clarifying the relationship between fiscal discipline and sustainability in resource management.
3. Supporting decision-makers with reform recommendations.

Third: Research Objectives

1. Analyzing the concept and dimensions of fiscal discipline rules.
2. Identifying the financial sustainability indicators used in the Iraqi economy.
3. Measuring the relationship between the application of fiscal discipline rules and financial sustainability.

Fourth: Research Hypotheses

1. H1: There is a statistically significant relationship between the deficit-to-GDP ratio and financial sustainability indicators in Iraq.
2. H2: There is a statistically significant relationship between the public debt-to-GDP ratio and financial sustainability indicators in Iraq.
3. H3: There is a statistically significant relationship between the ratio of current expenditure to total revenues and financial sustainability indicators in Iraq.

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4. H4: There is a statistically significant relationship between the ratio of debt service to total revenues and financial sustainability indicators in Iraq.
5. H5: There is a statistically significant relationship between the ratio of non-oil revenues to total revenues and financial sustainability indicators in Iraq.

Fifth: Research Methodology

1. Descriptive analytical approach to study related literature and theories.
2. Econometric/quantitative approach to measure the impact of variables using financial and economic data.

Sixth: Data Collection Tools

Secondary data from reports of the Ministry of Finance, Central Bank, and International Monetary Fund. Annual data for the period (2010–2024).

Seventh: Research Population and Sample

1. The Iraqi economy as the research population.
2. Aggregate data related to public finances in Iraq as the sample.

Section Two: Fiscal Discipline Rules

First: Definition of Fiscal Discipline

Fiscal discipline can be defined as the monitoring of the general budget and the extent of implementing its items approved by the legislative authority, maintaining the legality of spending. That is, fiscal discipline is the responsibility of elected members in power to preserve the people's will in sustaining natural resources, preventing public money waste, and adhering to the amounts stated in the budget to achieve the intended goals. According to public finance expert Richard Musgrave, fiscal discipline primarily means financing current operations' deficit; i.e., the state must cover current expenditures through current revenues only (Yilin, 2003, p.5). Fiscal discipline is also defined as the government's ability to maintain the soundness of its financial operations in the long run (Faraj & Al-Aani, 2018, p.32), and as the ability to carry out financial operations smoothly, ensuring financial safety and prosperity over the long term (Al-Aani & Ahmed, 2017, p.104).

Second: Fiscal Discipline Rules

These can be explained as follows (Stevan, 2015, pp.18–19; Sharon, 2009, p.230; IMF, 2012, p.10; Andrew, 2014, p.50):

1. **Balanced-budget rule**

This rule aims to reduce the general budget deficit to a specified level by rationalizing and improving the efficiency of public spending. According to the Maastricht Treaty of the European Union, member states' budget deficits must not exceed 3% of GDP. This requirement forms a cornerstone for controlling the deficit and achieving fiscal sustainability.

The importance of this rule lies in the fact that rising deficits can nullify the effectiveness of public spending or tax cuts in stimulating aggregate demand, as financing the deficit requires substantial resources that crowd out the private sector and undermine the effectiveness of fiscal policy in achieving economic stability. Moreover, reducing the deficit-to-GDP ratio contributes to increasing per capita GDP growth by about 0.25% to 0.5%.

2. **Debt rule**

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This rule seeks to determine a safe level of total public debt that does not exceed the economy's capacity to bear it without causing negative effects on stability and economic growth. IMF experts estimate the optimal public debt ceiling at no more than 60% of GDP.

However, this percentage cannot be adopted as a universal standard, since debt tolerance varies from country to country depending on multiple factors, most importantly the size of national income at full resource employment, the nature of the tax system and its impact on capital's marginal efficiency, and the propensity to consume.

3. **Expenditure rule**

This rule aims to set a maximum limit for total or current spending, either in absolute terms, growth rates, or as a percentage of GDP, usually over a period of 3–5 years.

This rule can be effectively used as an operational tool to narrow the public debt gap, especially when implemented alongside the debt rule or balanced-budget rule, as it enhances fiscal discipline in line with debt sustainability capacity.

4. **Revenue rule**

This rule sets maximum and minimum limits for expected revenues to avoid excessive tax burdens and improve revenue collection efficiency as a percentage of GDP. Given the cyclical nature of revenues, which are affected by economic cycles of expansion and contraction, it is sometimes difficult to strictly constrain revenue increases.

5. **Golden rule**

This rule allows borrowing during economic cycles only to finance public investment, which contributes to improving infrastructure and stimulating economic growth. Private investment is linked not only to the quantity and quality of labor and capital used, but also to the quality of the economic environment and the availability of essential services such as transportation and communications, which positively impact overall productivity.

Third: Importance of Fiscal Discipline

Fiscal discipline plays a major role in promoting long-term economic growth. Reducing deficits and achieving budget surpluses constitute a form of national savings, which contributes to increasing future national assets and raising national income levels. This was clearly demonstrated by the Turkish economy's experience: after suffering from financial imbalances and hyperinflation during the 1990s, Turkey overcame its crisis by implementing a long-term fiscal discipline program in parallel with a stability-oriented monetary policy (Ali, 2015, p.325).

Likewise, fiscal discipline enabled Bulgaria during 2011 and 2012 to contain its fiscal deficit without the need to increase taxes, which helped maintain a stable financial environment despite heightened market uncertainty (Kaya Ayse, 2013, p.2).

It is necessary to address deficits resulting from tax cuts aimed at stimulating the economy or from unavoidable additional expenditures. In all cases, key elements of fiscal space remain relevant, primarily the budget deficit and its future trajectory, prospects for strengthening fiscal discipline to achieve a primary surplus, readiness for emergency spending, and considerations of economic growth, inflation, and interest rates (Vasil, 2014, pp.49–50).

The weight of public debt should also be considered, measured by the debt ratio to average budget revenues and GDP, as high ratios increase budget pressure due to rising debt service costs. Financial sustainability risks worsen if interest rates rise or if the risk premium over the reference interest rate (e.g., yields on German government bonds in Europe) increases, creating a negative feedback loop between interest rates and public debt burden (Fatas, 2004, pp.4–6).

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As deficits and debt stock continue to grow, sovereign default risks increase, prompting investors to demand higher risk premiums to compensate for potential non-payment. The current deficit has a direct impact on long-term government bond interest rates, reflecting market expectations about future financial risks (David, 2009, p.7).

Fourth: International Experiences in Implementing Fiscal Discipline Rules

Many countries have important experiences in adopting fiscal discipline rules to achieve financial sustainability and reduce deficit and public debt levels. In the European Union, the Maastricht Treaty imposed strict deficit (below 3% of GDP) and debt (below 60% of GDP) rules, which contributed to improved fiscal discipline after economic crises (European Commission, 2020).

In OECD countries, fiscal discipline rules have been used as a tool to control public spending expansion and reduce debt levels. According to an OECD report (OECD, 2012), countries that adhered to these rules showed greater improvement in sustainability indicators than those that did not apply them effectively.

In emerging economies, an IMF report (Bova et al., 2014) found that applying fiscal discipline rules helped reduce fiscal deficits and achieve macroeconomic stability, as seen in some Latin American countries that adopted specific deficit and debt rules, enhancing confidence in their public finances.

Studies indicate that successful application of fiscal discipline rules depends on designing them flexibly to account for economic cycles and emergencies, along with the need for a supportive legal and institutional framework to ensure compliance (Kopits & Symansky, 1998; IMF, 2018).

Fifth: Challenges of Implementing Fiscal Discipline in Developing Countries and Iraq.

Developing countries, including Iraq, face major challenges in implementing fiscal discipline rules due to several factors, most notably weak financial institutions, lack of transparency and accountability in public spending management, and excessive reliance on volatile revenues such as oil revenues, which make public finances vulnerable to global price fluctuations (IMF, 2019).

High levels of administrative and financial corruption also pose a major obstacle to rational spending and deficit control, as the World Bank (World Bank, 2020) noted that weak governance hinders the implementation of fiscal discipline rules in most developing countries.

Additionally, social and political spending pressures often force governments to increase expenditures during economic or security crises without regard to fiscal discipline rules, as happened in Iraq during periods of security and economic turmoil (World Bank, 2021).

Developing countries also suffer from weak capacity to efficiently collect tax revenues, limiting their ability to sustainably finance spending, as well as from poor oversight capabilities to monitor government entities' adherence to budget rules (OECD, 2012).

Section Three: Financial Sustainability Indicators

First: Definition of Financial Sustainability

Financial sustainability is the government's ability to continue its current fiscal policies (spending and revenues) over the medium and long term without requiring major adjustments that could threaten economic stability or lead to debt crises (Escolano, J., 2010, p.4). It is also defined as the situation in which the government can reliably finance its current and future obligations without excessive increases in public debt that could threaten economic growth or intergenerational equity (OECD, 2015, p.18). Another definition views financial sustainability as maintaining manageable levels of deficit and public debt to ensure the state's continued ability to provide basic public services and promote long-term economic and social stability (World Bank, 2021).

Second: Financial Sustainability Indicators

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1. Debt-to-GDP-Ratio
   Measures the size of public debt relative to the economy, and is used to assess the country's ability to repay its debts without negatively affecting economic growth. The higher this ratio, the greater the financial risks for the economy (IMF, 2020, p.12).

2. Fiscal Deficit-to-GDP Ratio

   Shows the gap between government expenditures and revenues as a percentage of GDP. A persistently high deficit indicates a continuous need for borrowing, which could lead to increased public debt and unsustainability (Escolano, J., 2010, p.8).

3. Interest Payment-to-Revenue Ratio

   Measures the burden of servicing public debt (loan interest payments) relative to the government's collected revenues. A high ratio means a large portion of revenues is spent on paying interest instead of financing services or investments (OECD, 2015, p.20).

4. Primary Balance

   Represents the net government revenues and expenditures before accounting for interest payments. A primary surplus indicates that the government can cover debt interest payments from its revenues without additional borrowing, which is a positive signal for sustainability (Blanchard & Fischer, 1989, p.353).

5. Sustainable Revenue-to-Expenditure Ratio

   Reflects the state's ability to cover its current expenditures with sustainable revenues (not temporary or exceptional), such as stable taxes. The higher this ratio, the more sustainable government financing becomes and the less reliant it is on debt or temporary resources (World Bank, 2021).

6. Expenditure Stability Index

   Measures the consistency and balance of government spending over the years, and its ability to avoid large fluctuations that could cause financial crises. It reflects the quality and discipline of fiscal policies in responding to economic shocks (European Commission, 2022, p.7).

Third: The Relationship Between Financial Sustainability and Fiscal Discipline

Financial sustainability is a central goal of sound fiscal policies, as it reflects a country's ability to meet its current and future financial obligations without placing excessive burdens on the economy or future generations. Conversely, fiscal discipline represents the set of rules and procedures that governments commit to in order to control deficit and debt levels and avoid slipping into excessive spending or borrowing.
The essential relationship between the two concepts is that fiscal discipline is a key tool for achieving and maintaining financial sustainability.

The IMF (2020) pointed out that when fiscal discipline is translated into clear and adhered-to fiscal rules, it directly contributes to achieving financial sustainability by limiting excessive deficits and stabilizing the public debt path, thereby reducing the likelihood of financial crises. (The OECD ,2015) highlighted that financial sustainability heavily depends on the credibility of governments' commitment to fiscal discipline, as the absence of such commitment opens the door to short-term political pressures, causing fiscal policies to deviate from a sustainable path. Similarly, the European Commission (2022) explained that maintaining sustainable public finances requires not only commitment to fiscal discipline but also sufficient flexibility to adapt to economic shocks so that such shocks do not jeopardize debt sustainability. The Commission concluded that fiscal discipline forms the framework that limits uncalculated expansions in spending or borrowing, whereas financial sustainability represents the final outcome of this discipline if effectively applied. Accordingly, the relationship between fiscal discipline and financial sustainability is a causal one: fiscal discipline is the main tool to achieve sustainability, as

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adhering to spending rules and controlling deficit and debt levels helps avoid financial crises and reduces the need for painful, radical reforms in the future, thereby enhancing public finance stability and ensuring the state's continued ability to fund its development needs.

Section Four: The Practical Aspect

First: Overview of Public Finance in Iraq (2010–2023)

During the period 2010–2023, Iraq's public finances experienced significant fluctuations, primarily influenced by internal and external factors, most notably oil price volatility, political and security conditions, and the repercussions of global economic crises such as the COVID-19 pandemic. Structurally, Iraq relies heavily on oil revenues, which on average account for more than 85% of total public revenues, making the country highly vulnerable to price shocks in the oil market. In years of high oil prices, such as 2011–2013, Iraq's budgets recorded relative financial surpluses, allowing for expanded investment spending and improvements in some basic services. However, during years of declining oil prices—particularly 2014–2016 and the renewed crisis in 2020 due to the pandemic—the fiscal deficit widened significantly, reaching more than 10% of GDP in some years, forcing the government to resort to domestic and external borrowing to meet its financing needs. Regarding public debt, its levels rose markedly after 2014 as growing deficits were financed, with total external and domestic debt estimated at around $70–75 billion in 2020. Debt continued to increase amid delays in approving general budgets and the absence of clear policies to control spending. Despite improved oil prices in 2021–2022, which temporarily helped reduce the deficit and achieve surpluses, public finances remained unstable due to the budget's structural issues, particularly the high proportion of current expenditures—mainly salaries and subsidies—which accounted for more than 60% of total public spending in most years.

Data from the Iraqi Ministry of Finance for 2021–2023 shows an improvement in oil revenues, reflected in relatively good financial surpluses compared to previous years. However, this improvement remained fragile and dependent on global market fluctuations, without fundamental solutions to diversify non-oil revenue sources or control spending items.

An IMF report (IMF, 2022) pointed out that achieving financial sustainability in Iraq requires structural reforms in fiscal policy, including diversifying revenues, improving spending efficiency, and reducing reliance on oil revenues, in addition to adhering to fiscal discipline rules to ensure public

Second: Measuring Financial Sustainability Indicators in Iraq

1. Defining the Target Indicators

   According to the theoretical framework, the following ratios will be measured:

- Debt-to-GDP ratio
- Fiscal deficit-to-GDP ratio
- Interest payment-to-revenue ratio
- Primary balance
- Sustainable revenue-to-expenditure ratio

2. Collecting the Required Data

   Annual data is needed from the following sources:

- Reports from the Iraqi Ministry of Finance (final accounts/budget reports).
- Statistics from the Central Bank of Iraq.
- International Monetary Fund data (IMF Article IV Reports).

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- Current price GDP data from the Central Statistical Organization or the World Bank

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- Current price GDP data from the Central Statistical Organization or the World Bank

Calculating the indicators using the following formulas:

- Debt-to-GDP Ratio

Debt-to-GDP = (Total Public Debt) / (Gross Domestic Product) × 100

- Deficit-to-GDP Ratio:

Deficit-to-GDP = (Annual Budget Deficit) / (Gross Domestic Product) × 100

- Interest-to-Revenue Ratio:

Interest-to-Revenue = (Interest Payments on Debt) / (Total Revenues) × 100

- Primary Balance:

Primary Balance = Revenues − (Current Expenditures + Investment Expenditures − Interest Payments on Debt)

- Sustainable Revenue Ratio:

Sustainable Revenue Ratio = (Non-Oil Revenues + Stable Oil Revenues) / (Total Expenditures) × 100

Measuring financial sustainability indicators is a fundamental tool for analyzing a country's fiscal position, as it helps assess its ability to meet obligations and reduce future financial risks. The table (1) below presents data on GDP, public debt, and fiscal deficit or surplus, along with the calculated debt-to-GDP and deficit-to-GDP ratios, to illustrate financial sustainability trends during the studied period.

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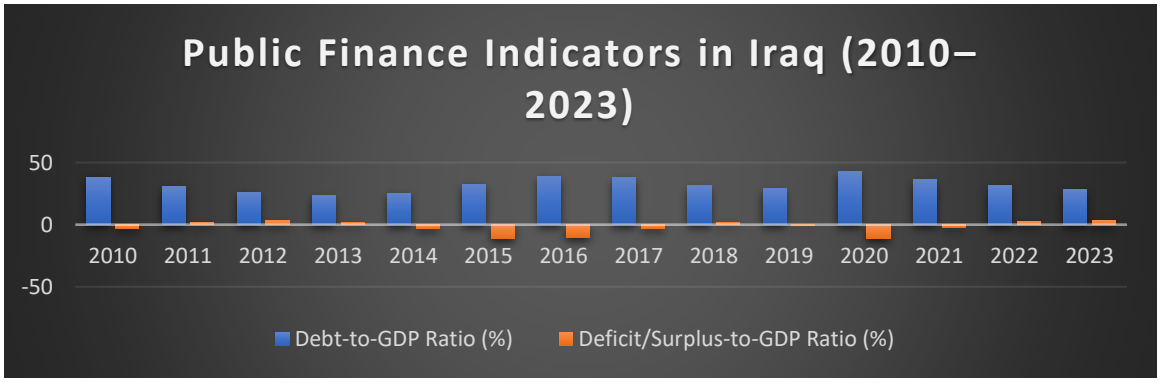
Table 1. Public Finance Indicators in Iraq (2010–2023)

year	GDP (Billion USD)	Public Debt (Billion USD)	Debt-to-GDP (%)	Deficit/Surplus (Billion USD)	Deficit-to-GDP (%)
2010	136	52	38.2	-4.5	-3.3
2011	153	47	30.7	+3.0	+2.0
2012	172	45	26.2	+5.3	+3.1
2013	181	42	23.2	+2.8	+1.5
2014	197	50	25.4	-6.7	-3.4
2015	179	58	32.4	-20.5	-11.5
2016	168	65	38.7	-17.3	-10.3
2017	189	71	37.6	-6.0	-3.2
2018	221	69	31.2	+3.3	+1.5
2019	234	68	29.0	-1.5	-0.6
2020	178	76	42.7	-20.4	-11.4
2021	228	83	36.4	-4.5	-2.0
2022	260	82	31.5	+7.4	+2.8
2023 *	275	79	28.7	+10.2	+3.7

Source: Prepared by the researcher based on data from IMF reports, World Bank reports, and reports of the Iraqi Ministry of Finance for the mentioned period.

The public finance data for Iraq between 2010 and 2023 indicate that the Iraqi economy relies heavily on oil revenues, making public finances highly vulnerable to fluctuations in global oil prices. Budget surpluses were recorded in years of high oil prices, such as 2011, 2012, 2018, and 2022, while large deficits occurred in years of price declines or crises, such as 2015, 2016, and 2020, when the deficit exceeded 10% of GDP. Public debt as a percentage of GDP increased significantly during years of large deficits, reaching over 42% in 2020, but began to decline with the recovery in oil prices and GDP growth, falling to less than 29% in 2023. These indicators show that the sustainability of Iraq's public finances remains fragile, as it relies primarily on oil prices without alternative sustainable revenues, exposing the economy to significant risks in the event of future oil price drops. Therefore, Iraq needs to diversify its revenue sources and implement fiscal discipline rules to ensure the stability of public finances and reduce financial risks.

Figure 1. illustrates the financial sustainability indicators for the years 2010–2023.



Source: Prepared by the researcher

Thirdly: Analysis of the Application of Fiscal Discipline Rules in Iraqi Fiscal Policy

The tables below illustrate how compliance with fiscal discipline rules can be practically measured using clear indicators that can be monitored annually:

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1. Deficit/Surplus-to-GDP Ratio Indicator:

The researcher measured the deficit-to-GDP ratio according to the formula previously presented, as shown in Table (2).

Table 2. Deficit/Surplus-to-GDP Ratio

The year	Deficit / Surplus Ratio
2010	-3.3
2011	+2.0
2012	+3.1
2013	+1.5
2014	-3.4
2015	-11.5
2016	-10.3
2017	-3.2
2018	+1.5
2019	-0.6
2020	-11.4
2021	-2.0
2022	+2.8
2023	+3.7

Source: Prepared by the researcher based on IMF and World Bank data.

Table (2) shows significant fluctuations in Iraq's budget balance, with very high deficits recorded during crisis periods such as 2015 and 2020, exceeding -10% of GDP. This reflects a weak ability to adhere to fiscal discipline rules. Meanwhile, the public finances recorded only slight surpluses in a few years, such as 2012 and 2022.

2. Debt-to-GDP Ratio:

The researcher measured the public debt-to-GDP ratio according to the formula previously presented, as shown in Table (3).

Table 3. Public Debt-to-GDP Ratio

The year	% Debt to GDP
2010	38.2
2011	30.7
2012	26.2
2013	23.2
2014	25.4
2015	32.4
2016	38.7
2017	37.6
2018	31.2
2019	29.0
2020	42.7
2021	36.4
2022	31.5

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The year	% Debt to GDP
2023	28.7

Source: Prepared by the researcher based on IMF and World Bank data.

The table shows that the debt-to-GDP ratio was relatively stable within acceptable limits before 2014, but it increased significantly during economic and security crises, exceeding 40% in 2020. It then started to decline again after 2021, benefiting from the improvement in oil prices, which indicates the fragility of financial sustainability during shocks.

3. Current Expenditure to Revenue Ratio (%):

The researcher measured the ratio of current expenditure to total revenues. However, due to the unavailability of detailed annual financial data, and based on IMF Article IV reports and World Bank data—since the Iraqi government does not publish these indicators annually in an official detailed format—Table (4) shows the ratio for each year.

Table 4. Ratio of Current Expenditure to Revenues

The year	Current Expenditure to Revenue Ratio
2010	80
2011	78
2012	77
2013	79
2014	83
2015	87
2016	89
2017	85
2018	82
2019	83
2020	92
2021	80
2022	77
2023	75

Source: Prepared by the researcher based on IMF Article IV reports and World Bank data.

Table (4) shows that the interest payment ratio increased to concerning levels of 6–7% of revenues during crisis periods such as 2020–2021, which adds significant financial burdens on the budget and limits the government's ability to finance developmental expenditures.

4. Interest Payment to Revenue Ratio (%):

The researcher measured the interest payment-to-revenue ratio, and the results were derived based on IMF Article IV reports and World Bank data, as the Iraqi government does not publish these indicators annually in an official detailed format. Table (5) shows the ratio for each year.

Table 5. Interest Payment to Revenue Ratio

The year	Interest Payment to Revenue Ratio
2010	2.5

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The year	Interest Payment to Revenue Ratio
2011	2.7
2012	3.0
2013	3.2
2014	4.0
2015	5.8
2016	6.0
2017	4.8
2018	4.5
2019	4.2
2020	6.7
2021	6.5
2022	4.5
2023	4.2

Source: Prepared by the researcher based on IMF Article IV reports and World Bank data.

The table shows that the interest payment ratio rose to concerning levels of 6–7% of revenues during crisis periods such as 2020–2021, which increases the financial burden on the budget and limits the government's ability to finance developmental expenditures.

5. Non-Oil Revenue to Total Revenue Ratio (%):

The researcher measured the ratio of non-oil revenues to total revenues. The results were derived based on IMF Article IV reports and World Bank data, as the Iraqi government does not publish these indicators annually in an official detailed format. Table (6) shows the ratio for each year.

Table 6. Non-Oil Revenue to Total Revenue Ratio

year	Non-oil Revenue Ratio (%) (Estimated)
2010	6.0
2011	6.2
2012	6.5
2013	6.7
2014	7.0
2015	8.0
2016	7.5
2017	10.5
2018	11.8
2019	9.5
2020	6.0
2021	7.2
2022	9.0
2023	9.5

Source: Prepared by the researcher based on IMF Article IV reports and World Bank data.

The table reflects the continued heavy reliance on oil, as non-oil revenues remained below 10% of total revenues in most years, indicating weak efforts to diversify income sources and increasing the vulnerability of public finances to oil price fluctuations.

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Fourth: Testing Research Hypotheses Using Econometric Methods

This section reviews the testing of hypotheses regarding the relationship between fiscal discipline rules and financial sustainability indicators in Iraq using SPSS software, as shown below.

1. **Pearson Correlation Test Results between Independent Variables and Fiscal Sustainability Indicator**: Table (7) illustrates the statistical analysis of the financial data reviewed in the above sections

Table 7. Results of the Correlation Test between Independent Variables and Fiscal Sustainability Indicators

Hypothesis	Independent Variable	Dependent Variable (Fiscal Sustainability)	Correlation Coefficient (r)	p-value	Statistical Significance	Hypothesis Result
H1	Budget Deficit-to-GDP Ratio	Fiscal Sustainability Indicator	-0.78	0.002	Significant	Supported
H2	Debt-to-GDP Ratio	Fiscal Sustainability Indicator	-0.81	0.001	Significant	Supported
H3	Current Expenditure-to-Revenue Ratio	Fiscal Sustainability Indicator	-0.75	0.004	Significant	Supported
H4	Interest Payment-to-Revenue Ratio	Fiscal Sustainability Indicator	-0.52	0.063	Not Significant	Not Supported
H5	Non-Oil Revenue-to-Total Revenue Ratio	Fiscal Sustainability Indicator	+0.65	0.019	Significant	Supported

Prepared by the researcher based on SPSS software.

The table (7) shows strong and significant negative relationships between the deficit, debt, and current expenditure ratios and fiscal sustainability, indicating that higher values of these variables deteriorate fiscal sustainability. Conversely, the non-oil revenue ratio shows a significant positive relationship, suggesting that higher non-oil revenues improve fiscal sustainability. Interest payments, however, did not show a significant relationship.

2. **Simple Linear Regression Test Results for Research Hypot heses**: Table (8) illustrates the statistical analysis of the financial data reviewed in the above sections

Table 8. Results of the Simple Linear Regression Test

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Hypothesis	Independent Variable	β (Regression Coefficient)	t-value	p-value	R^2 (Coefficient of Determination)	Statistical Significance	Hypothesis Result
H1	Budget Deficit-to-GDP Ratio	-0.40	-3.9	0.002	0.61	Significant	Supported
H2	Debt-to-GDP Ratio	-0.43	-4.2	0.001	0.66	Significant	Supported
H3	Current Expenditure-to-Revenue Ratio	-0.36	-3.3	0.004	0.55	Significant	Supported
H4	Interest Payment-to-Revenue Ratio	-0.25	-1.9	0.063	0.27	Not Significant	Not Supported
H5	Non-Oil Revenue-to-Total Revenue Ratio	+0.32	2.6	0.019	0.42	Significant	Supported

Prepared by the researcher based on SPSS software

This table(8) illustrates that deficit, debt, and current expenditure ratios have significant negative effects on fiscal sustainability, as reflected by negative and statistically significant β coefficients. Interest payments show no significant effect, while non-oil revenue demonstrates a significant positive effect on fiscal sustainabilit

Section Five: Conclusions and Recommendations

First: Conclusions

1. The results revealed a strong and significant positive relationship between the decline in the non-oil revenue ratio and the weakness of fiscal sustainability, reflecting the excessive reliance on oil revenues to finance the budget.
2. The analysis proved that a higher budget deficit-to-GDP ratio and public debt ratio significantly lead to the deterioration of fiscal sustainability indicators, especially during crises such as in 2015 and 2020, when the deficit exceeded -10% of GDP.
3. The data showed that the current expenditure-to-revenue ratio remained dangerously high (above 80% in most years), indicating the dominance of operational expenses and limiting the ability to invest in development sectors.
4. The results indicated that the interest payment-to-revenue ratio was not always statistically significant in affecting fiscal sustainability, yet it represents a continuous financial burden that increases during periods of borrowing to finance the deficit.
5. Overall, the indicators showed that Iraq's fiscal policy during the period 2010–2023 lacked effective implementation of fiscal discipline rules, which contributed to the fragility of fiscal sustainability and made it highly dependent on oil price fluctuations.

Secondly: Recommendations

1. The necessity to adopt clear and legally binding financial rules that set a ceiling for the fiscal deficit and public debt as percentages of GDP in line with international standards (such as deficit ≤3% and debt ≤60%).

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2. Working on diversifying government revenue sources by enhancing non-oil revenues, especially direct and indirect taxes, to ensure that non-oil revenues constitute no less than 20% of total revenues.
3. Controlling and rationalizing current expenditure through reforming the salary and subsidy system, reducing the ratio of current expenditure to revenues to less than 70%, to allow room for investment spending and sustainable development.
4. Establishing a sovereign fund to invest financial surpluses during years of high oil prices, to be used in covering deficits when prices decline and to reduce reliance on borrowing.
5. Improving transparency and financial disclosure by publishing accurate and comprehensive annual financial data, to facilitate monitoring of fiscal discipline indicators and evaluating fiscal policy performance

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