The Role of Monetary Policy Tools on Stability of Iraqi Economy: A Macroeconomic Analysis (2004-2018)

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Abstract

Monetary coordination and macroeconomic stability are increasingly critical for domestic and fiscal policy in the aftermath of the global financial crisis. This research investigates the impact of monetary policy on financial and economic stability following the COVID-19 pandemic's economic lockdown. This article utilized a V.A.R. (Vector Autoregressive Models) estimator for time series data models. Quarterly statistics are gathered from the first quarter of 2004 to the first quarter of 2018. Using a V.A.R. model, the study investigates the causal connections between monetary policy instruments and economic stability. The findings suggest that Iraq's monetary policy is most efficient at maintaining a target growth rate for the money supply while simultaneously controlling inflation through an equalization cap (1.8 percent). Due to the rentier structure of the Iraqi economy, the money supply had a negligible influence. Monetary authorities must monetize oil earnings in order to finance public spending. Finally, an appropriate framework for monetary management must be created that ensures monetary independence and supremacy remain unimpaired. The findings give a thorough knowledge of the links between national monetary policies and economic stability, which can eventually aid in developing nations' formulation of good monetary and fiscal policies.

Keywords

Financial Stability, Economic Stability, Monetary Policy, Macroeconomic Policy.

Introduction

In recent years, global capital markets have become more interconnected, and transactions have become more dynamic. Financial markets contribute to the efficient distribution of money and the accumulation of goods and services (Kbelah, Amusawi, & Almagtome, 2019). Iraq and other developing countries have made sustained efforts to stimulate economic growth, contain inflation, and stabilize the economy through structural reforms and a more hospitable business environment. The government is concentrating its efforts on advancing the financial sector to ensure that it continues to fulfill its vital function of providing finance to the economy, promoting industrial growth, and ensuring macroeconomic stability. The trend toward globalization necessitates several circumstances to which Iraq must adapt. Iraq has become increasingly dependent on attracting investors in a variety of sectors, including financial services provided by Iraqi commercial banks, as part of the integration process. Iraq's stock exchange, as it did previously, should prioritize depth over broad growth in the coming decade. Micro-characteristics of banks such as asset scale and capital adequacy, a bank's good liquidity status means that the bank's balance sheet has a relatively high degree of stability. This helps to reduce financial frictions caused by information asymmetry and affects the risk expectations of external investors for banks, which in turn affects banks' external financing costs or the availability of external funds, and ultimately restricts bank credit behavior (Paravisini, 2008). The effect of this mechanism is more obvious in countries with a high degree of marketization and strong market constraints. Generally, the lower the degree of information asymmetry, the lower the bank's external financing cost, and the less the bank's credit behavior will be affected by monetary policy shocks. Giordana and Schumacher (2013) used a bank optimization model to conduct data simulations and found that small and medium-sized banks with a high degree of maturity mismatch have a greater impact on their lending behavior by monetary policy shocks.

Monetary policy occupies an important place among economic policies for its outstanding role in shaping and achieving the main objectives of the economic development of countries, and economic stability is one of the priorities that different policies seek to achieve. The delay in applying the appropriate monetary policy creates an economically unstable environment, so the study highlighted the most important measures and measures adopted for monetary policy and to show its effectiveness in influencing the way in achieving economic stability and identifying obstacles to achieving the goals set for it (Hameedi, Al-Fatlawi, & Almagtome, 2021). Therefore, the study's hypothesis was that a prudent monetary policy would contribute to the activation of economic activity and economic stability if there was an appropriate economic environment. The study aims to

explore the role of monetary policy after the transformation in Iraq in achieving economic stability through the impact of its various instruments on indicators(growth, inflation, unemployment) during the period 2004-2018. Economic literature indicates that there is a lack of coordination between monetary policy on the one hand and economic policies, especially fiscal policy, which leads to a weakening of the effectiveness of monetary policy in achieving the desired economic stability. It is necessary to secure economic stability and sustainability to foster sustainable growth in Iraq. Monetary policy should be supplemented with a commitment to market stability as well. In this context, harmonizing monetary policy and economic policies helps to ensure economic stability and sustainability, guaranteeing the continuing stability of the country's economy. The paper focuses on how Iraqi monetary policy has changed in the wake of the financial crisis and how macro-prudential policy and financial stability have played a role since then. Based on the framework G.M.M., we analyze the relationship between Iraqi monetary policies and its macro-prudential policies. Based on the V.A.R. model, we analyzed the correlation between Iraq's economic stability indicators and Iraq's monetary policies.

Literature Review

The concept of macro-prudential supervision has been generally recognized by the regulatory authorities of various countries since the international financial crisis in 2008, but its coordination with monetary policy has always been the focus of domestic and foreign research (Amusawi, Almagtome, & Shaker, 2019). The existing literature's exploration of the coordination of macro-prudential policy and monetary policy is mainly based on international experience combing or theoretical discussion (Smets, 2018), and often use complex macro models to coordinate the "two-pillar" coordination method Conducted research (Blanchard, Dell' Ariccia, & Mauro, 2010), but paid limited attention to the micro-mechanism between the two policies, the proposal of monetary policy credit channels and their influencing factors. For a long time, economists have summarized the mechanism of monetary policy as interest rate channels, that is, tightening monetary policy raises the level of interest rates, leading to a decline in investment, thereby reducing macroeconomic output (Fan, Wu, Xia, & Liu, 2016).

However, the interest rate channel that is based solely on currency and bond balances does not fully explain how monetary policy is transmitted in the macroeconomic environment. In this regard, Bernanke and Blinder (1988) re-examined the role of bank loans in the transmission of monetary policy and proposed a credit channel for monetary policy transmission. The credit channel that considers the three asset portfolios of currency, bonds, and loans is a supplement to the traditional interest rate channel and reveals the

interaction between monetary policy and micro-subject– banks. Regardless of whether macro aggregate data or micro bank-level data are used, empirical research results verify the existence of monetary policy credit channels (Ali, Almagtome, & Hameedi, 2019). After the existence of monetary policy credit channels was basically proved, scholars at home and abroad began to explore the main factors affecting the efficiency of monetary policy credit transmission and tried to provide reasonable explanations for these findings. Empirical research based on data at the bank level in the United States shows that factors such as bank scale, liquidity, and capital status play an important role in the credit transmission channels of monetary policy (Amusawi, Almagtome, & Shaker, 2019). Generally, the larger the bank, the higher the level of liquidity, and the better the capital adequacy, the lower the sensitivity of bank credit supply to monetary policy. However, this conclusion has not reached a consensus in other countries or regions (Khaghaany, Kbelah, & Almagtome, 2019). Xu and Chen (2011) show that large banks with ample liquidity have their credit behavior easily affected by capital adequacy, while small-and medium-sized banks are often restricted by their liquidity levels.

The influence mechanism of commercial bank liquidity management on monetary policy credit transmission channels. Although different scholars have reached different conclusions on the influence factors of monetary policy credit transmission efficiency, they all agree that bank liquidity plays an important role in monetary policy credit transmission channels. The traditional view is that because banks are facing deposit reserve constraints, changes in monetary policy lead to changes in deposit scale, making banks face liquidity pressure, which is the cause of bank credit adjustment behavior (Al-Fatlawi, Al Farttoosi, & Almagtome, 2021). The modern view is that credit channels affect banks' external financing costs through monetary policy, and the external financing costs of banks depend on the balance sheet tension and investors' risk expectations of banks (Almagtome, Al-Yasiri, Ali, Kadhim, & Bekheet, 2020). These two mechanisms of action have been verified in foreign studies. First, balance sheet tension and asset structure conversion. In the presence of friction in external financing, the holding of liquid assets can help banks adjust the surplus and shortage of funds and maintain the optimal asset portfolio structure. Keister, Martin, and McAndrews (2008) indicate that when the central bank adopts a tightening monetary policy, banks with higher liquidity can reduce their holdings of liquid assets to maintain a credit portfolio, so their credit supply is less affected by monetary policy. Whether bank liquidity has an impact on monetary policy credit channels depends on the adjustment of the asset structure of commercial banks and the conversion of assets with different liquidity levels. For example, commercial banks replace low-liquid assets such as loans with high-liquid assets such as government bonds,

It will cause a decline in the scale of credit (Almagtome, Khaghaany, & Önce, 2020) and the replacement of short-term interbank loans with highly liquid assets by banks will not affect the scale of bank credit (Banerjee & Mio, 2018).

Monetary policy, in its narrow sense, relates to the expansion and restraint of the money supply to achieve certain ends, such as price stability. Since every action taken by the government is influential on the overall economic health of the non-banking sector. On the other hand, monetary policy is defined as encompassing all financial measures and decisions, whether aimed at achieving financial or non-monetary objectives or all non-monetary actions and decisions to influence the overall economic system. Hence, it can be said that monetary policy in this broad sense is all that the monetary authority and the government can do by various means to influence the size and direction of the cash after the objectives have expanded to include economic and non-monetary targets. The monetary policy seeks to achieve stability in the price of goods and services. Adherence to this goal is essential because of the significant negative consequences of high inflation on the economy and society, the anxiety it engenders, and the state of confusion it creates. The monetary policy seeks to achieve appropriate economic growth rates by affecting the level of credit, the money supply, and the price level. It aims to achieve a real increase in real income and output by the average level and to achieve a high level of employment by reducing unemployment. Through monetary policy, the volume of credit is increased, which in turn increases the volume of investment, which contributes to the operation of idle resources as well as the balance of payments stability.

Basyariah, Kusuma, and Qizam (2021) examine the effects of macroeconomic and institutional stability on the development of the global market while controlling for population effects. The study utilizes, respectively, GDP per capita, exchange rate, and inflation as indices for macroeconomic stability, the World Development Index (WDI) uses six dimensions of Worldwide Governance (WGI) data sources. Through their monetary powers, governments are taking several measures to reduce the leakage of their gold balances and foreign currencies, such as reducing the amount of credit provided to non-banking sectors. This can be achieved by increasing the cash reserves ratio and increasing interest rates on loans, and then improving the quality of imports from abroad(Al-Wattar, Almagtome, & AL-Shafeay, 2019).The monetary policy encompasses several types of policy tools that range from traditional quantitative tools to indirect tools used by monetary authorities to influence the level of money held by banks. Three instruments include open market operations, the rediscount rate, the ratio of legal reserves, and interest rate swaps. These instruments have been used by monetary authorities in some developed countries to achieve specific economic objectives in the

face of financial and banking crises. Of the most powerful tools used to address the recovery, quantitative easing, future guidance, zero interest rates, currency manipulation is most important.

On the other hand, economic stability is one of the top priorities for governments and one of the main goals they seek to reach with their various monetary policy tools (Amagtome& Alnajjar, 2020). Economic stability represents an economy achieving that which can prevent the economy from deviating significantly from that path. By strengthening monetary and fiscal policies with sufficient flexibility, it is possible to prevent the decline of the middle course. It is a major variable in measuring economic growth, inflation that reflects an increase in the level of prices, and whether prices are going up or down over a certain period. As a result, inflation is caused by an imbalance of wealth and unemployment. In this context, a large sample of countries that used monetary instruments to counter economic volatility and, thus, achieve economic stability is essential in ensuring that central banks are independent and is, thus, a prerequisite for effective monetary policy. By enacting monetary policy, the Fed can affect the currency's value to stabilize both the domestic economy and the international economy. Due to the high trade exposure, monetary policy plays a vital role in maintaining economic stability by ensuring adherence to currency stability. De Resende (2014) indicates that monetary and financial policies must be integrated for long-term price stability.

Da Costa and Olivo (2008) also demonstrate that monetary policy works best when it has an appropriate environment in which a central bank is independent of political pressures. Goldberg, Klee, Prescott, and Wood (2020) consider the possible relations between the Federal Reserve's monetary policy policies and instruments and the extent of financial stability. They propose that there are probable advantages of using these techniques and methods but that such circumstances can require the introduction of protections to restrict their use. A well-defined solution can help reduce financial vulnerabilities. Asaad and Marane (2020) indicate that the correlation between the degree of corruption, terrorist attacks, and political stability in Iraq is substantially positive. This analysis assesses how corruption, global terrorism, and political stability are linked by using the Ordinary Square approach, along with the IS60 market, to measure the entire sample span (2005-2019).

By comparison, the oil price coefficient is slightly negative as compared to the Iraq stock exchange, indicating that lower levels of corruption, decreased terrorist activity, and increased political stability all have a substantial impact on the growth of the Iraq stock exchange. Thus, the policymakers develop the stock market by enacting policies and

strategies to combat widespread corruption and extremism, especially in the aftermath of the ISIS/ISIL declaration. Transparency and the establishment of a stable political climate through sound governance practices are essential to draw additional foreign investment and stimulate economic growth. Economic and political structures become dysfunctional because of factors such as extremism and corruption, which has a negative impact on Iraq's stock exchange success. On the other hand, Venter (2020) indicates that for most situations, in compliance with traditional wisdom, currency appreciation softens positive monetary policy shock. Monetary policy and financial stability all contribute to stability. Unlike most other reports, this one examines the impact of monetary policy on the stability of the Iraqi economy over a 15-year period using financial data (2004-2018).

Data and Methodology

The present study's findings are focused on the review of the effect of economic stability on monetary policy in Iraq. Data corresponding to the decade of 2004-2020 was collected from the Central Bank of Iraq's statistics - General Directorate of Statistics, and statistical analyses were performed in E views 3.1. The VAR, Granger Causality Test, and ECM were used in this analysis to show the resilience of the Economy calculated by error rate. The primary reason for selecting these models is that VAR technology is adaptable and often used in time series analysis, most notably in forecasting financial and economic patterns. The moment. Unit root analysis was used to analyze the results. The money supply and economic stability were validated using Dickey-Fuller's ADF The cointegration test resulted in the integration of the variables. The Engle-Granger method was used to validate the results of this study and Johansen's method (Chandio et al., 2019). While the term "machine" means that two time series combine independently, certain linear combinations have a lower order of integration. They are said to be combined if this is the case. The following illustration illustrates the mathematical formula:

$$X_t = \alpha_1 X + \alpha_2 X_t + \varepsilon_t. \qquad (1)$$

X_t = the time series variable vector; α is the intercept vector; α_1 are the matrices that govern the parameters; ε is the error not observable.

1. Measurement of Independent Variable

Table 1 shows the money supply (M2) in Iraq during the period 2004-2018 (million dinars). This analysis shows the continuation of the increase in money supply growth rates, which reached the highest growth rate during the period studied in 2006 with a ratio

of 43.6. However, the growth rates decreased gradually in the last years of the period studied to a weak growth rate in 2015 (-6.8). Due to the lack of balanced monetary policies during the studied period, which was reflected in the apparent volatility of the wide cash spread (M2).

Table 1 Indicators of Monetary Policy in Iraq (2003-2018)

Years	Cash Offer (M2) (1)	Rate of change in (M2) (2)	Current G.D.P. (3)	Rate of change in (G.D.P.) (4)	Cash Stability Factor (2/4) (5)
2003	6953420		29585788.6		
2004	11498148	65.4	53235358.7	1.6	40.9
2005	14659350	27.5	73533598.6	38.13	0.7
2006	21050249	43.6	95587954.8	30.0	1.5
2007	26919996	27.9	111455813	16.6	1.7
2008	34861927	29.5	157026062	40.9	0.7
2009	45355289	30.1	130642187	-16.8	5.2
2010	60289168	32.9	162064565.5	24.1	4.7
2011	72067309	19.5	217327107.4	34.1	0.6
2012	75336128	4.5	254225490.7	17.0	0.3
2013	87679000	16.4	273587529.2	7.6	2.1
2014	90728000	3.5	266420384.5	-2.6	-1.3
2015	84527000	-6.8	199715699.9	-25.0	0.27
2016	90466000	7.0	203869832.2	2.1	3.3
2017	92857000	2.6	225995179.1	10.9	0.2
2018	95391000	2.7	251064479.9	11.1	0.2

2. Measurement of Dependent Variables

Table 2 shows that indicators of economic stability fluctuated sharply during the study period. In 2009, the GDP growth rate was -16.8. It was consistent with the global financial crisis results in 2008, accompanied by a drop in inflation to -2.8 in the same year. Unemployment rates remain high, despite the comprehensive recruitment policies for young people in the Ministries of Defense and Interior, and the ministries' low recruitment rates. But unemployment rates remained high due to the lack of a vibrant private sector that could absorb the unemployed workforce.

Table 2 Indicators of Economic Stability in Iraq (2003-2018)

The government's support	Gross Domestic Product (G.D.P.)	Rate of change in (G.D.P.)	Inflation	Unemployment rate
2003	29585788.6			
2004	53235358.7	1.6	27.0	26.8
2005	73533598.6	38.13	37.0	17.97
2006	95587954.8	30.0	53.2	17.5
2007	111455813	16.6	30.8	16.9
2008	157026062	40.9	2.7	15.3
2009	130642187	-16.8	-2.8	15.3
2010	162064565.5	24.1	2.4	15.2
2011	217327107.4	34.1	5.6	15.2
2012	254225490.7	17.0	6.1	11.9
2013	273587529.2	7.6	1.9	15.1
2014	266420384.5	-2.6	2.2	10.6
2015	199715699.9	-25.0	1.4	16.4
2016	203869832.2	2.1	0.1	10.8
2017	225995179.1	10.9	0.2	13.8
2018	251064479.9	11.1	0.4	13.8*

Results and Discussion

1. Stability Test

As shown in Table 3, our model is both stable and economically relevant. The results of the VAR root test on both time series indicate that they are jointly constant due to the delay's duration being "1". Since the significance level of the VAR unit root test is less than one, i.e., 0.832782, the results suggest that the model is stable. This enables one to account for a complex and long-run equilibrium relationship between two variables in Iraq, namely, monetary policy and economic stability.

Table 3 Results of Economic Stability Test

Variable	At I (0)			First Difference I (1)			
	Statistical value	Critical values	The result	Statistical value	Critical values	The result	Moral level
View cash M2	0.941689	-3.495021 -2.889753 -2.581890	Non-deployed.	-14.43561	-3.495021 -2.889753 -2.581890	Based	1%
Inflation INF	-1.908160	-3.492523 -2.888669 -2.581313	Non-deployed.	-11.37069	-3.493129 -2.888932 -2.581453	Based	1%
Unemployment rate A	-2.307926	-3.493747 -2.889200 -2.581596	Non-deployed.	-10.20508	-3.495021 -2.889753 -2.581890	Based	1%
G.D.P.	-0.726055	-3.493747 -2.889200 -2.581596	Non-deployed.	-10.37334	-3.495021 -2.889753 -2.581890	Based	1%

2. Vector Autoregression (VAR) Test

The Granger Causation Approach is often used in research to determine the existence of a long-term causal relationship, and Chandio et al. (2019) investigated the existence of a long-term causal relationship between bank capitalization and economic growth. Through the study of reciprocal complementarity, we determined that Iraq's economic stability is related to the Central Bank's monetary policies. The lag value of one derived from the test conditions also tells us about the research outcomes. The results of Granger's causal tests are summarized in Table 4.

Table 4 Results of Vector Autoregression (V.A.R.)

	M2	INF	GDP	UN
M2 (-1)	0.593157	2.58E-05	0.067972	-4.68E-08
	(0.09346)	(3.8E-05)	(0.04930)	(6.0E-08)
	[6.34695]	[0.67975]	[1.37860]	[-0.78313]
M2 (-2)	0.379716	-2.00E-05	-0.040081	2.00E-08
	(0.09433)	(3.8E-05)	(0.04976)	(6.0E-08)
	[4.02561]	[-0.52163]	[-0.80543]	[0.33129]
INF (-1)	15.95845	0.844606	35.91584	-0.000224
	(248.449)	0.10085)	(131.076)	(0.00016)
	[0.06423]	[8.37496]	[0.27401]	[-1.40761]
INF (-2)	-53.25142	0.180778	-66.84871	0.000120
	(264.155)	(0.10722)	(139.362)	(0.00017)
	[-0.20159]	[1.68598]	[-0.47968]	[0.70820]
GDP (-1)	-0.434036	-5.15E-05	0.865790	1.61E-07
	(0.19568)	(7.9E-05)	(0.10324)	(1.3E-07)
	[-2.21809]	[-0.64824]	[8.38650]	[1.28251]
GDP(-2)	0.497976	5.23E-05	-0.033294	-7.01E-08
	(0.19636)	(8.0E-05)	(0.10359)	(1.3E-07)
	[2.53605]	[0.65638]	[-0.32139]	[-0.55808]
ONE (-1)	-146923.0	115.6751	28268.98	0.796511
	(164924.)	(66.9451)	(87010.2)	(0.10548)
	[-0.89085]	[1.72791]	[0.32489]	[7.55153]
ONE (-2)	105858.0	-105.3704	-81331.15	0.046916
	(165200.)	(67.0569)	(87155.5)	(0.10565)
	[0.64079]	[-1.57136]	[-0.93317]	[0.44406]
C	8284415.	-4986.472	5437241.	6.697559
	(7196588)	(2921.20)	(3796749)	(4.60255)
	[1.15116]	[-1.70700]	[1.43208]	[1.45518]
R-squared	0.994092	0.987901	0.973544	0.944376
Adj. R-squared	0.993450	0.986586	0.970668	0.938330
Sum sq. resids	2.84E+14	46783594	7.90E+13	116.1366
S.E. equation	1756786.	713.1040	926838.3	1.123545
F-statistic	1548.128	751.1874	338.5420	156.1973
Log likelihood	-1621.371	-817.0058	-1555.506	-152.3326
Akaike AIC	31.69652	16.07778	30.41760	3.171507
Black SC	31.97790	16.35916	30.69898	3.452886
Mean dependent	35239151	21304.84	11343523	15.37379
S.D. dependent	21707447	6157.016	5411684.	4.524334
Determinant resid covariance (dofadj.)	9.11E+31			
Determinant resid covariance	5.18E+31			
Log-likelihood	-4491.547			
Akaike information criterion	88.28246			
Schwarz criterion	89.68935			
Durbin Watson statistic	0.180079			

Through the VAR table, and for the M2, the value of the R2 selection factor is (0.994), which means that it has been able to interpret what is recognized as a (99.4 percent) studied phenomenon. The coefficient is also 99.3%. This enhances the model's explanatory power and the calculated t value showing the influence of the M2 variable when the t-value exceeded the scheduled t. The coefficient for the INF was 0.986, which could be explained by the 95.3 percent of the explanatory power attributed to it. Changing variables, R 2 adj (98.6 percent). The model was made of high-quality items. In terms of GDP, r2 (0.987) may be the value of r, which means an explanation of over 97% of the observed phenomenon. The R-squared is (97 percent), which provides greater explanatory power with the model. The calculated t value was more significant than the tablet t, which indicates the significant correlation between the GDP variable and the t statistic. The interpretation of the ratio was very good, as it fell within the 0.0-1.0 range (94.4 percent). The RMSE was 93.8 %. It gives greater interpretive power to the model.

The results of the f test show the overall morale of the model confirmed the very high moral consequences of the model when the calculated F value exceeded the computed value of the tabled value. However, the D-W test results show that its value is (0.180079), which is a low value, i.e., Durbin-Watson statistics report that there is a problem of heteroscedasticity heterogeneity and a self-correlation problem that is shown through the D.W value. It requires addressing this problem by extracting P-VALUE (Prob) values for each variable. If the variable's p-value is more significant than (0.5), the model has uneven homogeneity, but if it is smaller than (0.5), the model is free of this problem. So, we doa heteroskedasticity test to overcome the problem of inequality heterogeneity.

Table 5 P-VALUE (Prob) for each variable

F-statistic	3.280976	Prob. F(4,102)		0.0142
Obs*R-squared	12.19780	Prob. Chi-Square (4)		0.0159
Scaled explained SS	16.72601	Prob. Chi-Square (4)		0.0022
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-1.93E+13	3.24E+14	-0.059560	0.9526
GDP	-3090292.	2994814.	-1.031881	0.3046
INF	8.15E+09	4.53E+09	1.799909	0.0748
Eu	7.16E+12	4.07E+12	1.757945	0.0818
R-squared	0.113998	Mean dependent var		5.34E+13
Adjusted R-squared	0.079253	S.D. dependent var		9.32E+13
S.E. of regression	8.94E+13	Akaike info criterion		67.13219
Sum squared resid	8.16E+29	Schwarz criterion		67.25709
Log-likelihood	-3586.572	Hannan-Quinn criteria.		67.18282
F-statistic	3.280976	Durbin-Watson stat		0.397860
Prob(F-statistic)	0.014209			

Here the hypothesis that heteroskedasticity is not present in the form because all values of P-VALUE) are accepted below 5% and are close to zero as a yellow indicator. So, we can say that the model does not suffer from record problems. It represents the relationship betweentheM2 cash offer and the variables of both, the INF inflation rate, the UUE unemployment rate, and GD.P.

3. Johansen Cointegration Test

As regards the Johansen Cointegration Test results (5 percent), the approximate upper limit is below the measured average of 87.26702. Therefore, the morality is resolved when (r=0,1,2) on it will reject the hypothesis of zero to test the effect (r=0). There is a standard integration between the search variables (i.e., t, here is a long-term balance relationship between variables). The impact test showed that this is a very compact and cohesive unit, i.e., accept the hypothesis "the mean and the standard deviation are equal" at a moral level of 0.05 and the impact test results below.

Table 6 Results of the Impact Analysis

Hypothesized		Trace	0.05	
No. of C.EC.E. (s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.337508	87.26702	69.81888	0.0011
At most 1	0.184872	47.32759	47.85612	0.0560
At most 2	0.139155	27.49983	29.79706	0.0900
At most 3	0.122618	12.96531	15.49470	0.1161
At most 4	0.002846	0.276488	3.841465	0.5990
Trace test indicates one cointegrating(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

4. Granger Causality Test

Bui (2018) used the Granger causation test to assess the existence of a long-term causal association between the stock market's success and the exchange rate. Through the analysis of mutual complementarity, we determined that Iraq's economic stability is related to the Central Bank's monetary policies. The lag value of one obtained from the test conditions also tells us about the analysis outcomes. A thorough review of the results is included in Table 7.

Table 7 Granger Causal Results

Null Hypothesis:	Obs	F-Statistic	Prob.
I.N.F. does not Granger Cause GDP	103	1.15924	0.3180
GDP does not Granger Cause INF	0.37879	0.6857	
M2 does not Granger Cause GDP	103	3.90815	0.0233
GDP does not Granger Cause M2	4.01786	0.0210	
UN does not Granger Cause GDP	103	2.00115	0.1407
GDP does not Granger Cause UN	0.60210	0.5497	
M2 does not Granger Cause INF	103	0.12247	8849
INF does not Granger Cause M2	0.59826	0.5518	
UN does not Granger Cause INF	103	1.43325	0.2435
INF does not Granger Cause UN	2.92769	0.0582	
UN does not Granger Cause M2	103	0.23704	0.7894
M2 does not Granger Cause UN	0.51855	0.5970	

Table 7) shows a strong relationship between the M2 cash supply variables and GDP. As the t-test results indicate that the F statistics are over three standard deviations, we accept the hypothesis that the change in cash supply causes GDP changes according to Granger's effect. Furthermore, the estimates reveal that changes in macroeconomic variables are driving changes in the monetary collection. The degrees of freedom are (4.01786), so we accept the null hypothesis, and there is a two-way causal relationship between money supply and income levels. Although the challenges facing Iraq were apparent, the cash offer's growth was also accompanied by growth in the economy. Due to several factors, the most important of which is the high amount of crude oil produced during the study period, with the high price of a barrel of crude oil and the recent growth in many economic aspects. Other extractive industries, such as oil production, increased Iraq's average GDP per capita. It reflects the Iraqi crude oil sector's priority in generating GDP according to the national development plan's investment policy. This sector requires the temporary acceptance of a state of economic neutrality to increase the rate of oil production and exports to strengthen Iraq's financial position motivated by financing development and reconstruction programs. The imbalance in the Iraqi economy structure is deliberate in its appearance, but it is almost sustainable in its content for decades. The study's duration (2004-2018) witnessed a fundamental change in the performance of the banking system after the issue of Resolution No. (56) of 2004, which granted the Central Bank of Iraq independence from government interventions in the formulation of monetary policy. The monetary authority in Iraq succeeded to some degree in achieving economic stability, proving that there was some convergence towards growth. In conclusion, the study's results concur with the monetary community's assessment of the efficacy of monetary policy in influencing fiscal policy and bolster Friedman and Schwartz's (2008) claim that changes in financial supply have a significant effect on the economy.

Conclusion

The paper aims to discuss the role of monetary policy in achieving economic stability in developing countries. The results also indicate the success of monetary policy in curbing the inflation wing during the years (2008-2018), in which it was attributed to the inflation rate (1.8 percent). The main reasons monetary authorities had such limited control over liquidity flows were that they had to ensure that local currency needs were met. The policies used in the monetary system interact with other economic policies to promote stability and economic growth. The economic indicators that measure stability should be balanced while also considering the other aspects such as inflation and unemployment rates. Finally, a proper atmosphere for monetary policy settings must be provided free of fiscal and financial dominance, ensuring the absolute maintenance of its independence. The findings provide an in-depth understanding of the relationships between national monetary policies and economic stability, which can eventually help formulate sound planning of monetary policy and fiscal policy in developing countries. This paper looks at how monetary policy (especially interest rates) and coordination can lead to economic stability and financial sustainability. Economic security and financial viability are critical for developing a sound economy. Prudential fiscal policy is primarily used to avoid financial risk and indirect macro effects.

In contrast, monetary policy is used primarily to control aggregate demand and has indirect macro effects in all industries and sectors. Monetary policy and macro-fiscal policy both have their expected impact on the Economy, like the credit channel and the balance sheet channel. Both measures have pros and cons, and, therefore, they cannot be implemented independently. Only financial stability and sustainability can be accomplished when government policies that complement each other concur.

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