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MONETARY POLICY AND ITS ROLE IN REDUCING THE IMPACT OF PUBLIC DEBT ON IRAQ'S ECONOMY AFTER 2003

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Abstract
The impact of monetary and financial factors on Iraq's state debt from 2004 to 2021 is examined in the study. Bond sales, transfers from the Treasury, and external borrowing from foreign institutions all go toward covering the deficit. Instead of investments, current costs are frequently paid with borrowed funds. Despite the federal budget having fiscal surpluses for most of the study years, the budgetary authority nevertheless found that pausing was the best course of action given its control over the money supply and the lack of specific government plans for future budgets. The findings of the data analysis and formal analysis showed that there was little correlation between the financial and monetary variables. This was principally brought on by the financial authority's domination, failure to make payments for most of the surplus years, and the Paris Club's debt reduction.
Keywords: monetary policy, fiscal policy, public debt, exchange rate, GDP, interest rate

Introduction

The government seeks to reduce public debt and achieve economic stability through monetary and fiscal policy tools to influence an economy reflected in GDP and given the important role macroeconomic policies play in affecting production and employment and the state's economy in general. In addition to addressing various aspects of reducing the effects of public debt on economic activity s economy ", it was necessary to address factors directly affecting public debt and GDP in Iraq's economy; this reflects the nature of economic activity by relying on statistical and metric methods and tests to reach results by analysing data for time series in Iraq's economy from 2004 to 2021.

1st. Concept and elements of monetary policy

Monetary policy affects economic sectors and addresses issues if there is an enabling environment in which they can operate their tools to achieve their goals to influence economic activity and achieve specific objectives through macroeconomic and microeconomic variables, such as investment, pricing, GDP, consumption, Savings and other stabilisation measures are a vital tool in economic policies [1]. As a result, the management of the expansionist and deflationary policy of cash volume to achieve specific objectives, known as the narrow concept of monetary policy, can be considered. Others, however, see Keynesians as indicating how much changes in the money supply are occurring and affecting economic activity. The broad definition includes all government actions that impact the availability of credit and funds, as

well as public debt management and policy [2].

1. Objectives and elements of monetary policy

Initial goals, intermediate goals and end goals, which we will discuss in the following, are used by monetary policy to help economic policy achieve its goals.

A. Primary monetary policy objectives

One of the central bank's main goals is the monetary basis of cash transacted with public and banking reserves. Bank reserves are the total amount of money kept in banks, whereas current funds comprise banknotes, supplemental funds, and deposits. The degree of an increase or decrease in interest rates and other lending conditions, as well as whether the interest rate on bank accounts is the same as the interest rate on assumed balances, should all be considered by lenders[3].

B. Objectives Intermediate monetary policy

Monetary authorities attempt to influence the variable to further their ultimate objectives because they cannot directly impact, for example, GDP and its components. The monetary authority takes advantage of the discrepancies between its tools and those of its ultimate goals to accomplish its goals [4]. The term "intermediate aims" refers to these components. The intermediate objective is the economic variable that the central bank can properly and correctly control. Additionally, the connection is reliable or at least predictable. Minimum while considering the ultimate goal of monetary policy [5].

C. Objectives Final Monetary Policy

Economic power influences the main goals and objectives of each economic development stage through actions combined with other policies. Still, the capacity of monetary policy to overcome obstacles and achieve the plan depends on the promptness of the proper decision-making in influencing variables [6]. They collaborate to accomplish the shared goals outlined in: to help solve economic problems.

- ❖ Maximise full employment, which requires reducing unemployment to a level consistent with normal rates.
- ❖ Maintain a low overall price level (price stability).
- ❖ Balance of payments
- ❖ Achieving the highest rates of economic growth.

2. Monetary policy tools and mechanisms

Central banks use a range of policies to deal with monetary policy [6]:

A. Credit Policy: This is the policy governing the general framework through which a group of banks engage in their credit activity, including the policy that determines the discount rate, credit ceilings, statutory reserve ratios, liquidity ratio, and other quantitative and qualitative restrictions that the central bank is allowed to use to guide banks.

B. Exchange rate management policy: to maintain the purchasing power of the national currency, prevent its depreciation, maintain its stability, and join the market as a seller or buyer to achieve the goal, the central bank has chosen to manage the exchange rate in a balanced economic framework.

C. Government debt management policy: The Central Bank controls public debt to provide funds to finance the government's ongoing operations and current expenditures by issuing general treasury authorisations and funding investment expenditures by giving them—long and medium-term bonds and signing domestic and international loan agreements.

2nd. Public Debt Concepts and Contents

The term "public debt" refers to the money the government borrows from individuals and organisations to meet urgent needs, finance economic development initiatives and achieve targets when public revenues are insufficient to pay for State expenditures, such as war and hyperinflation. In addition, there are obligations owed by sovereign Governments, mainly in the form of negotiable bonds, treasury bills with a maturity of three months or less or treasury bills.

When the state cannot cover its public expenses from other sources, particularly taxes, it borrows money from other people, organisations, international organisations, or other States. This debt is referred to as government debt. The idea of public religion in its modern sense is relatively new, dating back to the early eighteenth century, as a result of the development of society and the emergence of legislative powers representing the people with their full right to tax on the one hand and to practice public religion on the other [7].

Public debt is the sum of funds that the government or any other public entity, whether private or public, receives or borrows, with an agreement to repay and pay interest following the rules and instructions.

1. Types of government debt

Government (public) debt is divided into a foreign debt of foreign institutions and Governments and an internal debt of citizens or local institutions [8].

A. Government (internal) debt: - Government loans are often held in the state's local currency and obtained through local institutions such as banks or by issuing bonds. Among them, government investments (borrowed) from health and social insurance funds are known to deduct from tax funds those internal debts, or the government's internal debt among its many sectors.

B. Government (external) debt: - Where transactions are based on foreign individuals, companies or countries obtaining government loans from foreign institutions such as foreign banks or international organisations such as the Monetary Fund and the World Bank.

2. Indicators of government debt

Three whole sets of indicators are used to study the behaviour of public debt. On the other hand, the possibility that the debt position may worsen due to the current scenario is measured by several indicators. A second category evaluates the government's capacity to handle expected emergencies in the future. Last, financial indicators can be used to determine how obligations function as market variables [9].

The ratio of government debt/budget revenues

This statistic measures the degree of debt commensurate with the government's ability to make its payments, presenting the years required to repay the loan burden in full. Because this ratio considers the size of the finances when calculating the state's tax collection capacity, the constant proportion between debt and GDP may provide different results.

A. The ratio of government debt/ GDP

This debt ratio is measured in proportion to the government's capacity. It indicates that an economy that generates and sells enough goods and services to pay off debt without taking on more debt has a low debt-to-GDP ratio.

B. Budget income in currencies/exchange rate

This debt-to-exchange ratio measures the currency and indicates a low debt-to-exchange percentage, particularly in more prosperous countries such as Iraq.

3th. Effective monetary policy in reducing the impact of public debt on Iraq's economy after 2003

After 2003, the Iraqi economy was in transition. The recent shift in monetary policy trends following the Central Bank's independence under Law 56 of 2004 prompted the monetary authority to use sophisticated tools consistent with the requirements of transitioning towards a market system. On the one hand, the Iraqi economy's distinctiveness and the structural imbalance and underdevelopment it experiences on the other [10].

Owing to the rent economy, fiscal fragility and the separation of the real sector from the monetary sector, the monetary authority pursued a policy targeting inflation to maintain the country's financial stability. As a result, traditional channels for transferring the impact of monetary policy (interest rate) have become largely ineffective.

Under the declared drainage system, the managed float system, the natural two-stage exchange system, first 2003-2009, Orbit system, dual fixed exchange rate system 2009-2021, The monetary authority used the currency sale window as a mechanism for controlling and controlling the exchange rate as well as providing foreign exchange to the private sector to enable it to import and fill the aggregate demand gap, and the monetary authority was successful.

1. Reality and trends in Iraq's public debt after 2003

Enhancing the capacity of the Ministry of Finance debt management is critical given Iraq's rapid public debt accumulation, lack of expertise in basic debt instruments, and significant financing needs. The average ratio of public debt to GDP is 44% from 2004-2020, as shown in Table 1, which is considered excessive. The government's public debt is more than $70 billion, of which $20 billion is external debt, most of which will be repaid by 2028.

The total amount of debt related to overseas development projects and additional external debt that has increased due to the war on terrorism is estimated to be $23 billion. The state will still

be responsible for repayment even though the internal debt, estimated to exceed $50 billion, is contained to the government's financial system in 95% of the cases. The state has never experienced a fiscal budget deficit; thus, it has never produced financial instruments like the local bond market (there are just government bonds here) or access to international bonds like the heavily relied-upon Eurobond bonds.

The findings in figure 1 demonstrate that one of the primary causes of the increase in public debt is geopolitical and economic factors, such as conflict, recession, and other factors, which impact how much money the government borrows and whether it decides to take on more debt. This affects corruption through dubious government contracts influenced by influential people. It attained its lowest ranking in the year (2013) by (12%) [11] as a consequence of the rise in oil prices on global markets, which was reflected in the fall in the budget deficit while increasing the security situation and stabilising the political situation. in reaction to the government's public finances' swift collapse.

Table 1
Public Debt to Iraq's Gross Domestic Product (2004 - 2020)

Years	Total government debt	GDP	The ratio of public debt to GDP
2004	102670970	53235358.7	193%
2005	71066600	73533598.6	97%
2006	50101500	95587954.8	52%
2007	46953320	111455813.4	42%
2008	45310920	157026061.6	29%
2009	37861230	130643200.4	29%
2010	38371500	162064564.5	24%
2011	37409700	217327107.4	17%
2012	34810840	254225490.7	14%
2013	31913400	273587529.2	12%
2014	38352500	258900633.1	15%
2015	61654000	191715791.8	32%
2016	72233000	180456329	40%
2017	87519200	194320132	45%
2018	82603699	204678543.8	40%
2019	78279848	306798543	26%
2020	101945750	219768798.4	46%
2021	99890746	301,439,533.90	33%
Average			44%

Source: the Republic of Iraq, Ministry of Finance, Public Debt Service, various years.

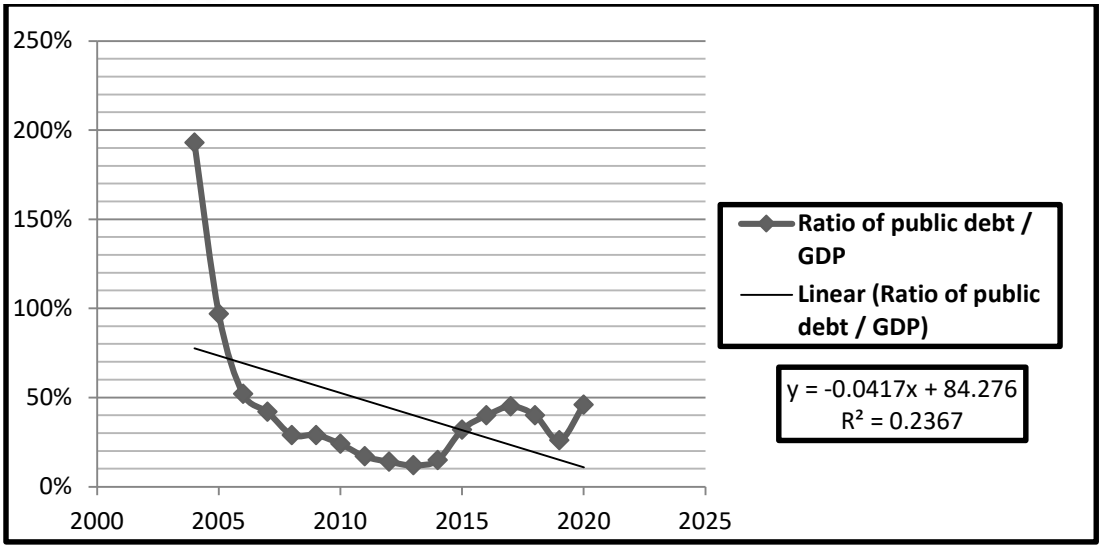

Figure (1) Ratio of public debt / GDP in Iraq for the period 2004-2021

As oil accounts for more than 90% of government income and exports, the significant drop in oil prices from $111.63 in 2012 to $41.96 in 2020 has severely impacted and caused a considerable recession in Iraq's economy. In addition, a quarter of Iraq's population was affected by the terrorist attacks that began in 2014, which endangered the security of oil installations on the country's western border. This has further slowed the economy and increased the country's external costs. Trade and reduce investors' confidence in the financial market. According to table 2, Iraq's economy experienced a real GDP growth rate of -35% in 2015, the lowest level since the end of the conflict in 2003.

As a result of a steep decrease in oil income, increased economic pressure brought on by the fight against terrorism, and the surge of internally displaced people, the government's spending was severely constrained in 2015. The budget deficit consequently grew by more than 10% of GDP. As a result, the public debt's annual growth rate quickly increased from -7% in 2014 to 61% at the end of 2015. Due to the declining export sector, the current account saw its first balance-of-payments deficit since 2005 in 2015.

As a result, the overall trend of international reserves declined from US $66.7 billion. 6.7 months of imports in 2016 compared to 10.9 months of imports in 2014 of approximately US $45.2 billion. With the help of a slow recovery in oil prices, Iraq's economy recovered in 2016, with oil production and exports rising from 3.7 million BPD in 2015 to 4.6 million BPD and from 3.4 million bpd to 3.8 million BPD—Programme of Action ", respectively. However, the country's public finances, overall international reserves and debt management are expected to continue to be adversely affected by the severe and detrimental effects of two shocks, namely the conflict against ISIL and the rapid decline in oil prices, as shown in figure (2) where we note that the trends in annual growth of GDP and public debt have been unstable.

Table 2
The annual growth rate of Iraq's public debt and GDP for the period (2004 - 2021)

Years	GDP	Annual growth rate	Total government debt	Annual growth rate	Oil Prices
2004	53235358.7		102670970		38.26
2005	73533598.6	38%	71066600	-31%	54.57
2006	95587954.8	23%	50101500	-30%	65.16
2007	111455813.4	14%	46953320	-6%	72.44
2008	157026061.6	29%	45310920	-3%	96.94
2009	130643200.4	-20%	37861230	-16%	61.74
2010	162064564.5	19%	38371500	1%	79.61
2011	217327107.4	25%	37409700	-3%	111.26
2012	254225490.7	15%	34810840	-7%	111.63
2013	273587529.2	7%	31913400	-8%	108.56
2014	258900633.1	-6%	38352500	20%	98.97
2015	191715791.8	-35%	61654000	61%	52.32
2016	180456329	-6%	72233000	17%	43.64
2017	194320132	7%	87519200	21%	54.13
2018	204678543.8	5%	82603699	-6%	71.34
2019	306798543	33%	78279848	-5%	64.3
2020	219768798.4	28-%	101945750	30%	41.96
2021	301439533.9	%37	99890746	-2%	
متوسط		***9%***		***2%***	

Source:
- the Republic of Iraq, Ministry of Finance, Public Debt Service, various years.
-Source: the Republic of Iraq, Ministry of Planning, National Accounts, various years.

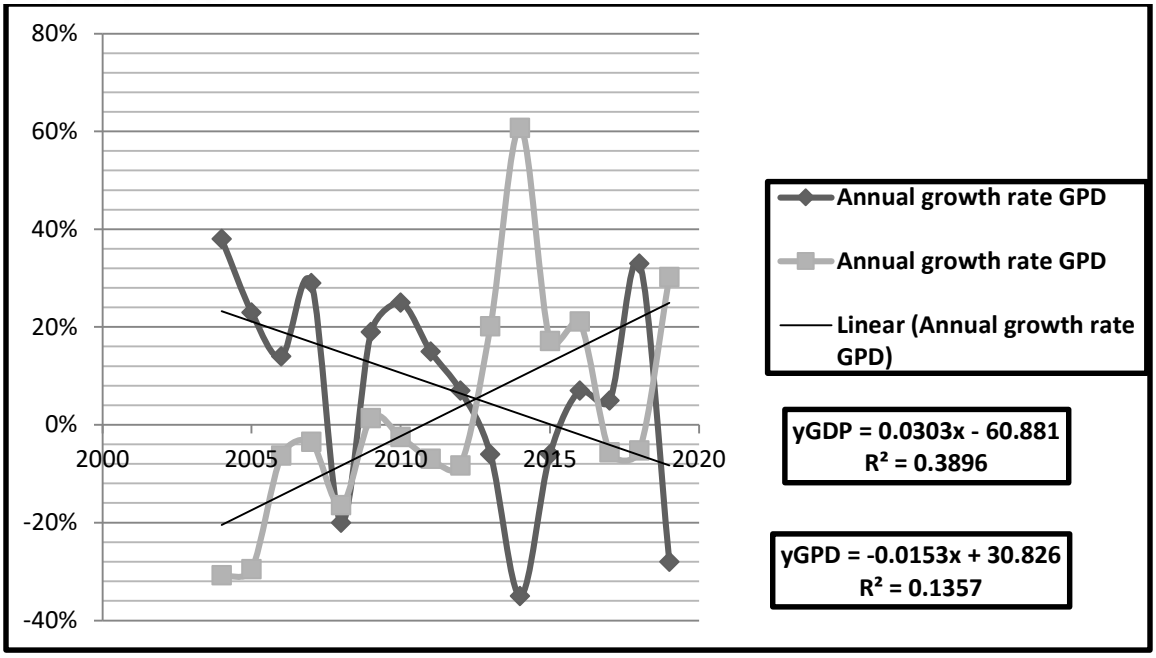

Figure 2. The annual growth rate of Iraq's public debt and GDP for the period (2004 - 2021)

The budget was created due to the government's dependence on oil earnings, which comprise 95% of all revenues. The general situation is reflected in the rise in public spending, particularly current expenditure on salaries and employee benefits. Global oil market prices indirectly impact the nation's overall foreign reserves, debt reduction, and public finances.

We note, therefore, that the deficit in the federal budget is due to increased current expenditure versus lower investment expenditure s foreign reserves, due, among other things, to the deficit in the balance of payments as a result of the state's dependence on imports, resulting in the exit of foreign exchange and total reliance on oil exports, In addition, the unstable political and security situation has affected the country's economic realities, as shown in Table 3. The Iraqi government has taken steps to implement a medium-term strategy ([5] years), as shown in figure 3, to:

A. Finance government budget deficit at the lowest cost with minimal risk

B. Achieve the required composition of the portfolio in line with the objective of public debt management.

C. Develop the local debt market, focus on reducing it and ultimately eliminate the government's dependence on it.

D. Issuance of long-classified government bonds and indirect monetary financing

Table 3
Iraq's federal deficit and surplus budget for the period (2004 - 2021)

Years	Actual revenue	Actual tunnels	Deficit and budget surplus
2004	32989000	32117000	872000
2005	40436000	26375000	14061000
2006	49056000	38807000	10249000
2007	54965000	39031000	15934000
2008	80641000	59403000	21238000
2009	55244000	52567000	2677000
2010	70178000	64352000	5826000
2011	99998776	69640000	30358776
2012	119817000	90375000	29442000
2013	113840000	106873000	6967000
2014	105387000	83556000	21831000
2015	66470000	70398000	-3928000
2016	54409270	67067000	-12657730
2017	77422000	75490000	1932000
2018	106570000	80873000	25697000
2019	107566995	111723523	-4156528
2020	63199689	76082443	-12882754
2021	109,081,464	102,849,661	6,231,803.00

Source: the Republic of Iraq, Ministry of Finance, Budget Service, various years.

Be aware that the government budget for Iraq shows a deficit and surplus from 2004 through 2021 [12]. Expenditure" denotes a rise in spending on income. Without attempting to identify other ways or solutions to fill the deficit aside from external or internal borrowing, which has had a detrimental impact on numerous projects, this has raised the proportion of public debt. Moreover, inflation is possible under certain conditions, which would lower per capita income.

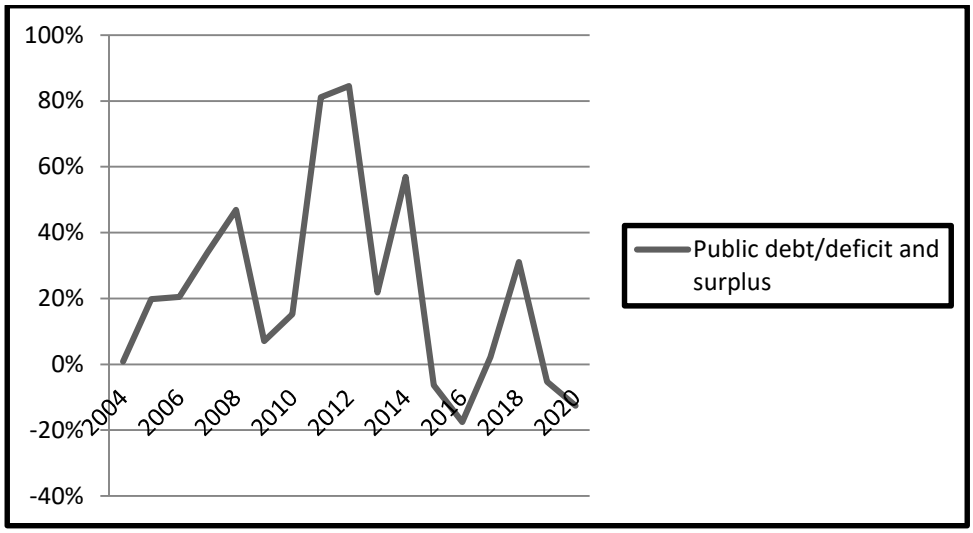

Figure 3. Iraq's public debt/deficit and federal budget surplus for the period (2004 - 2021)

2. Monetary policy trends in reducing the impact of public debt on Iraq's economy after 2003

The goal of the Central Bank of Iraq's public debt management strategy after 2003 is to finance ongoing government operations and current expenses by issuing treasury bills and funding for investment expenses by issuing bonds with long and medium-term maturities and by signing domestic and foreign loans. The rise in local debt can be attributed to indirect monetary activities, including issuing treasury bills that were first bought by state-owned Rafidain Bank and Rasheed Bank and then sold to the Central Bank of Iraq at a lower price.

Due to the government's urgent financial demands, the public financial situation's rapid decline, and the capital market's perception of Iraq, the government was compelled to use this indirect monetary process, which comprised 34.6% of the total domestic debt in December 2016. Yet, because of the budget deficit brought on by a lack of liquidity and the ongoing decrease in oil prices, the state's central bank must engage in indirect monetary operations in the domestic banking industry. The CBI's investor base comprised 59.0% of all domestic debt as of December 2016 [13].

A. Interest risk rate: High-interest risk is indicated by the high percentage of debt with variable prices in 2015 and 2016. The average time taken to repay the external debt was 15.1 years. The year-long debt resettlement rate was 11.5%. Interest risks will increase in the next phase of tightening the US Federal Reserve's monetary policy. This indicates a variable debt ratio of 10.2% of total external debt for 2004-2021, which means increased interest risk. While a large proportion of debt with variable interest rates is rising, the actual interest rates for external debt in 2016 were 3.0%, deficient and well below current interest rates for Iraqi risk of over 700 basis points at the end of 2016. Despite the increase in a large part of the variable debt rate, this rate is still growing, and indirect cash operations by the CBI are still expected to be necessary for government financing, but at a much smaller size than in 2016.

Table 4

Changes in Iraq's real, nominal and exchange rates for the period (2004-2021)

Years	Nominal interest rate	Real Interest Rate	Exchange Rate
2004	9,5	(17,5)	1,453.00
2005	15,5	(21,5)	1,472.00
2006	19,5	(33,7)	1,475.00
2007	23,5	(7,3)	1,267.00
2008	18,5	15,8	1,172.00
2009	12,33	15,13	1,171.00
2010	9,75	7,35	1,170.00
2011	9,50	3,9	1,170.00

2012	9,50	3,4	1,166.00
2013	9٫6	4٫5	1,232.00
2014	9٫4	4٫4	1,214.00
2015	9٫4	4٫9	1,190.00
2016	9٫2	5٫3	1,190.00
2017	9٫5	5٫9	1,190.00
2018	9.1	5٫7	1,190.00
2019	5.1	5٫3	1,190.00
2020	4.1	4.4	1,190.00
2021	4.2	3.4	1,450.00

Source: Central Bank of Iraq, Directorate General of Statistics and Research, Annual Bulletin, Various Issues, Baghdad.

B. Exchange rate risk was difficult to determine the exchange system, particularly in countries such as Iraq that use a fixed exchange rate as monetary policy because they need more financial depth to participate in inflation targeting through interest rate policy. Because of this, Iraq's effective exchange system -- which serves as the basis for judging monetary policy -- is one in which the exchange rate promotes stability.

The US dollar accounts for 56.2% of the total currency composition of the external debt, followed by the Japanese yen (17.6%) and the euro (15%). Since the Iraqi dinar is almost tied to the US dollar, the currency risk is expected to be relatively low. The Iraqi external debt portfolio is resilient to higher interest rates. There should not be too much currency risk, and the debt portfolio should be completely stable. As a result, it won't be easy to integrate many of the fixed exchange methods used before 2003. Therefore, monetary policy officials have sought to implement a price structure that is consistent with current trends and supports the stability of the currency's value. Local currency.

The government, therefore, depended on a controlled floating exchange rate regime to maintain monetary stability. The Central Bank governs the unfettered exchange subject to the Supply and Demand Act. To ensure this success, the Central Bank has implemented a daily auction program to buy and sell foreign currency. The level of reserves, which dropped from $77.8 billion in 2013 to less than two-thirds in 2021, will determine the risks associated with foreign exchange.

Table 5

Changes in Iraq's official and parallel exchange rate for the period (2004-2021)

Years	**Auction exchange rate**	**Parallel exchange rate**
2004	**145,2**	1453

2005	**146,9**	1472
2006	**146,7**	1475
2007	**1255**	1267
2008	**1193**	1203
2009	**1170**	1182
2010	**1170**	1182
2011	**1170**	1196
2012	**1166**	1233
2013	**1166**	1232
2014	**1188**	1214
2015	**1190**	1228
2016	**1190**	1229
2017	**1190**	1200
2018	**1190**	1200
2019	**1190**	1200
2020	**1190**	1200
2021	**1450**	1480

Source: Central Bank of Iraq, Directorate General of Statistics and Research, various annual bulletins, Baghdad.

4FO Measurement and analysis of the impact of monetary and financial variables on Iraq's public debt for the period 2004-2021

The quantitative (normative) analysis method is used to measure the relationship between the economic variables covered in the research and their compatibility with the validity or invalidity of the research hypotheses. 12 Eviwes will be used to calculate the correlation between cash variables (exchange rate), finance (budget deficit surplus), and oil prices in Iraq from 2004 through 2021.

1. Analysis and description of the model for the impact of financial and monetary factors on Iraq's government debt over time (2004-2021)

The objective of the standard model is to analyse and predict a range of relationships between different economic variables that represent a particular economic phenomenon. Since these relationships may be causal, and any change in a single variable may lead to changes in other variables, it is essential to identify the strengths and weaknesses of these relationships.

A. Mathematical Model

The standard model for independent and affiliated research variables will be developed according to the following structural formula for estimating and assessing the correlation between government debt and monetary and financial variables:

GD =f (AIM, ARE, ASP, EXRA, NO, OP)
GD = a+β0+β1 AIM +β2 ARE +β3 ASP +β4 EXRA +β5 NO+β6 OP+ U
Short-term transactions: β0 ،β1 ،β2 ،β3 ،β4 ،β5 ،β6
The government debt (GD) represents the dependent variable, the actual imbalance (AIM) (stable at level), substantial revenue (DARE), actual expenditure (DASP), an exchange rate (DEXRA), interest rate (DNO), oil prices (DOP) represent independent variables (stable at first difference)

Table 6
Standard Variable Model

	code	VARIABLES	VARIABLES
1	AIM	Actual imbalance	**Independent Variable**
2	DARE	Actual income	
3	DASH	Actual expenditure	
4	DEXRA	Exchange rate	
5	DNO	Interest rate	
6	DOP	Oil prices	
7	GD	Government debt	**Dependent Variable**

2. Data:

In the standard analysis model, annual data for Iraq's research variables for 2004-2021 have been used based on national sources, including the Ministry of Finance, the Central Statistical Authority, the Ministry of Planning and the Central Bank of Iraq. As shown in table (7).

Table 7
Annual statements of Iraq's monetary and financial variables for the period 2004-2021

Years	Total government debt **GD**	Actual revenue **ARE**	Actual tunnels **ASP**	Actual imbalance **AIM**	Exchange Rate **EXTRA**	Oil Prices **(OP)**	Nominal interest rate **(NO)**
2004	102,670,970.00	32,989,000.00	32,117,000.00	872,000.00	1,453.00	38.26	9,5
2005	71,066,600.00	40,436,000.00	26,375,000.00	14,061,000.00	1,472.00	54.57	15,5
2006	50,101,500.00	49,056,000.00	38,807,000.00	10,249,000.00	1,475.00	65.16	19,5
2007	46,953,320.00	54,965,000.00	39,031,000.00	15,934,000.00	1,267.00	72.44	23,5

2008	45,310,920.00	80,641,000.00	59,403,000.00	21,238,000.00	1,172.00	96.94	18,5
2009	37,861,230.00	55,244,000.00	52,567,000.00	2,677,000.00	1,171.00	61.74	12,33
2010	38,371,500.00	70,178,000.00	64,352,000.00	5,826,000.00	1,170.00	79.61	9,75
2011	37,409,700.00	99,998,776.00	69,640,000.00	30,358,776.00	1,170.00	111.26	9,50
2012	34,810,840.00	119,817,000.00	90,375,000.00	29,442,000.00	1,166.00	111.63	9,50
2013	31,913,400.00	113,840,000.00	106,873,000.00	6,967,000.00	1,232.00	108.56	6،9
2014	38,352,500.00	105,387,000.00	83,556,000.00	21,831,000.00	1,214.00	98.97	4،9
2015	61,654,000.00	66,470,000.00	70,398,000.00	-3,928,000.00	1,190.00	52.32	4،9
2016	72,233,000.00	54,409,270.00	67,067,000.00	-12,657,730.00	1,190.00	43.64	2،9
2017	87,519,200.00	77,422,000.00	75,490,000.00	1,932,000.00	1,190.00	54.13	5،9
2018	82,603,699.00	106,570,000.00	80,873,000.00	25,697,000.00	1,190.00	71.34	9.1
2019	78,279,848.00	107,566,995.00	111,723,523.00	-4,156,528.00	1,190.00	64.3	5.1
2020	101,945,750.00	63,199,689.00	76,082,443.00	-12,882,754.00	1,190.00	41.96	4.1
2021	99890746	109,081,464	102,849,661	6,231,803.00	1,450.00	67.58	4.2

Source: -

- The Republic of Iraq, Ministry of Finance, Public Debt Service, various years.
- The Republic of Iraq, Ministry of Planning, National Accounts, various years
- Central Bank of Iraq, General Directorate of Statistics and Research, various annual bulletins, Baghdad.

3. Model Estimation

The model was estimated using the "OLS" micro-square approach, and it was determined from the above-estimated results that there was no moral correlation between the variables under

consideration:

GD = 4843484 -0.564 AIM + 0.638 D(ARE)- 0.547D(ASP)- 2879D(EXRA)-1471 D(NO)-45106 D(OP)

T-Statistic = (1.15) (1.145) (1.328) (0.681) (1.8107) (1.335) (1.584)

P-Value: 0.2783 0.5108 0.1003 0.211 0.144

R-squared: 0.4954 Adjusted R-squared: 0.194 Prob (F-statistic): 0.2322

The formula, using the results of the legal analysis, shows that assuming the stability of other variables, the effect of variables on public debt is very modest. It is a fragile association, and the R-squared ratio of 49% shows how weak it is. The residual effect can be attributed to financial dominance, which has had a noticeable impact on the majority of the research period, has had surplus budgets, low debt repayment rates and a lack of clearly identifiable sustainability of public debt addition. To the Paris Club debt reduction programme for Iraq's external debt before 2003.

Table 8

Estimate the model using the program (12 Reviews)

Dependent Variable: DGD
Method: Least Squares
Date: 08/20/22 Time: 22:07
Sample (adjusted): 2005 2021
Included observations: 17 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AIM	-0.564147	0.355997	-1.584697	0.1441
DARE	0.638061	0.477848	1.335280	0.2114
DASP	-0.547612	0.302429	-1.810712	0.1003
DEXRA	-28794.37	42228.97	-0.681863	0.5108
DNO	-1471601.	1107972.	-1.328193	0.2136
DOP	-451064.9	393410.5	-1.146550	0.2783
C	4843484.	4183979.	1.157626	0.2739

R-squared	0.496580	Mean dependent var	-163542.6
Adjusted R-squared	0.194528	S.D. dependent var	13828229
S.E. of regression	12410570	Akaike info criterion	35.79890
Sum squared resid	1.54E+15	Schwarz criterion	36.14198
Log likelihood	-297.2906	Hannan-Quinn criter.	35.83300
F-statistic	1.644023	Durbin-Watson stat	1.395440
Prob(F-statistic)	0.232211		

Conclusions

The research's conclusions, analysis and assessment of the data revealed a relationship between monetary financial variables and public debt default, with economic variables having the most significant influence. There was a surplus in the government budget during most research years, but it was spent due to the expansionist tunnel policy's approval and the lack of a fiscal control policy. As the Central Bank gained independence under Law 56 of 2004, a monetary policy employed an economic power payment to apply sophisticated tools appropriate for transitioning to a market economy.

The monetary authority used the currency sale window as an exchange rate adjustment mechanism and the provision of foreign exchange to the private sector to enable it to import and fill the aggregate demand gap; The monetary authority has also succeeded in mitigating the effects of public debt. And this showed in 2021 by changing the dollar exchange rate from (1190) to (1450) dinars, reducing the planned deficit in the 2021 federal budget, reflected in a decline in domestic and external public debt to fill the deficit.

The goals of the monetary authority must be supported, and the central bank's independence must be safeguarded. Adopting the rescheduling of internal debt between financial and economic authorities in accordance with the general budgetary situation in periods of deficit and surplus and taking advantage of opportunities to generate surplus revenue from higher oil prices by creating the sovereignty fund in the event of an obligation and allocating part of it to repay public debt, thereby allowing avoiding borrowing both internally and externally

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