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THE IMPACT OF MONETARY FINANCE IN THE GENERAL BUDGET IN IRAQ

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Abstract:

The study addressed Monetary Finance policy as a macroeconomic policy to confront crises in Iraq and selected countries. Monetary Finance involves direct transfer of funds from the central bank to the central government in exchange for government securities (deductible transfers) provided to the central bank. Monetary Finance also includes creating money by the central bank to finance public spending, cover deficits and government debt at low interest rates, usually lower than the market rate. The study utilized the Financial Crisis with Dummy variable - NARDL model to analyze the impact of monetary finance on the general budget. The study found that monetary finance had a positive effect on financing deficits and public debt in Iraq. However, it led to an increase in the money supply, resulting in higher inflation levels especially after 2020. The study aimed to understand monetary finance as a policy imposed by governments on central banks to finance public expenditure during crises. and the study lies in how monetary finance contributes to addressing crises affecting the Iraqi economy such as financial deficits and rising public debt. Monetary Finance also increases the monetary base, leading to inflation and weakening the control of the Iraqi Central Bank.

Keywords: Monetary Finance, General Budget, Asymmetric Non-linear Autoregressive Distributed Lag (NARDL

THE PROBLEM

Financial, health, and political crises worldwide have resulted in a deficit in the Iraqi general budget. Confronting crises often involves increasing public expenditure, facilitated by Monetary Finance.

THE HYPOTHESIS

There is a relationship between Monetary Finance and the net general budget in Iraq. Monetary Finance addressed financial and health crises in the Iraqi economy by financing deficits during the period 2015-2022 but weakened the independence of the Central Bank in targeting inflation.

OBJECTIVES

The study aims to understand Monetary Finance as a policy imposed by governments on central banks to fund public expenditures in response to crises or shocks that occur from time to time. Additionally, the study also aims to clarify the relationship between Monetary Finance as a tool used by the Central Bank of Iraq and its impact on the general budget and some macroeconomic variables. The Financial Crisis model with Dummy variable - used NARDL was utilized to demonstrate the importance of Monetary Finance from the Central Bank of Iraq to the central government in facing crises that occur periodically.

1- INTRODUCTION

Monetary Finance (MF) has become more prominent as a potential macroeconomic policy to address crises affecting advanced and developing economies. MF entails the direct transfer of funds from the central bank to the central government, or creating money by the central bank to finance public spending against government securities. The global economy has faced several crises over the past decade and a half, including the global financial crisis of 2008

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and the health crisis of 2020. Central banks responded to these crises by lowering interest rates and utilizing unconventional monetary tools to facilitate MF in many economies. These measures helped mitigate the impact of crises on the economy, especially the budget deficits of countries. However, MF has led to undesirable effects on economic growth sustainability, such as increased inflation rates and public debt levels.

1-1 Overall Concept of Monetary Finance

MF is defined as increasing government budget resources through the central bank expanding the money supply or creating money by central banks to finance public expenditure by directly purchasing government debts (bonds).

MF is known as funding the general budget deficit by the central bank resulting from increased public spending with a significant sovereign debt owed by the central government. The last definition focuses on the impact of MF on the budget, reflecting the importance of liquidity provided by central banks for government expenses.

MF can be defined as the process of transferring funds from central banks to the government directly or indirectly. It is resorted to during economic crises that lead to increased government expenditures for mitigation. MF works to create and deploy low-cost funds from central banks to governments to address and facilitate public debt and budget deficits. In Iraq, MF necessitates three essential conditions, namely a gradual increase in the monetary base, equivalent or lower interest than the real market interest rate, and the central bank's inability to reject deducted government transfers.

1-2 Types of monetary financing in central banks

Monetary finance can be divided into two main types: direct and indirect, as illustrated (DeGrauwe, 2020) .

A- Direct monetary finance : Creating credit for a government account through a loan transaction without collateral, And Purchasing government bonds from the primary market.

B- Indirect monetary finance : Transfer finance occurs central banks transfer profits surplus ,resulting from profits generated from open market operations. And Reinvestment financing occurs

2- MF Policy in Iraq: General Introduction

2-1 CBI's Crisis Management Mechanism: Objectives and Tasks

The Iraqi economy has witnessed numerous crises and shocks that occurred globally after 2003, negatively affecting the reality of the Iraqi economy. This is due to Iraq's dependence on oil revenues to meet government expenditures from general revenues. This resource relies on external changes that affect and reflect on the reality of global oil markets. Each time Iraq emerged from a shock, it either awaited the rise in oil prices in global markets or turned to domestic and external borrowing to bridge the gap in the federal general budget.

The recent two crises marked a significant turning point in the economy, including the dual crisis (severe recession and the war against the terrorist ISIS) in 2014 and the health crisis in 2020 leading to a complete halt in global trade. In both crises, oil prices significantly dropped, resulting in decreased general revenues. Government spending increased, including military operations, social assistance, salaries, and wages, especially the excessive ones for the three presidencies. The government undoubtedly resorts to borrowing as the primary solution to address the budget deficit. At times, internal borrowing occurs through private banks or indirectly from the Iraqi Central Bank by deducting treasury transfers, issuing bonds managed by the Ministry of Finance and supervised by the Iraqi Central Bank, and deducted by government banks. On other occasions, the government seeks external borrowing from financial institutions (such as the World Bank, IMF) and other countries like Japan, Germany, and others. Therefore, internal and external borrowing generates public debt managed by the Iraqi Central Bank (acting as the financial agent for the government), administering and settling it periodically through the government's account at CBI.

2-2 Analysis of Types of Monetary Finance in Iraq

MF in Iraq became apparent in 2015 when the Central Bank deducted central treasury transfers due to the sharp drop in oil revenues following the global recession crisis. The significant increase in general expenditures was due to the government's commitments towards current and investment spending, in addition to exceptional expenses for military spending, hosting displaced individuals, and more, resulting in actual deficits in 2015 and 2016. Consequently, the Iraqi government turned to the Central Bank to address the difficult financial conditions.

The situation further escalated in 2020 due to the health shock caused by the COVID-19 crisis, leading to global trade closures, reduced global aggregate demand causing decreasing demand for oil in global markets. This negatively impacted the Iraqi economy heavily reliant on oil revenues, accounting for about 92% to meet budget expenditures in the general budget.

Furthermore, apart from the mentioned points, the government did not suffice with the indirect intervention of the Central Bank to finance the general budget deficit but indirectly urged the Central Bank to undertake initiatives on its behalf. This constitutes MF, as these initiatives are within the governments' jurisdiction to stimulate the economy.

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It is noteworthy that the Iraqi Ministry of Finance began pressuring the Central Bank in 2020 and converted internal debt - the Central Bank's debt to the central government - into long-term debt since 2015 to date, with repayment in installments or payments. The Ministry of Finance is responsible for selecting the repayment time and interest rate. However, in reality, it is renewed annually, with partial payments made between periods. After 2020, the government did not repay any amount of the debt, despite the surplus achieved in 2022. Hence, the features of the MF policy in Iraq have become clear (CBI, 2022). The following provides an explanation of the types of MF in Iraq as follows:

2-2-1 Deduction of Treasury Transfers

MF are considered a tool of public debt and are financial instruments issued in a format for the holder, with maturities ranging from (3) months to one year. Therefore, they are short-term debt instruments that are traded in the secondary market (stock market) on a discount basis. Usually, their selling price at the initial issuance is lower than their market value, and the difference represents the return on the transfer, which is determined based on supply and demand forces at the time of subscription. They are characterized by high yield and liquidity and have zero risk (Dagher et al., 2022). However, in Iraq, these instruments have turned into annual maturities, and their interest rates are determined by the Ministry of Finance (central government) that has imposed financial dominance over the monetary authority in the country. The MF funding provided to the government by the end of 2022 amounted to about 44 trillion Iraqi dinars as shown in Table (1):

Table (1) MF transfer discounts as a form of cash funding in Iraq for the period (2015-2022).

The Bank	Year of release	Renewal date	Due date	The rate %	The amount of the treasury transfer
Rafidain	2015	2021 Feb 23	2022 Feb 22	2	1,000,000
Rafidain	2015	2021 Mar 25	2022 Mar 25	2	2,331,088
Al Rasheed	2015	2021 Mar 29	2022 Mar 28	2	1,094,305
Rafidain	2015	2021 Aug 18	2022 Aug 17	5	100,000
Al Rasheed	2015	2021 Aug 18	2022 Aug 17	5	500,000
Rafidain	2015	2021 Nov 4	2022 Nov 3	5	400,000
Al Rasheed	2015	2021 Nov 10	2022 Nov 9	5	200,000
Al Rasheed	2016	2021 Jan 24	2022 Jan 23	5	2,000,000
Rafidain	2016	2021 Feb 14	2022 Feb 13	5	2,000,000
Al Rasheed	2016	2021 Mar 14	2022 Mar 13	5	1,000,000
Al Rasheed	2016	2021 Jun 19	2022 Jun 18	5	500,000
Rafidain	2016	2021 Oct 9	2022 Oct 8	5	500,000
Al Rasheed	2016	2021 Oct 29	2022 Oct 28	5	1,000,000
Rafidain	2016	2021 Dec 6	2022 Dec 5	5	1,000,000
Al Rasheed	2020	2021 Dec 26	2022 Dec 25	5	500,000
Rafidain	2020	2021 Jun 28	2022 Jun 27	2	500,000
Rafidain	2020	2021 Jun 28	2022 Jun 27	5	500,000
Al Rasheed	2020	2021 Jun 28	2022 Jun 27	2	500,000
Al Rasheed	2020	2021 Jun 28	2022 Jun 27	4	59,250
Al Rasheed	2020	2021 Jun 28	2022 Jun 27	4	450,000
Retirement	2020	2021 Jun 27	2022 Jun 26	4	1,690,000
Retirement	2020	2021 Jun 27	2022 Jun 26	2	250,000
Retirement	2020	2021 Jun 27	2022 Jun 26	2	360,000
Rafidain	2020	2021 Jun 20	2022 Jun 19	4	59,250
Rafidain	2020	2021 Jun 20	2022 Jun 19	4	450,000
Rafidain	2020	2021 Jun 20	2022 Jun 19	4	134,250
Al Rasheed	2020	2021 Jun 20	2022 Jun 19	4	134,250
TBI	2020	2021 Jun 20	2022 Jun 19	4	940,000
Rafidain	2020	2021 Jun 22	2022 Jun 21	3	2,000,000
Al Rasheed	2020	2021 Jun 22	2022 Jun 21	3	1,300,000
Al Rasheed	2020	2021 Aug 17	2022 Aug 16	3	3,000,000
Rafidain	2020	2021 Aug 17	2022 Aug 16	3	2,000,000

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Al Rasheed	2020	2021 Nov 15	2022 Nov 14	2	8,000,000
Rafidain	2020	2021 Dec 8	2022 Dec 7	2	4,000,000
Rafidain	2021	2021 Aug 12	2022 Aug 11	2	1,000,000
Al Rasheed	2021	2021 Aug 16	2022 Aug 15	2	1,000,000
Rafidain	2021	2021 Dec 14	2022 Dec 13	2	1,000,000
Al Rasheed	2021	2021 Dec 14	2022 Dec 13	2	1,000,000
					44,450,393

Source: Central Bank of Iraq, Financial Statements, 2022, p. 35.

2-2-2 Central Bank of Iraq Initiatives

The role of the Central Bank of Iraq in supporting the development process in general and sustainable development in particular is evident through its monetary policy aimed at encouraging real investment, strengthening development opportunities by stimulating banking credit activity, directing it towards development projects, enhancing the required funding levels, and helping to improve the efficiency of operational levels and optimal use of the country's material and human resources. Additionally, the Central Bank of Iraq has adopted numerous initiatives and contributions that have a significant impact on society, leading to achieving sustainable development in its various economic, social, environmental, and technological sectors (CBI, 2023).

The Central Bank of Iraq's initiative is based on controls and instructions set by the Central Bank of Iraq and recommended to be followed by banks and borrowers from project owners. In session number 1525 in 2015, the Central Bank of Iraq decided to release 1 trillion Iraqi dinars to private banks for the purpose of financing small and medium projects, in addition to launching its second initiative of 5 trillion dinars to finance medium and large projects, thereby increasing production in agricultural and industrial sectors and establishing housing projects contributing to the development of Iraq's economic infrastructure. Additionally, the Central Bank has effectively empowered the private banking sector to play a more active role in stimulating economic activity by implementing the initiative in coordination with the Iraqi Private Banks League through private bank windows and under the coverage of the Banking Guarantees Company. The total amount of initiative funds reached about 11.493 trillion Iraqi dinars during the period (2015-2022), as shown in Table (2):

Table (2) Central Bank of Iraq Initiatives as a form of indirect MF funding during the period (2015-2022) in trillion dinars.

Year / Statement		-2015) (2018	2019	2020	2021	2022	The total
Agricultural sector	Financing Amount	30,3	26,0	4,5	10,3	102,2	173,3
	NO. Project	85	43	29	132	176	465
Industrial sector	Financing Amount	92,6	16,2	47,5	154,4	774,3	1,085
	NO. Project	360	227	216	321	568	1692
Commercial sector	Financing Amount	43,7	33,6	44,4	125,9	303,7	551,3
	NO. Project	2059	1476	1349	1498	2143	8525
Services sector	Financing Amount	18,1	18,0	60,9	100,5	128,3	325,8

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	NO. Project	725	530	434	674	871	3234
Housing sector	Financing Amount	1,624	50,1	281,7	3,231	4,171	9,357.8
	NO. Project	907	421	760	1239	2190	4190
Total	Financing Amount	1,808,7	143,9	439	3,622.1	5,479.5	11,493
	NO. Project	3229	2277	2788	3864	5948	18106

Source: Central Bank of Iraq, Open Market Operations Department, Duration Data (2015-2022). * Percentages extracted by the researcher.

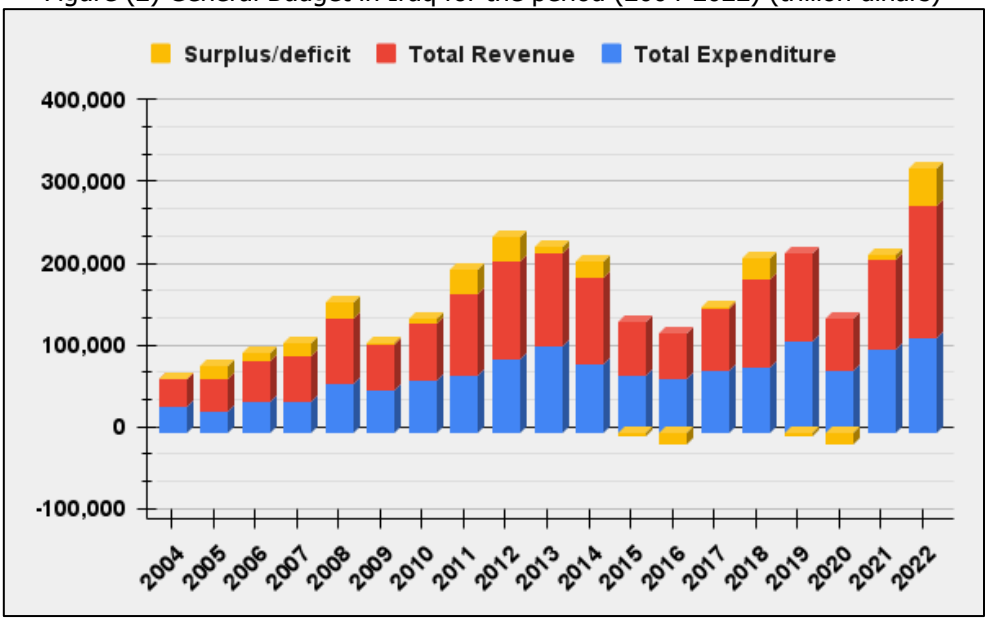
It is necessary to mention that these initiatives are the responsibility of the central government and the role of fiscal policy in stimulating and activating small and medium projects. Thus, it is a form of indirect MF in Iraq.

3- Analysis of the relationship between MF and the general budget in Iraq

The relationship between MF and the general budget becomes evident through temporary deficits that occur in Iraq. A temporary deficit in the general budget occurs due to the slow pace between revenues and general expenses, as it relies on oil revenues to finance public spending. Therefore, the government turns to the central bank or some private banks, in addition to issuing some government bonds to overcome this type of deficit, as these issues occur periodically and naturally because the Iraqi economy relies on a single commodity (crude oil) to meet government spending.

However, things changed completely when the government resorted to MF abnormally, upon approving the budget, and then including the amount of MF needed to cover its increasing public expenses before implementation. This is evident through the treasury transfers deducted since 2015 - as mentioned earlier - continuously until now. The Figure shows the general budget figures in Iraq for the period (2004-2022):

Figure (2) General Budget in Iraq for the period (2004-2022) (trillion dinars)



Source: Iraqi Ministry of Finance, Economic Department, Technical Information Section, Various Years for the Period (2004-2022). * The budget law was not approved in the years 2014, 2020, and 2022 for different reasons.

Figure (2) shows that the general budget incurred actual deficits in 2015 and 2016 due to the economic and military crisis represented by the sharp economic recession, which led to a decrease in crude oil prices - the main resource for the general budget. This coincided with the ISIS terrorist events and the increase in military expenses at that time, prompting the Iraqi government to resort to indirect cash financing to overcome the crisis.

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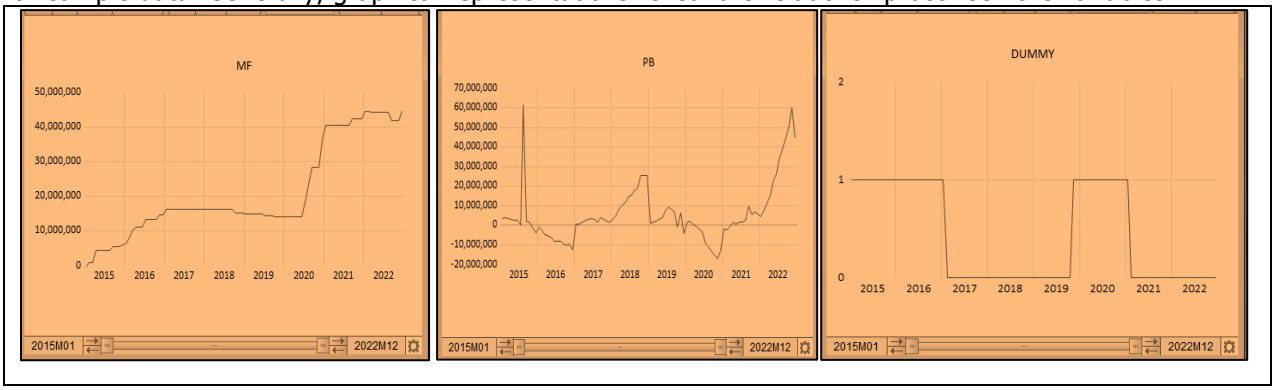
During the period (2019 - 2021), there was an actual deficit due to internal (political) reasons, represented by the protests that almost shut down life in central and southern Iraq, as well as the health crisis in 2020, leading to a complete halt in global trade, causing a significant drop in crude oil prices. This forced the Iraqi government to use MF (treasury transfers deduction) to overcome the crisis, which extended until the end of 2021. Public expenses - especially current ones - reached record levels to address social burdens such as increased health and social care expenses.

3- Assessing the Impact of the Relationship between MF and the General Budget in Iraq

3-1 Justifications for Model Selection

The selected standard model reflects financial crises, which countries turn to during financial crises. To measure the financial crisis (shock) in line with the Iraqi economy, three signals were identified, integrating them with the NARDL methodology, explicitly showing the cumulative effect of variables in the model. This aligns with the cumulative impact paragraphs on prices highlighted in the analytical chapter.

The NARDL is a modern and flexible model in dealing with variables. It provides clear results on the cumulative impact and shocks resulting from financial crises, making it suitable for economic measurement of thesis variables. The researcher will utilize the NARDL model by integrating it with dummy variables representing financial and health crises to determine long and short-term dynamics. Before conducting standard tests, it is essential to examine the research sample data. Generally, graphical representations reveal the relationship between the variables:



Source: The researcher relies on outputs from Eviews 13.

Each graph shows an increasing trend. There is a strong correlation between (MF) and the general budget surplus (PB). The dummy variable appears to show the deficit crisis in 2015 and 2016, as well as the health crisis year. The natural state in the economy is represented by a straight line parallel to zero.

To apply the standard model to the variables, the relationship between MF and the general budget surplus is used. The impact of the independent variable on the dependent variable is tested.

4-2 Economic Measurement Results of the Model

4-2-1: Stationary Test (Unit Root)

Testing the stationary of time series variables is done before conducting any economic measurement test to determine the optimal model for variable testing.

Table (4) Unit Root Test - Augmented Dickey-Fuller (ADF).

Variable	Level			1st Difference		
	Intercept	Trend and Intercept	None	Intercept	Trend and Intercept	None
	Prob.	Prob.	Prob.	Prob.	Prob.	Prob.
PB(I)	0.0457	0.0667	0.0108			
MF-I(I)	0.8703	0.7926	0.9537	0.0000	0.0000	0.0000

Source: The researcher relies on the outputs of the program (Eviews 13). It means the significance test at a significance level (5%).

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Through Table (4) for testing the unit root, the stationary of the time series of the study variables was shown, as the time series for the independent variables (Monetary Finance) did not stabilize (non-stationary) at the level but became stationary (stable) after taking the first differences (1st Difference). As for the dependent variable, the net public budget balance stabilized at the level.

4-2-2 Estimation of the NARDL Model

Through tests of the stationary of the time series of the study variables, which became stationary after a mix of level and first differences, the best model that fits those results is the NARDL model. It can be applied when there is a mix of level stationary data with first difference stationary data or when the stationary is similar. As follows:

Table (5) Results of the estimated model used

(Dependent Variable: D(PB
Method: ARDL
Date: 02/07/24 Time: 10:52
Sample: 2015M02 2022M12
Included observations: 95
(Dependent lags: 1 (Automatic
Automatic-lag dual non-linear regressors (0 max. lags): MF BD IN
Static regressors: DUMMY
(Deterministics: Unrestricted constant and no trend (Case 3
(Model selection method: Akaike info criterion (AIC
Number of models evaluated: 1
(Selected model: ARDL(1,0,0,0

Variable	Coefficient	Std. Error	t-statistic	Prob.*
PB(-1)	-0.632670	0.104520	-6.053086	0.000
@CUMDP(MF)	0.701966	0.474964	1.477935	0.1431
@CUMDN(MF)	-13.68586	3.225764	-4.242672	0.0001
DUMMY	-4597552	2674485	-1.719042	0.0892
C	8497522	4008638	2.119803	0.0369
R-squared	0.312456	Mean dependent var	433115.9	
Adjusted R-squared	0.248499	S.D. dependent var	9937945.	
S.E. of regression	8615122.	Akaike info criterion	34.86588	
SUM squared resid	6.38E+15	Schwarz criterion	35.10783	
Log likelihood	-1647.129	Hannan-Quinn criter	34.96364	
F-statistic	4.885370	Durbin-Watson stat	2,207457	
Prob(F-statistic)	0.000054			

Source: The researcher relied on the outputs of the program (Eviews 13).

Table (5) shows the test of the nonlinear regression model for distributed lag periods NARDL by integrating it with the dummy variable expressed by a number (40) months representing the crises that the Iraqi economy has faced. The results demonstrated the distinguished estimated model that aligns with the relationship between MF and the net public budget balance. The coefficient of determination reached (31.2%), meaning that the independent variable (MF) explains about (31.2%) of the variations in the dependent variable (net public budget balance), while (68.8%) of the variations are attributed to other external factors not included in the model, such as fluctuations in oil prices globally, the 2020 health crisis, and others. Additionally, the F-statistic reached (4.885370) with a very high significance for the model at (0.000054), indicating complete acceptance of the model.

According to the NARDL model interpretation, the parameter values for each variable (positive P and negative N) are divided by the dependent variable parameter to explain the results. Dividing the positive MF parameter (0.701966) mentioned in Table (5) by the net public budget balance parameter (0.632670-) shows a positive result (1.109529), meaning that a (70%) increase in MF leads to a (1.10%) decrease in the public budget deficit, as increased funding to cover the deficit comes from rising oil revenues in the global markets. Similarly, dividing the negative MF parameter (13.68586-) by the net public budget balance parameter shows a positive outcome (21.63190), meaning that a (13.6%) decrease in MF results in a (21.6%) increase in the net public budget, aligning with the economic reality in Iraq.

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Finally, the results of the dummy variable in the model showed a significant prob with a negative parameter. When the dummy variable parameter (4597552.2-) is divided by the net public budget balance parameter, a positive result (7266904.07) emerges, indicating that crises (security, financial, and health) directly impacted the public budget. These crises resulted in a deficit in the Iraqi public budget being mitigated through MF, particularly by deducting from Treasury remittances. Considering the number of crisis months represented by the dummy variable (40 months) during the period (2015-2022), approximately 29 trillion dinars were affected, indicating the amount of MF provided by the Central Bank of Iraq to address the crises within the study period. This aligns with the MF value of about 30.6 trillion dinars in 2022.

4-2-3 Joint Integration Test according to the Financial Crisis with Dummy Variable Methodology - used NARDL

The bound test is used as a first step to identify the existence of a long-term equilibrium relationship between study variables. The results of this test showed that the calculated value of (F) reached (5.549510), which is greater than the tabulated value at the minimum and maximum at a significance level of (1%, 5%, and 10%) respectively. This means we accept the alternative hypothesis and reject the null hypothesis, which suggests the presence of a long-term equilibrium relationship between the dependent variable of the general budget net balance and independent variables (monetary finance) as shown in Table (6).

Table (6): Bound Test of Joint Integration for the NARDL Model.

Test Statistic	Value	K
F-statistic	5.549510	6
Prob	I0 Bound	I1 Bound
%10	2.236	3.381
%5	2.627	3.864
%1	3.457	4.943

Source: The researcher relies on the outputs of the (Eviews 13) program.

Therefore, the presence of a long-term equilibrium relationship between the general budget balance and the independent variable (monetary finance) in Iraq, as this is the necessary condition test, and the sufficient condition (error correction coefficient), and its conditions indicating the existence of a long-term relationship between the variables (EViews13, blog spot, 2019).

4-3 Cumulative Dynamic Asymmetric Impact Multiplier

The cumulative dynamic asymmetric multiplier shows the asymmetric dynamic effects of positive and negative changes to the independent variable on the dependent variable. It also allows tracking the patterns of asymmetric adjustments that occur in the dependent variable after both positive and negative changes to the dependent variable, as well as knowing when the effects are symmetric and when they are asymmetric and what is the duration necessary to make the effects asymmetric. The cumulative dynamic multiplier also shows the impact of shock development on the dependent variable and its related results. When a shock is applied to the dynamic system, it can affect the independent variables and the future results over a long period of time, and the dynamic accumulation reflects how this shock evolves over time and its continuous impact on its related results (Eviews13, 2023). Figure (3) shows the cumulative dynamic impact of the monetary finance independent variable resulting from a shock of one unit on the dependent variable (the general budget balance), whether positive or negative.

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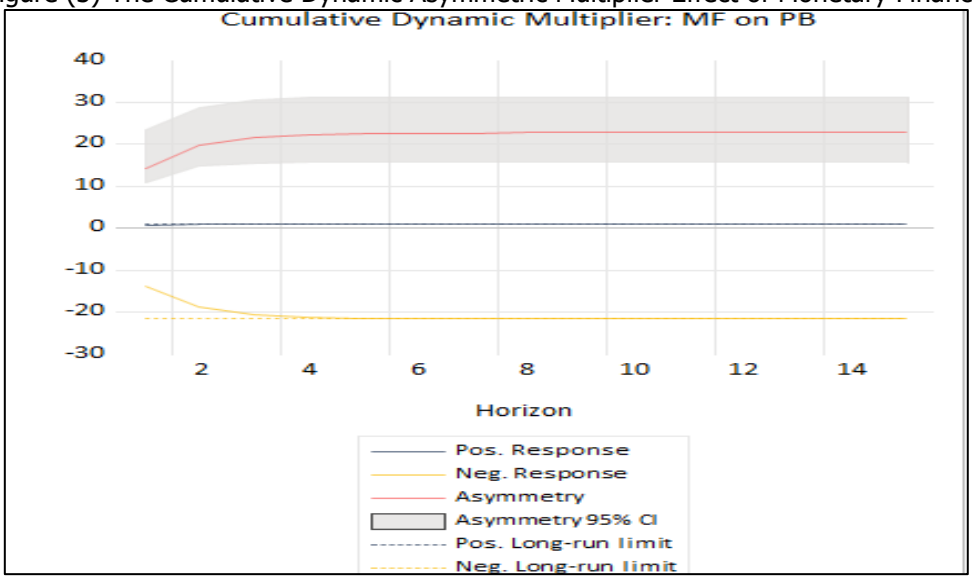
Figure (3) The Cumulative Dynamic Asymmetric Multiplier Effect of Monetary Finance



Source: The researcher depends on the outputs of the EVeiws13 program.

Figure (2) illustrates the cumulative dynamic multiplier effect of the relationship between the general budget balance and MF. The blue curve shows the positive response of the independent variable (MF) to positive changes in the general budget balance (PB). An increase in MF by (1%) leads to a 4% reduction in the deficit over 40 months. Since the response curve was above zero, this means that MF had a positive impact on addressing the budget deficit throughout the study period.

The yellow curve shows the response of the independent variable MF to a negative shock in the dependent variable PB. The curve has a negative slope, indicating that MF responds significantly to the general budget balance during crises. A 1% decrease in MF results in a 20% reduction in deficit liquidity over 40 months. The response to negative changes was more pronounced, indicating a larger response to negative changes by the independent variable MF, ranging between (11-22%).

The red asymmetry curve demonstrates the asymmetry in the dependent variable PB resulting from positive and negative shocks in the independent variable MF, remaining within positive bounds. This indicates that positive and negative changes do not symmetrically impact the model, with positive effects dominating in terms of the impact of MF on the general budget balance.

CONCLUSION

1- Monetary Finance improved spending performance in the Iraqi general budget during the period (2015-2022) and helped the Central Bank of Iraq in controlling inflation while addressing economic crises through deficit and public debt liquidity.

2- Iraqi Central Bank Law No. 56 of 2004 prohibits direct government financing but allows indirect deficit and public debt financing through deductions, as observed during (2015-2022).

3- The model used was formulated over a period of (40) months, representing the crises faced by the Iraqi economy. The results showed a long-term equilibrium relationship between MF and (PB) , And The coefficient of determination reached (31.2%), indicating that the independent variable (MF) explains about (31.2%) of the variation in the dependent variable (PB), with (68.8%) of the variation attributed to other external factors not included in the model, such as fluctuations in global commodity prices, the 2020 health crisis, and others.

Through the cumulative dynamic multiplier test of the relationship between the PB and MF, it is evident that a 1% increase in MF leads to a 4% deficit liquidity over (40) months. As the response curve was above zero, this means that MF had a positive impact on addressing the budget deficit throughout the study period.

RECOMMENDATIONS

1- It is essential to adhere to economic logic when resorting to MF policy in Iraq, limiting deductions solely to government capital expenditures to sustain public debt and reduce inflation levels in the country.

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2- Maintaining the independence of the Iraqi Central Bank as stipulated in Law No. 54 of 2004, granting it the authority to approve MF, and limiting the Ministry of Finance's use of MF only based on studies or plans aimed at stimulating productive sectors in the country.
3- Monetary policies post the complex crisis have evolved beyond their traditional role toward achieving economic stability. Therefore, updating tools and policies is crucial during exceptional times, with limited justification for regular use as they may struggle to return to targeting inflation or controlling government debts that continue to rise even in normal circumstances.
4- Correcting fiscal policy orientations in the country should prioritize using MF in exceptional times, utilizing MF with private banks independent of the Iraqi Central Bank. The primary goal should be to stimulate non-oil sectors and transition from rentierism in economic performance.

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