



Bank Deposits and Credit and Their Impact on the Operational Objectives of Monetary Policy, Iraq as a Model for the Period (2004-2020)

Salam Hashim Mohammed ^{a*}, Ameen Fahad Jayed ^a and Husam Abbas Ali ^a

^a *Iraqi Ministry of Education, Iraq.*

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The study focused on the topic (the impact of the operational objectives of monetary policy on bank deposits and bank cash credit) to know the extent to which these objectives are used effectively by the Central Bank of Iraq, and their impact on credit and bank deposits, and the use of the standard aspect program (eviews10), and the study concluded that the effect of credit Cash and bank deposits on the policy rate were not statistically related to achieving a rate of (11%), and this is due to the failure to use the operational interest rate tools by the Central Bank of Iraq to influence the economy as it is, but rather developed countries. The influence relationship between the exchange rate with monetary credit and deposits was greater than the influence relationship in the policy rate model, but it remains very weak as a result of the exchange rate's focus on maintaining inflation rates and the lack of focus on the main objectives of monetary policy. The study also recommended the necessity of paying attention to the operational objectives to achieve the final objectives of the monetary policy, which it is unable to achieve directly.

Keywords: Operational objectives; monetary policy; bank deposits; bank credit.

1. INTRODUCTION

The Monetary Authority makes some decisions resulting from an in-depth study within the monetary policy it follows in a country for the purpose of regulating the process of granting credit at appropriate costs in pursuit of macroeconomic objectives, where it is able to control the financial practices of banks in order to influence the financial ability of individuals [1,2,3]. This goal is achieved by transmitting the impact of monetary policy across financial institutions in general and banking institutions in particular by providing credit, which is influenced by the central bank's decisions related to setting the mandatory interest rate and reserve used by the monetary authority to achieve the objectives [4].

With the increasing market turmoil and the intensification of competition with some factors affecting the activities and efficiency of banks, the Central Bank of the Middle East and North Africa has asked commercial banks to deal with the more dynamic climate by changing their policies more than before, as commercial banks must provide more quality financial services and products that take into account modern technological developments, globalization and financial progress, which pose a threat to the status of commercial banking. In the market which calls for the expansion of electronic banking services through the use of the latest technologies [5].

The Monetary Authority in Iraq seeks through some of the decisions it takes to achieve a number of goals that would affect economic activities, as bank lending represents an important channel for cash transfer despite the control of government banks over the bulk of the lending process. A large segment of borrowers, especially small businesses, rely on banks for financing for their operations, and this supports the argument that supports the views that disruptions in the flow of credit from banks can affect economic activity [6]; Onoh & Nwachukwu, 2017; Onyemaechi, 2015.

The current study contributes to the ongoing debate about the ability of the monetary authority to achieve the planned goals, especially the batch of them and discover the impact of deposits and cash credit in achieving these goals, for the purpose of achieving the objectives of the research, this paper was organized as follows, the Department of Literature provides a review of some previous studies related to the

subject of study, while the Department of Methodology provides the details used in the analysis of data, the empirical results are then presented, interpreted, their implications discussed and then the section on conclusions and recommendations.

2. LITERATURE REVIEW

2.1 Channels of Monetary Policy Influence

It is necessary to understand the mechanism of the impact of monetary policy and the way that it can affect it in order to achieve the objectives of monetary policy, and despite the importance of monetary policy in influencing economic activity through the banking system, the size of the impact and how to influence it is still disputed, as a result of different structural features and institutional economy of the countries, which was reflected on the nature of the mechanism, which are four main channels (interest rate, exchange rate channel, credit channel and asset price channel (2006; Bank of England [7]; BIS [8]).

2.2 Price Policy

The effect of this channel can be divided into two stages, namely, the change in the official interest rate in the long and short-term interest rates in the economy, and the second stage, the effect of changing interest rates in these real variables, which are represented in aggregate demand and output and their impact on inflation. Long and short-term interest rates and then change interest rates on loans and deposits, as well as the case in the event of a change in the official interest rate, economic activity will be affected by affecting the investor's ability to borrow and invest and thus production, which affects negatively and positively on the gross domestic product [9].

High interest rates lead to a decrease in the required amount of loans, whether for consumption or investment, which means that interest rates directly affect the total spending and then the total demand, and this interest is the reason for managing the interest.

2.3 Channel Exchange Rates

The exchange rate channel works alongside the interest rate channel, because the increasing integration of national economies and the

transition to a flexible exchange rate, the exchange rate has played an important role in transmitting the impact of monetary policy on exports and its impact on foreign investment and flows. The exchange rate channel is one of the most important channels through which the impact of monetary policy is transmitted, especially in economies that are characterized by a large degree of openness to external markets. The importance of the exchange rate increases in countries where interest rates are characterized by inflexibility, as the difference in domestic interest rates from international ones pushes savers to acquire currencies with higher returns. The exchange rate transfers the effect of monetary policy through the channel of aggregate demand and supply and the channel of inflation, and its effect is transmitted through these two channels indirectly to the real economy. A change in the exchange rate affects the inflation rate, which in turn affects aggregate demand and supply for indirect. The exchange rate channel is important in the case of developing small economies that depend on imports, as the relationship shows:

$$M\uparrow \Rightarrow I\downarrow \Rightarrow ex\downarrow \Rightarrow Nx\uparrow \Rightarrow Yd\uparrow \Rightarrow \pi\uparrow$$

The adoption of an expansionary monetary policy decreases interest rates in the market due to the interaction of the mechanisms of supply and demand for credit, and a decrease in the exchange rate of the national currency ex leads to a decrease in the incentive to hold it and exports become more competitive. Aggregate demand Yd and prices rise. Changes in the exchange rate affect financial positions, especially those that have obligations in foreign currency, as the change in the exchange rate affects the net wealth leads to changes in spending and borrowing resulting in the instability of financial positions, resulting in a contraction in aggregate demand. On the other hand, the exchange rate affects inflation directly.

2.4 Bank Credit

Bank credit is all direct and indirect facilities granted to the customer or a commitment to disburse a cash amount in exchange for the right to repay the amount spent in addition to paying interest or any fees on the amount, whether guaranteed or not. (2006:24), the word credit represents the confidence or security that binds the debtor and the creditor, which results in the payment of a value in the present and a deferred payment in the future, since in general a period

of time was granted by the creditor to the debtor and the latter must pay the debt owed by him At the end of it, and that it is difficult to define a specific definition of credit, but we can say that it is the relationship of indebtedness that is based on trust. It arises from the exchange of goods, services or money in the future in a specific time for goods, money or services, and in most cases in return for a pledge to pay a specific allowance, the pledge is to pay in cash [10].

2.5 Bank Deposits

Deposits in commercial banks are the main axis on which banking operations in banks and financial institutions are based, because they take the nature of the loan or the depositor lends the bank a sum of money for a specific term with a known interest that is paid when it becomes due (Tahero Saeed [11] 2020, 204) and the definition of the deposit is us Depending on what bodies or individuals do by depositing it in banks for a temporary period, short or long, in order to preserve or employ it, these deposits are mostly sometimes legal cash and sometimes they take other forms [12].

3. METHODOLOGY

3.1 The study Problem

The problem of the study stems from the inability of the Iraqi monetary policy to achieve the final goals with the exception of stability in the general level of prices, by using operational tools as support and assistance goals for quantitative and qualitative tools. Despite the availability of liquidity for commercial banks through which the Iraqi economy can move.

3.2 Study Hypothesis

The study assumes that the Central Bank of Iraq does not use the operational objectives in its effective form in influencing the monetary credit and bank deposits to achieve the final objectives of monetary policy and to stimulate and revive the Iraqi economy, which suffers from severe problems.

3.3 Purpose of the Study

The study aims to investigate the following:

- 1- Recognizing the effectiveness of operational tools in influencing cash credit and bank deposits.

- 2- The ability of commercial banks to influence the wheel of the Iraqi economy by attracting deposits and by providing effective cash credit.

3.4 The Importance of Studying

The importance of the study lies in the role played by the operational tools of monetary policy in moving economic activity through achieving the ultimate goals that the Central Bank is working to achieve represented in (reducing unemployment and inflation and achieving a high level of economic growth), as well as the importance of both deposits and monetary credit for commercial banks Which is the basis for achieving profits for banks on the one hand, and the influence through which the Central Bank on economic activity.

4. RESULTS AND DISCUSSION

4.1 The Interest Rate and Exchange Rate

The policy rate is one of the operational tools used by central banks to control the economy through its impact on the banking system that adopts it in setting interest rates on deposits and loans.

4.1.1 Price policy

Through the Table 1, we find that the Central Bank of Iraq adopted a semi-stable policy in determining the interest rate, as it ranged during the study period between (4-7) and this stability is not reflected on the banking system only through the clarification of future policies of commercial banks as a result of this stability, which reduces the risks that commercial banks may be exposed to in terms of the stability of interest rates in the future, this is one side, and the other side is that stability is also reflected on the public in terms of being borrowers and depositors, meaning that individuals know that the central bank has not changed policy rates significantly, which is clear to him as for the deposit His money is in the banks or he goes to the stock market to invest his money or issue securities to obtain financing, as well as the stability of the market in terms of the stability of the general level of prices, which reduces inflation whose rise affects markets and individuals [13].

During the study period, we find that the years (2006-2008) the interest rate (15-20) as a result

of an increase in inflation rates and to enhance the purchasing power of the Iraqi dinar against the dollar. This prompted the Central Bank to raise the rediscount rate so that it could reduce the ability of banks to grant credit or Granting credit with high interest rates in response to what the Central Bank has done by raising the rediscount rate.

4.1.2 Exchange rate

One of the policies followed by the Central Bank of Iraq to maintain the value of the Iraqi dinar after 2003, through the currency auction due to the complete absence of the production base and the increase in imports to compensate for the production base.

Through Table 1, we find that the exchange rate started in 2003 with the highest value during the study period (1936), and this is a result of what happened in Iraq this year and before this year, from the siege and war on the country, in addition to the decline in oil exports, which Iraq completely destroys by obtaining the dollar However, later, with the Central Bank of Iraq starting a policy of maintaining the value of the Iraqi dinar through the auction, the exchange rate began to decline to (1453) in 2004 and continued to decline until it reached (1190) in 2019 and this confirms the success of the policy taken in the province On the value of the Iraqi dinar, on the other hand, Iraq lost its reserves of the dollar in exchange for this policy. In 2020, the Central Bank of Iraq's policy took a policy of raising inflation by raising the foreign exchange rate to reduce the depletion of hard currency, and this pleased the exchange rate rise from (1190) to (1460).

4.2 Cash Credit and Deposits

Credit plays an important role in achieving the objectives of the bank on the one hand, which is represented in profitability, and the objectives of monetary policy on the other hand in influencing economic activity. The credit and deposits of commercial banks in Iraq can be shown as in the Table 2.

4.2.1 Cash credit

Through the Table 2, it is clear that bank loans took an upward trajectory after 2003 and achieved in (2004) an amount of (824) million dinars, and the rise in credit continued until it reached (49,817) billion dinars in the year (2020)

and this increase came after it headed Iraqi commercial banks to provide loans because of the availability of great opportunities for investments in the economy of the banks and the need for individuals to loans, whether consumer or productivity. This increase is seen by the banks as an achievement in the presence of the great fear of the commercial banks of the increasing repayment of non-performing loans, which the commercial banks were unable to

reduce despite their taking strict measures in providing credit, but the non-performing loans remain the problem and the obstacle for the commercial banks in providing loans to the Iraqi environment. This rise came due to the launch of the initiative of the (1) trillion dinars by the Central Bank to stimulate the Iraqi economy. That is why we find that after this amount has been spent, loans have usually declined, especially in the year (2020) to (49) billion dinars.

Table 1. Policy rate and exchange rate Central Bank of Iraq

Years	Exchange rate	Policy rate
2004	1453	6
2005	1469	7
2006	1467	16
2007	1255	20
2008	1193	15
2009	1170	7
2010	1170	6
2011	1170	6
2012	1166	6
2013	1166	6
2014	1186	6
2015	1187	6
2016	1190	4
2017	1190	4
2018	1190	4
2019	1190	4
2020	1460	4

Source: Central Bank of Iraq

Table 2. Cash credit and deposits of commercial banks in Iraq

Years	Total deposits (billion dinars)	Total credit (billion dinars)
2004	7.936	824
2005	10.770	1.717
2006	16.928	2.664
2007	26.189	3.459
2008	34.525	4.587
2009	38.582	5.690
2010	47.947	11.721
2011	56.150	20.344
2012	62.006	28.438
2013	68.855	29.952
2014	74.073	34.123
2015	64.344	36.752
2016	62.398	37.180
2017	67.048	37.952
2018	76.894	38.486
2019	82.106	42.052
2020	84.924	49.817

Source: Central Bank of Iraq

4.2.2 Deposits

Through the data in Table 2 that deposits took a continuous rise during the study period, as they achieved (7,936) billion dinars in 2004 and the rise continued after that until it reached the year 2020 which amounted to (84,924), and this shows that commercial banks in Iraq own deposits that they can invest In investments that achieve benefit by increasing their revenues on the one hand and increasing the depositors' revenues on the other hand, instead of depositing in the central bank with low interest, the reasons that drive banks to reduce deposit investment are reducing non-performing loans that are achieved when the bank grants surpluses towards lending, for this reason it tends Banks have to deposit these deposits in the central bank to get very little interest instead of offering them like loans that get due to the wrong policy adopted by commercial banks.

Also, these values, by increasing them, show that commercial banks have sufficient funds to move the market and reduce the recession periods in the Iraqi economy, but they are unable to find policies that secure their money on the one hand and increase their investments on the other.

Forth: Expercal results:

Before conducting the standard analysis, the data was transferred to a quarterly due to the small number of observations, as the study period for the years (2004-2020) ie (16) observations, and it is not possible to conduct statistical tests on these observations, so the data was converted to a quarterly, in order to give results More accurate and more reliable. The variables can be described in terms of symbols and in terms of the type of variable (dependent or independent) as in the Table 3.

Table 3. Study variables

Symbol	Variable type	Variables	Sequence
Pr	dependent variable	policy price	1
Ex	dependent variable	exchange rate	2
Cr	independent variable	cash credit	3
Do	independent variable	deposit	4

Source: Prepared by the researcher

First: The silence test:

This test is conducted to ensure that the data does not suffer from problems, and by using the program (evIEWS10), we reached the following results:

Table 4. Dickey-fuller stability test results

Prob	Tabular values			Calculated values	Variables
	10%	5%	1%		
0.0000	-2.590	-2.906	-3.533	-8.000	Ex
0.0163	-1.613	-1.946	-2.604	-2.417	PR
0.0000	-2.591	-2.908	-3.538	-16.24	DO
0.0000	-2.591	-2.908	-3.538	-19.64	CR

Source: Prepared by the researcher based on the results of EvIEWS10

Through the above table, the policy price has stabilized at the level and at a significant level (5%, 10%), because the calculated (T) is less than the tabular, while the exchange rate did not achieve stability at the level because the calculated (T) is greater than the tabular, rejecting the alternative hypothesis and accepting the hypothesis The absence indicates the instability of the time series, and stability was achieved at the first difference and at the level of (1%, 5%, 10%), and the two independent variables (cash credit and deposits) did not achieve stability at the first level and difference, but they settled at the second difference because The calculated (T) is smaller than its tabular counterpart and at (prob) (0.0000), i.e. accepting the alternative hypothesis indicating the stability of the chains and making the series free from the unit root.

Second: Estimating the function of the effect of cash deposits and credit on the policy rate:

After the multiple autoregression test was conducted, the following results were obtained:

$$PR = 7.528762 - 0.000572dcr + 0.000358DDO$$

R-squared=11%, Adjusted R-squared=8%, F-statistic=3.922089

Prob (F-statistic) = 0.024811

Table 5. The multiple autoregression

Prob.	t-Statistic	Std. Error	Variable
0.0000	11.16542	0.674293	C
0.0223	2.342430	0.000244	DCR
0.0200	2.387167	0.000150	DDO

Source: Prepared by the researcher based on the results of Eviews10

Through the above results, it is clear that the relationship between the policy price and the monetary credit granted is an inverse relationship, meaning that an increase in the policy price by one unit will decrease the granted monetary credit by (0.000572) and this is consistent with the logic of economic theory. As for the policy price relationship, the results showed a positive relationship, that is, increasing the policy price by one unit, deposits will increase by (0.000358), and this shows that when the central bank increases the policy price, the ability of commercial banks to obtain deposits will increase and help reduce the prevalence of dealing in cash and increase banks' liquidity commercial. The significance of the results is the variables in the effect as in the above table, since all the variables were achieved less than (5%), which indicates and confirms that the calculated

(t) is greater than its tabular counterpart for each of the variables in its relationship with the dependent variable (the policy price).

As for the effect of all the independent variables on the dependent variable, they had achieved an amount of (11%) percent according to the (R-squared) test, and this shows the weak influence of the independent variables on the dependent variable because the variable is the semi-fixed policy price by the central bank and thus reduces of the effect on the variables under study.

As for the F-statistic test, which turned out to be greater than its tabular counterpart, being less than (5%), meaning that it is significant according to (Prob (F-statistic) = 0.024811) and this indicates the significance of the estimated model.

Third: Estimating the function of the effect of cash credit and bank deposits on the exchange rate

Relying on the program (eviews 10) to measure the effect of independent variables on the dependent variable, we reached the following results:

$$DEX = 1.825305 - 0.004597 DDO + 0.008524 DCR$$

R-squared=23%, Adjusted R-squared=21%, F-statistic=9.9

Prob (F-statistic) = 0.000180

Table 6. The multiple autoregression

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.7584	-0.308921	5.908650	-1.825305	C
0.0009	-3.496867	0.001314	-0.004597	DDO
0.0002	3.984413	0.002139	0.008524	DCR

Source: Prepared by the researcher based on the results of Eviews10

Through the above results, it is clear that the relationship between the exchange rate and bank deposits is an inverse relationship, that is, an increase in the exchange rate by one unit will decrease the deposits by (0.004597), because the rise in the exchange rate will help reduce the value of the currency, which will push individuals who have large cash savings to deposit it in Commercial banks, but the relationship between the exchange rate and monetary credit is a positive direct relationship, meaning that the increase in the exchange rate will help to increase the credit granted by (0.008524) as a result of the depreciation of the local currency when the exchange rate is raised, which prompts commercial banks to offer more loans as compensation for the depreciation Currency, and the above table confirms the significance of the influence relationship between the exchange rate, monetary credit and bank deposits in Iraq through the (T) test and the (prob) test, which was less than (5%), which confirms that the calculated (t) is greater than its tabular counterpart and the significance of the effect.

- Testing the amount of influence of the independent variables on the dependent variable through the coefficient of determination test, the results of which showed that its amount is (23%) percent, and this despite the fact that it is a higher value than the effect relationship above, but it remains weak in effect.

- F-statistic test, which shows the significance of the estimated model because the calculated (F) is greater than its tabular counterpart, as the calculated (F) is (9.9), which is greater than its tabular counterpart.

5. CONCLUSIONS

- 1- The policy price has taken a semi-stable and fixed path, especially in the last study period, which made it a limited tool influencing the course of business of commercial banks.
- 2- The exchange rate used tools to maintain the general level of prices only, and the Central Bank of Iraq neglected the impact of these operational tools on other objectives, including economic growth and reducing unemployment, as the exchange rate must take into account the extent of imports to strengthen and encourage local production, which increases economic growth and reduces unemployment. This

achieves the three main objectives of monetary policy.

- 3- There is a significant development in the quantities of cash credit provided compared to what was previously in terms of the lack of quantities provided.
- 4- The impact of cash credit and bank deposits on the policy rate was not statistically related to achieving a rate of (11%), and this is due to the failure to use the operational interest rate tools by the Central Bank of Iraq to influence the economy as it is, but rather developed countries.
- 5- The influence relationship between the exchange rate with monetary credit and deposits was greater than the influence relationship in the policy rate model, but it remains very weak as a result of the exchange rate's focus on maintaining inflation rates and not focusing on the main objectives of monetary policy.

6. RECOMMENDATIONS

- 1- Deposits and cash credit are among the most important banking tools that can influence and move the economic activity of any country. Paying attention to these tools and increasing their efficiency is a paramount necessity that helps attract money to individuals on the one hand deposits and finance investments on the side of cash credit, which increases economic growth and reduces unemployment.
- 2- It is possible to increase the efficiency of the policy rate in influencing banking activity by influencing deposits and monetary credit and thus affecting economic growth.
- 3- When using the operational tools of the exchange rate, consideration must be given to its impact on banking activity, which affects unemployment and economic growth, and not to neglect these objectives in the decisions adopted by the Central Bank of Iraq in the exchange rate.
- 4- The need to focus on the efficiency and effectiveness of the credit provided in terms of focusing on the productive sectors rather than the consumer sectors through the application of an efficient banking system characterized by planning and effective control in placing credit in the productive market.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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