

The Impact of Public Debt on Some Macroeconomic Indicators in Iraq: An Analysis Study for the Period 2004-2019

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Abstract

When the local economy is vulnerable to external shocks due to the rents of the Iraqi economy and its dependence on a single source of public revenues, in addition to internal shocks, which need to increase public spending and not be covered by the revenues collected, which made the financial management look for ways to finance the deficit and resort to internal and external shocks, public debt is one of the tools of fiscal policy that can be used to fund the obligation of the state budget. In particular, when the local economy is vulnerable to external shocks due to financial management and the economy, this is also due to how debt is used, which includes funding consumer spending rather than income-generating investments, which affects GDP.

Keywords: public debt, Iraqi economy, macroeconomic, Economic development.

Introduction

Public debt is one of the tools of fiscal policy to finance the deficit of the state budget, especially when the local economy is exposed to external shocks due to the rents of the Iraqi economy and its dependence on a single source of public revenues, in addition to internal shocks, which need to increase public spending and not be covered by the revenues collected, which made the financial management look for ways to finance the deficit and resort to internal and external borrowing, and that the accumulation of public debt and the burden of serving it will leave negative effects and great risks On financial management and the economy also because of the way debt is used and financing consumer expenses and not investment income-generating and affecting the GDP, as the effects exerted by the burden of debt are varied, there is the financial burden of interest, installments and benefits granted to debt instruments, as there is the economic burden and is distributed between the direct from the redistribution process and the indirect resulting from the impact of deflation on output, research has addressed the optimal size of debt through several indicators, including its size of output As a minimum (60%) and (40%) are the safe limits of external debt as it should be noted its ratio to the budget deficit and to the burden of debt, and the research came to highlight the developments of public debt in Iraq for the period (2004-2019) especially for the years in which the Iraqi economy is exposed to economic crises and the occurrence of a deficit in the general budget of the state requires coverage through internal and external borrowing, as the aim of the research is to show the impact of public debt in macroeconomic indicators and one of the most important results of the research is that the continuation of The fiscal deficit in the public budget leads to an increase in public debt and an increase in debt service burdens and drains money to pay its burdens instead of using it to finance development plans, as it concluded that the impact of internal and external debt on inflation and growth is an opposite effect, increasing internal debt leads to increased inflation and growth while increasing external debt leads to their decline,

while the negative impact of the increase in internal debt on the balance of payments was attributed to the external debt, which had a positive impact on the balance of payments. Balance of payments.

The concept of public debt

Several definitions of public debt have been given according to the point of view of this term and according to the economic interpretation of it according to successive economic theories, and is defined as the size of the debt on the state to lenders from inside and outside the state itself, and the borrower can be individuals, companies, governments and even international and regional organizations concerned with finance and cash, according to which public debt is the money borrowed by a government to face emergency conditions for the purpose of achieving the goals to enhance its general revenues to cover its expenses to finance its development projects Or to finance its current spending, and this borrowing process is often carried out through the issuance of bonds addressed to local investors and in the local currency or the issuance of bonds directed to foreign investors and in a leading currency such as the dollar and the euro or through borrowing from international, regional and other funds¹. The state's general revenues when its payments are less than its expenditures, and thus it prefers to spend to service the debt over spending on infrastructure projects and vital social services.² Expenditures.

It is also defined as the debt of the federal government or the obligation of the group of the government system, including the subnational and local level or the so-called general government. It may include public companies and others, and the public debt accumulates as a result of financing the deficits of those entities by borrowing. The total government debt is all liabilities of the government that require interest payments and debt installments. In contrast, the net government debt is the total minus the government's financial assets without the real one, and the government remembers this in the list of its financial position where The assets side represents their financial assets, including their economic deposits in national and foreign banks. The liabilities side represents the paragraphs of the government's total debt³.

The importance of public debt

The importance of public debt is represented by a set of characteristics of the economy and through the use of its tools to influence some economic variables as well as its importance through borrowing because it is a tool used by the government within its fiscal policies and follows the significance of debt from the following ⁽⁴⁾:-

- 1- It is an effective process of mobilizing savings, absorbing fiscal surpluses, and using (its proceeds) to fill the budget deficit and finance government expenditures.
- 2- The government uses public debt to fight problems, such as unemployment and depression, due to the lack of effective demand and the low level of economic activity as the government increases its financed spending from borrowing.
- 3- Financing the development process due to the lack of public revenue and the need to fund the government's economic activity
- 4- Development of social capital such as education, health, and health care requires huge investments that the government cannot meet, primarily through taxes.

¹ Imad Mohamed Ali Abdel Latif: Internal Government Debt and its Impact on Monetary Policy, Al-Mustansiriyah Journal of Arab and International Studies, No. 39, Year 2016, p. 4.

² : Christoph Rosenberg ‘ Periods of ease to findChance To process Deficits PainBalance , Finance and Development, March 2018, p. 1.

³ Ahmed Abrihi Al-Ali: Public Debt Policy and the Characteristics of the Oil Economy, Journal of Fiscal and Monetary Policies, Central Bank, 2015, pp. 4-5.

Moheeth(2015),public Debt : Meaming,Forms,and Effect,published research,p52 .⁴

In general, government borrowing, whether internal or external, offers a safe investment opportunity for savers who are reluctant to invest their money in dangerous areas and are looking for a haven for their surpluses to face uncertainties of their future income returns and the government with debt policy facilitates the recovery of part of the savings to the stream of demand and the income cycle at appropriate interest rates, and not as it is said that government borrowing displaces private sector investments, and the government's spending of the supposed debt raises The level of liquidity in banks and money markets / also enables investors to access credit ⁽⁵⁾

The political economic interpretation of public debt

The financial decision may be led to the course of politics, especially in periods of electoral competition between parties and the satisfaction of society, and those are described as unfavorable and the economy becomes more burdened with public debt as a result of borrowing, while optimal economic policy refers to the maximization of resources and gains for all joints of the economy and political tendencies may overlap with the principle of temporal preference or consumption of the same amount in the present better than in the future, for example the needs of society in 2020 were more than Looking at their needs in 2022, we find that governments increased their borrowing in 2020 and increased the debt stock as studies show that the abundance of ruling parties, consensus and the prevalence of aspiration for gains weaken fiscal discipline and form a political decision environment that moves away from the conditions for the proper management of resources and increases the likelihood of deficit and debt weight ⁽⁶⁾

The burden of public debt and its sustainability

Researchers and international and regional organizations of financial and monetary importance have found many indicators to follow up the responsibility of public debt over time, including its ratio to GDP, interest payments to revenues or expenses, debt service to GDP, the percentage of the unpaid debt to GDP, Special indicators have also been added for external debt, such as its ratio to the average exports or foreign reserves of the monetary authority, and there are particular indicators for short-term debt, and the obligation of the foreign private sector must be distinguished from the bilateral debt of multilateral organizations, and we must take into account the state of the public budget and the amount of its deficit to revenues and public expenditures as well as to GDP. Is the government budget deficit associated with the balance of payments or not, and must study and analyze where the amount of public debt is spent, whether to finance operating or income-generating investment expenses? And that's very important. Generally, the sustainability of the government's religion is based on the following equation⁷

$$WILL HE \leq \sum_B^t st, t = 0,1,2 \dots n$$

St: Basic surplus per year t

Bo: Existing Debt Foundation Year

R: Discount rate or interest rate

Bt: the discount factor in year t, which is $I/(1+r)^t$

Is the net present value of future surpluses equal to the value of the existing debt in the base year? For example, if the annual rest is one billion dollars, the discount rate is 6%, and

⁵ :Tsoulfidis,Lefteris,classical Economics and public Debt ,Rises,vol54,2007 p12 .

⁶ : Ahmed Abrehi Al-Ali, The Theory of Government Debt, Central Bank of Iraq, October 2021 p. 28-31

⁷ Ellison,Martin and scott,managing uk national Debt 1694-2017 Department Discussion paper number 833,2017,university of oxford p2

the time (25 years) is about 12. \$78 billion, and when the interest rate drops to 3%, the present value of surpluses will be 17.41, with inflation excluded in our example.

Types of public debt

Debt is classified into external and internal obligations. Suppose the state depends on financing its deficits from individuals or institutions within the country's territorial boundaries. These debts are considered internal, but if they depend on external governments or institutions, the debt becomes external.

Internal debt: It arises when the government borrows from natural and legal persons within the borders of the state regardless of their nationality, meaning when the government issues its various bonds and is addressed to local investors within the political boundaries of the state and in the local currency and subscribes to them by state nationals and residents, whether individuals or economic units, etc. Such a type is called internal debt.⁸ That is, the internal debt is just a transfer of wealth within the borders of the country and must be based when issued on a group of reasons, including the presence of surplus savings, and also requires the willingness of investors to subscribe to it and the ability of the government to maintain the internal economic balance to avoid inflation and exchange fluctuations, knowing that the government in Iraq markets most of its issuances through the mediation of the Central Bank, which markets them to government and private banks at a discount, as well as the presence of a market for government issues in the stock market with Beginning of 2018⁽⁹⁾

- 1- External debt: - The set of consequences of a state towards foreign parties that may be governments, international and regional organizations, or institutions of the foreign private sector, and the external debt arises as a result of the inability of domestic resources or the failure of the proceeds of national savings to cover the need for the required investments and the demand of the state for foreign currency (external resource gap¹⁰).
- A. Bilateral loans: - Contracts concluded by the state if one of its public institutions with another country, company, or bank, and such loans are granted after a round of negotiations between the parties on (the value of the loan, the maturity of the loan, interest, how to repay, the period of poison, the method of its expenditure. Such type of bilateral international financing may be characterized by low-interest rates if compared to interest in the cash market, containing a grace period before repayment, as lenders may require some conditions such as importing the foreign component of the project from the country granting the loan as such a thing characterizes it. Type of rescheduling if the borrower defaults on repayment due to his critical economic circumstances, negotiations for rescheduling or write-off are conducted under the auspices of the Paris and London Club and with the involvement of international organizations of financial and monetary importance.¹¹
- B. Multilateral debt: In general, this type of international organization (IMF) and (W.B.) is issued, in addition to regional and global development banks such as the Arab Monetary Fund, the Islamic Development Bank, the Japan Development Bank, and the European Investment Bank. Multilateral debt is not amenable to write-off and

⁸ Mayeh Shabib Al-Shammari, Haider Jawad Al-Morshedy, Analysis of the Impact of Public Debt on Some Economic Variables in Egypt (2001-20011) Al-Ghari Journal of Economic and Administrative Sciences Volume XII Issue 35 p. 3.

⁹ Falah Hassan Thuwaini, The Problem of External Indebtedness, Causes and Effects, p. 139

¹⁰ Salah al-Din al-Hadithi, Salem Abdul Hussein, Treasury Remittances and Their Uses in Iraq, Journal of Economic Sciences, Vol. 16, Baghdad, 2010, p. 8.

¹¹ Mayeh Shabib Al-Shammari, Hassan Karim Hamza, International Finance Foundations of Theory and Analysis, I2· 2019, p. 65.

rescheduling, extends for a long term of up to 30 years, and requires the state to be a permanent member of international or regional organizations¹².

- C. Private debt: - It includes the facilities of suppliers and exporters guaranteed by governments in addition to banking facilities from international banks
- D. Sovereign debt: - It is also called international commercial debt, where the state and companies resort to covering their needs from international debt markets (bond market) when the state issues bonds addressed to investors abroad and in non-local currency (dollar, euro, yen, pound sterling, etc.) and market them to the global bond market, and such debt is called sovereign debt, and it is required that the state has a credit rating certificate issued by international evaluation institutions such as (Standard & poor, Modys, Fithratting) to qualify for the issuance of bonds in the global market.

Characterization and formulation of the model

Characterizing the model to be estimated is one of the most critical steps of standard research from an accurate description of the variables contained in the model. Moreover, it is one of the essential stages in the preparation of the quantitative model through which the relationship between dependent (adopted) economic variables and independent (illustrative) variables included in the model that has been described in the light of the data of economic theory is determined.

The process of formulating any quantitative model in general through which it is developed from the foundations of economic theory or described in the form of linear or nonlinear equations and work to transform those defined variables into a mathematical structure that can be estimated to apply statistical and standard tests and then analysis and economic interpretation of the required relationship, then The characterization phase is the priority of the common quantitative research stages, and this process is called model building.

To build a standard model for understanding and estimating the impact of debt components (internal debt, external debt, public debt) on some economic indicators such as (inflation, growth, balance of payments, and total formation of private fixed capital) in Iraq, it can be explained as follows:

Dependent variable

- a) Inflation Y1.
- b) Y2 growth.
- c) Balance of payments Y3.
- d) The total composition of your fixed capital is Y4.

Independent variables

- a) Internal debt X1.
- b) External debt X2.
- c) Public debt X3.

Random variable

This variable includes variables that have not entered the model, i.e., contains variables that are difficult to measure, such as habits and the nature of behavior as well as external effects and their reflection on the performance of the banking system, or is considered a random variable because of the lack of some data on the variables of the study to measure.

¹² Mayeh Shabib Al-Shammari, Hassan Karim Hamza, Ibid., p. 66.

Table of independent variables (internal debt, external debt, public debt) and dependent variables (inflation, growth, balance of payments, total composition of private fixed capital) included in the standard development

Dependent variables Dependent Variables	Independent variables Independent Variables
Inflation Y1	Internal Debt X1
Growth Y2	External debt X2
balance of payments 3 AND	Public debt X3
Total Private Fixed Capital Formation 4AND	

Source: Prepared by the researcher.

3- Formulation of semantic relationships of estimated models:

The indicative relationships of the models to be evaluated are as follows:

Effect of debt indicators on inflation 1- $Y1=F(X1, X2, X3)$

Impact of Debt Indices on Growth 2- $Y2=F(X1, X2, X3)$

Effect of Debt Indices on Balance of Payments 3- $Y3=F(X1, X2, X3)$ Effect of Debt

Indices on Total Fixed Capital 4- $Y4=F(X1, X2, X3)$

It is worth mentioning that the estimation of the models described above to measure and estimate the impact of debt components (internal debt, external debt, public debt) on some economic indicators such as (inflation, growth, balance of payments, total formation of private fixed capital) for the period from (2004 - 2020), was done in a way Regression using quarterly data and in this way the characterization in this form has statistical and standard advantages that are not available in annual time series because increasing the time series in this way helps to exclude the problem of heteroscedasticity heterogeneity and the problem of auto correlation or reduce the likelihood of facing it A large extent so that it remains at a level where estimates can be relied upon being unbiased for those reasons in the event that any of the models pass the other tests this on the one hand, and on the other hand gives a more accurate and closer picture of reality using quarterly data because it reflects fact for short periods to know its changes and therefore it is closer to understanding reality or close to it for those reasons as well.

Mathematical form of estimated models:

Many times the mathematical model in its linear mathematical form may not reflect the reality of the relationship between the studied variables, so most economical and even non-economic relations are not related to linear relationships (Smooth), and when estimating by the

linear method of nonlinear relationships of model variables reflects negatively on the quality of statistical and standard tests and thus does not rely on estimates in theoretical explanations and forecasting. In other words, the assessment may be false, and to address this we use the following mathematical formulas to address that problem. The best ones will be selected when estimating based on statistical and standard tests, which are as follows:

Linear formula $Y=a+b_1X_1+b_2X_2+b_3X_3.....+U$

Double logarithmic form $\text{Log}Y=a+b_1 \text{Log} X_1+b_2 \text{Log} X_2+b_3 \text{Log} X_3...+U$

Semi-logarithmic form $Y=a+b_1 \text{Log} X_1+b_2 \text{Log} X_2+b_3 \text{Log} X_3....+U$ Inverse semi-logarithmic form $\text{Log}Y=a+b_1X_1+b_2X_2+b_3X_3....+U$

Second: Estimation and analysis of the standard model:

Test the stability of variables

To find out whether the regression was estimated and the appropriate method of estimation has performed a test of the stability of the variables of the research model through the application of the Dickey-Fuller Test For Expanded Unit Root, and the results of that test appeared as follows:

Table () *Results of the Dickey-Fuller Test for debt variables (internal debt, external debt, public debt) and some economic indicators (inflation, growth, balance of payments, total formation of private fixed capital) in Iraq for the period 2004-2019:*

Level of morale	Level of spreads	Regression shape	Appreciation		Variables
			Probabilities	t	
%1	Level	Section and general direction	0.0038	-4.433738	X1
%1	Level	Cross	0.0001	3.540830	X2
1%	Level	Cross	0.0015	-4.164470	X3
1%	Level	Cross	0.0003	-4.740010	Y1
1%	Level	Without a section and a general direction	0.0058	-2.802776	Y2
1%	Level	Cross	0.0002	-4.824522	Y3
5%	Level	Without a section and a general direction	0.0537	-1.964989	Y4

Source: *From Estimation Results Using Eviews10*

From the table above, we note that the time series for the period from (2004-2019) to estimate the impact of debt components (internal debt, external debt, public debt) on some economic indicators (inflation, growth, balance of payments, total formation of private fixed capital) by applying the unit root test (Dickie Fuller Extended Test) Dickey-Fuller Test For Expanded Unit Root that the stability of all independent and dependent variables X1, X2, X3, Y1, Y2, Y3, Y4) is at the level but with a section for each of (X2, X3, Y1, Y3, while both X1) at the station also with a section and a general direction, Y2 (Y4) was also at the level but without a section and a general trend Exogenous-None, while the significance of the level of stability of the variables was all at a significant level of 1%, except for the variable (Y4) it was at a significant level of 5%, thus accepting the alternative hypothesis. (H1: B=1) We reject the null idea (H0: B=0), which indicates that those variables for the period from (2004-2019)

of studied variables are devoid of the root of the unit and are generally stable, and this indicates an integrative relationship between the variables in the short term at least.

2- Matrix of Common Partial Correlation Transactions for Debt Variables (Internal Debt, External Debt, Public Debt) and Some Economic Indicators (Inflation, Growth, Balance of Payments, Total Formation of Private Fixed Capital) in Iraq for the Period 2004-2019:

	X1	X2	X3	Y1	Y2	Y3	Y4
X1	1.000000						
X2	0.400941	1.000000					
X3	0.442720	-0.182240	1.000000				
Y1	-0.277785	-0.585860	0.421548	1.000000			
Y2	0.133574	-0.428662	0.861598	0.429923	1.000000		
Y3	0.274999	0.106301	0.292503	-	0.120228	1.000000	
Y4	0.257902	0.517555	-0.352224	-	-	0.116018	1.000000

Source: From Estimation Results Using Eviews10

Joint Integration Test

The joint integration of variables refers to the long-term equilibrium relationship between them. The Johanson method will test the standard integration, which includes two tests, the Trace Test and the Maximum Eigen Value test, which show whether it is a long-term equilibrium relationship. Since the analysis contains seven variables, if these variables are cointegrated, there will likely be more than one vector. Therefore, for joint integration, the standard integration test of the model is carried out as in the following table:

Table Testing of Joint Integration of Debt Variables (Internal Debt, External Debt, Public Debt) and Some Economic Indicators (Inflation, Growth, Balance of Payments, Total Private Fixed Capital Formation) in Iraq for the Period 2004-2020

Nullity Hypothesis	Alternative hypothesis	Statistical value	Critical Value
Null hypothesis	Alternative heypo.	Statistic value	Critical value
Trace Test			
r = 0	r > 1	241.3652	125.6154
r = 2	r > 2	159.1046	95.75366
r = 3	r > 3	106.9948	69.81889
r = 4	r > 4	71.65876	47.85613
r = 5	r > 5	40.49932	29.79707
r = 6	r > 6	16.23111	15.49471
Maximum Own Value			
r = 0	r = 1	82.26056	46.23142
r = 1	r = 2	52.10981	40.07757
r = 2	r = 3	35.33607	33.87687
r = 3	r = 4	31.15944	27.58434
r = 4	r = 5	24.26821	21.13162
r = 5	r = 6	16.22309	14.26460

Source: From the researcher's work based on the results of the estimate using Eviews10

From the data in the table above, we note that the results of the Johansson test indicate that there is more than one vector for the selection of joint integration by exceeding the statistical value over the critical importance of all vectors and at a significant level of 5% (Trace test indicates six cointegrating eqn(s) at the 0.05 level) except for only one variable. In contrast, the Maximum Eigen Value Test showed the existence of 6 vectors if the statistical value was more significant than the critical value. Except for the last vector, at a substantial level of 5% (The max-eigenvalue test indicates six cointegrating eqn(s) at the 0.05 level), which means a long-term equilibrium relationship between most study variables.

4- Results of estimating the impact of debt components (internal debt, external debt, public debt) on some economic indicators such as (inflation, growth, balance of payments, and total formation of private fixed capital) in Iraq for the period 2004-2019

Estimating the impact of debt components (internal, external, and public debt) on inflation.

From the table, the results of the half-logar formula of the estimated model indicate that the significance of the parameters of independent variables (LOGX1, LOGX2) in their effect on the dependent variable Y1, was significant at the level of 1%, while the significance of LOGX3 and the constant constant at statistically acceptable levels was not proven, and therefore it can be said that if the internal debt changes X1 by 1% leads to an increase in inflation by 34.2295%, while in the case of an increase in external debt X2 by 1% leads to a decrease in inflation by -24.5679%, and the fact that the results seem to have the opposite effect as the internal debt leads to an increase in inflation while the external debt leads to a decrease in inflation and the difference between them is the net impact on inflation in general, and in terms of the effects of total debt on inflation did not count on the estimated parameter for its insignificance, as for the value of the multi-adjusted determination coefficient R^2 Approximately 63% of the changes in the dependent variable are attributable to independent variables and that the remaining percentage of the correct one of the change in the dependent variable is attributed to other variables that were not included in the estimate or attributed to random factors, which is confirmed by the significance of the model as a whole by choosing F. Test at the level of 1%, and the value of the D.W test indicates that it is located in the area of indecisiveness regarding the effect of the self-correlation problem on the estimated model.

Analysis of the results of estimating the impact of debt components (internal debt, external debt, public debt) on growth. The table indicates that the half-formula of the model is the best result and was moral (internal debt) at a moral level of 5%. In contrast, morality (fixed, external obligation) was at an honest story of 1%, while character (public debt) was not proven at statistically acceptable levels. Thus, it can be said that in the case of an increase in (internal debt) by 1% leads to an increase in growth by 69.2904%, while in the case of an increase in (external debt) by 1%, it leads to a decrease in growth by -42.0757%, and the fact of this result confirms what is wrong with the estimate of (indicators of debt on inflation) and that the results have the opposite effect as the internal debt leads to an increase in the debt and while the debt is the same as the debt is the same as the internal debt leads to a rise in the internal debt and the fact that the debt leads to the increase in the internal debt The above can be explained that there is a positive impact of internal debt on inflation and growth and the reason is that internal borrowing leads to an increase in government expenditures leading to a rise in inflation, while the increase in development may be some of them nominal and not confirmed as a result of the increase in prices this on the one hand, and may be The use of debt, whether external or internal, to replenish operating expenses and not for productive investment expenses on the other hand, and this is the most likely explanation for this phenomenon, but in terms of the impact of total debt on growth, the estimated parameter was not considered for its insignificance for the same reasons mentioned. The value of the adjusted multiple-determination coefficient was approximately 68% of changes in growth attributable to independent variables, and 32% of changes in development were attributed to other variables that were not included in the estimate or to random factors.

This is confirmed by the significance of the model as a whole by selecting F. Test at the level of 1%, and the value of the D.W test indicates that it is located in the area of indecisiveness regarding the effect of the self-correlation problem on the estimated model.

Analyze the results of estimating the impact of debt components (internal debt, external debt, public debt) on the balance of payments.

From the results included in the table, the half-logarithmic formula was also the best formula for estimation, and the morale of the parameters of the estimated independent variables (internal debt, external debt, public debt) all including (fixed) was evident in their impact on the dependent variable (balance of payments) at a significant level of 1%, and that in the event of a change (internal debt) by 1% leads to a negative impact on the balance of payments by 31.6839 % This indicates that the increase in internal borrowing for operational purposes leads to an increase in spending and therefore may lead to a rise in imports, which reflects negatively on the balance of payments, while in the case of an increase (external debt) by 1% leads to a positive impact on the balance of payments by 14.7973%, and this result is consistent with the economic logic as external loans represent the entry of capital into the country and are recorded on the positive side of the balance of payments, and when increasing (public debt) By 1% leads to a positive impact on the balance of payments by 34.1732%, and the results have an opposite effect as the internal debt leads to a negative impact on the balance of payments while the external debt leads to a positive impact on the balance of payments and the difference between them is the positive effect due to the multiplier on the balance of payments in general. The value of the modified multiple-determination coefficient was 21%, i.e., the same percentage attributed to the change in the balance of payments to independent variables (internal debt, external debt, public debt), and 79% of the difference in the balance of payments was attributed to other variables that were not included in the estimate or attributed to random factors. The significance of the model as a whole is inferred from the choice of the F. Test at the level of 1%, and the value of the D.W test indicates that it is located in the area of indecisiveness regarding the effect of the self-correlation problem on the estimated model.

Analyze the results of estimating the impact of debt components (internal debt, external debt, public debt) on (the total formation of private fixed capital).

It is also clear from the table that the half-of-the-way formula of the model is best represented by the effect of the components of debt (internal debt, external debt, public debt) as independent variables on (the total formation of private fixed capital). As a dependent variable based on statistical and standard tests despite the low morale of some independent variables, if the significance of the parameters of the effect of independent variables on the dependent variable has not been proven, except for the parameter (external debt), if it is at a significant level of 1%, and therefore in the case of an increase in (external debt) by 1% leads to a positive impact on (total formation of private fixed capital) by 5.6759%, This result is consistent with the economic logic, as external loans represent the entry of money into the country, which may be in the form of foreign investments, especially since some countries, including the Gulf countries, have converted part of their debt into assets inside Iraq, which may reflect positively on the formation of private capital, as for the impact (internal debt, total debt) on (complete formation of private fixed capital), the estimated parameters of their insignificance have not been counted. The value of the modified multiple-determination coefficient is that approximately 50% of the change in (total private fixed capital formation) is due to independent variables (internal debt, external debt, public debt) and that 50% of the change in (total private fixed capital formation) is attributed to other variables that have not been included in the estimate or attributed to random factors. By selecting F. Test, the significance of the model as a whole is evident at the level of 1%, and the value of the D.W test indicates that it is located in the area of inconclusiveness regarding the effect of the self-correlation problem on the estimated model.

Table: Results of estimating models of the impact of debt components (internal debt, external debt, public debt) on some economic indicators such as (inflation, growth, balance of payments, and total formation of private fixed capital) in Iraq for the period 2004-2020

Independent Variable	Dependent Variable: Y1		Dependent Variable: Y2		Dependent Variable: Y3		Dependent Variable: Y4	
	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic	Coefficient	t-Statistic
C	1.30858	0.1103	-195.032	-6.2543**	-30.1183	-3.0778**	4.5117	1.0341
LOGX1	34.2295	2.7996**	69.2904	2.1542*	-31.6839	-3.1395**	-5.7233	-1.2718
LOGX2	-24.5679	-4.9695**	-42.0757	-3.2351**	14.7973	3.6266**	5.6759	3.1193**
LOGX3	-17.3796	-1.6597	23.0773	0.8377	34.1732	3.9513**	2.3597	0.6122
R ²	0.645019		0.693419		0.249150		0.520902	
R ⁻²	0.628380		0.679048		0.213954		0.498445	
F	38.76385**		48.25137**		7.078916**		23.19482**	
D.W	1.116656		1.179912		1.275474		1.097388	

Source: From Estimation Results Using Eviews10

* The result is significant at the level of 5%

** The result is significant at the level of 1%

du=1.70 , 1.52 =dL , k=3 , n=70 :D.W

It was also found that internal and external debt affects macroeconomic variables, especially inflation and output. It was found that internal debt increases inflation and growth. In contrast, the opposite effect of external debt on inflation and maturation was found. At the same time, the increase in government borrowing appeared to affect the balance of payments through increased imports negatively.

As for the recommendations in the case of the recommendations, the financial management must develop a fiscal policy consistent with monetary policy, especially with shocks, the aim of which is to address the deficit in a way that reduces the need for debt without contradicting the functions of the public budget in the field of development and stability, as the researcher recommended the need to develop the government securities market because it increases the efficiency of public debt management and the government becomes more aware of the cost aspect when the actual value of the total returns to be paid to finance the debt appears, The researcher also recommended the need to work hard to expand and diversify sources of income and not to rely on the oil resource and pay attention to other revenues to occupy acceptable relative importance in the formation of public revenue.

Conclusions

Public debt is one of the tools of fiscal policy to address the internal and external shocks of the Iraqi economy due to the unilateralism of the economy and its rents, and this was evidenced by the increase in internal and external borrowing for the years of shocks, especially 2014-2016, and 2019, and increasing the level of public debt may expose the economy to risk in the event that its ratios exceed the ratios or benchmark indicators indicated by research and studies related to public debt, and that the continuation of borrowing leads to an increase in the volume of debt on the economy and hinders development efforts and what The consequent adverse economic and social effects and the increasing importance of funds allocated to repay the burden of debt instead of using it to finance development, as the adoption of the financial management in Iraq of an expansionary fiscal policy led to an increase in the internal and external public debt, especially when Iraq was exposed to the shock of the Mazdj (2014-2016) or the shock of the Corona pandemic in 2019 and the decline in public revenues against the requirements of increased spending, that the Installments and interest on servicing public debt today constitute a large proportion of operating expenses or oil revenues and that Iraq did not invest the debt in income-generating areas but rather tends to finance consumption, all of which did not create new financial surpluses used to pay off debt burdens. In general, the fluctuations of the oil resource and social and political pressures put before the economic and monetary management strategies to raise spending, and the compound growth rate of domestic debt between 2004-2019 (%15.47) where it was at the level of (4.4 billion \$) in 2004 to reach (70.21 billion \$) In 2020, while the compound growth rate of external debt (-0.04 %) and 2020 reached (23.60 billion \$) and public debt as at the end of 2020 constitutes 44.25% of GDP and foreign reserves 41.8 % and oil revenue 95 %

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