

Measuring the evolution of bank credit volume on some macroeconomic variables in Iraq during 2004-2018

Fatima Sawadi Shenbara and Aqel Hameed Jaber

Abstract

The current study was summarized to explain what was bank credit and the theories explaining it, as well as explain its impact on some macroeconomic variables during 2004-2018 in Iraq, the simple regression model and the 9EViews software were used, the study reached several conclusions, especially since the government bias to deal with government banks, and ignore private banks, it also concluded that the monetary credit has weak effect on inflation, as a result of complete control in the latter by the monetary policy represented by the Central Bank of Iraq, the accumulation of liquidity at the commercial banks in Iraq, despite reaching high rates. The sector unable to operate and invest its assets and deposits it has, the study recommended that there were great investment plans and opportunities, provided by the environment, the Iraqi economy, helps commercial banks to invest the cash they have, and to achieve appropriate profitability, it will help to leave the exploitation unethical, for example the higher profit margin charge, as well as the bias that the government works with banks, it does not work for the Iraqi economy, it must move away from prejudice and leave government and private banks to compete, and make it work and diversify its sources of income, which depends mostly on the currency auction and the difference between the official and advertised price.

Keywords: bank credit, inflation, Gross Domestic Product (GDP), unemployment.

1. Introduction

Bank credit has a very important role in supporting the economic development process, it is a financial intermediary between savers and investors, the capital was transferred from a person who has a surplus cash to a person who needs this surplus and does not have, to exploit it in the production process, use of human resources and increase the productivity of capital. Bank credit granting operations were the primary and important function, carried out by commercial banks to achieve their goals, credit represents most of these banks' assets, contributes to the largest share of its operating income. The process of granting credit is a marketing process for the funds available to banks, leads to achieving profitability and safety within sound controls and rules, with the availability of guarantees that ensure the flow of funds and their return to the bank. The limited development role of the banking system, as the ratio of cash credit granted to GDP did not constitute anything just (5.9%)

Economic growth was a major goal of economic policy in various countries of the world, it occupies the center stage in the economic policies of all countries, achieving economic growth is not easy, as there were basic requirements and preconditions, they must be available to achieve it in the required form and rate, the most basic elements were the availability of adequate financial resources from adequate sources to finance investment and achieve an increase in production and income. Inflation and unemployment were considered economic phenomena that may face any economy in the world, it was one of the main pillars, that direct government policies and programs. Unemployment was an economic phenomenon that began to appear tangibly with the prosperity of industry, it also became an economic phenomenon in any economy, as for inflation, it is the phenomenon of the general continuous

rise in prices, became a black point in the economy if it had negative side, therefore, a number of economists began to study the relationship between inflation and unemployment.

The study of Manicka Vasugi (2020) Indicators the capital market at the global level information macro and micro environment of the study found interest rate on other hand a considerable impact on S&P CNX nifty only foreign exchange rate on BSE sensx the capital market indices are depend on microeconomic variable the study concluded that microeconomic variable on capital market fundamental affecting domestic market and global level etc.,

2. Methodology

First: The importance of the study:

The importance of the study, because it deals with an important topic of economic issues, it is a bank credit and the role it can play as a financial intermediary, to mobilize savings in various forms, employ them according to different controls and standards, which made him enjoy the attention of economists and economic decision-makers, being a direct influence on macroeconomic variables, it provides an important financing aspect that contributes to supporting the developmental aspects of the country.

Second: The Research Problem:

The study problem stems from the fact that most countries, especially developing countries, it suffers from the phenomenon of not directing bank credits towards economic developmental trends, make it effective in positively affecting macroeconomic variables.

Third: The aim of the study:

The research aims to shed light on bank credit, and the effect that it can have on some economic variables such as economic growth, unemployment and inflation in Iraq using econometric models.

Fourth: the hypothesis of the study:

The hypothesis of the study starts that the development of the volume of bank credit has an effect on some economic variables, such as economic growth, unemployment and inflation in Iraq.

The theoretical side

The concept of bank credit: The concept of bank credit

Credit is an investment financing formula approved by all kinds of banks, takes money as a tool of exchange, a measure of values, and a tool for savings and deferred payment. Bank credit is one of the most important banking activities, which reflects the results of its operations on the overall financial accounts of banks in profit and loss, it is the most important job in the field of banking that achieves return for the bank, occupies a prominent position in stimulating economic activity, through the role of financial intermediation between savers and borrowers, contribute to increasing the money supply. Credit means credit in the economy, the ability to borrow, and the commitment of one party to another to borrow or indebtedness, in modern economics, it is intended for the creditor to give the debtor a period of time, upon its expiration, the debtor shall pay the debt value, in other words, granting a period of time from the creditor to the debtor, the latter must at its end pay the debt owed, it was based on the extent of trust, and therefore it defines it with confidence itself (Saeed, 2014: 185).

Credit refers to the services provided by the bank to the customers, which provides individuals and institutions in the community with the necessary funds, provided that the debtor undertakes to pay the money, interest, and commissions due on it and the banks. one payment or in installments on specific dates, it supports that process with a set of guarantees, that guarantees the bank to recover its money, in the event that the customer stops paying, without any losses incurred by the bank (Abdul-Baqi, 2015: 246). It was also known as a process or processes, according to which the bank accepts in return for a certain interest or commission, to grant his client or another person at the request of his

client, whether immediately or after a certain time, in the form of cash capitals or another form (Abdel Hamid, 2002: 120-121).

The importance of bank credit

Bank credit occupies a large and important position (Azfa, 2018, 15-16) (Taha: 2007: 439). Credit to banks represents the largest portion of profits, with his profits, banks can expand and grow, which brings more profits, therefore, it represents the most attractive investment for commercial banks, due to the high returns generated by it, as it aims to achieve profitability for the bank.

1. Bank credit is an important source of satisfying the financing needs of various economic sectors, helps projects in obtaining the necessary loans to finance them, it also helps finance individuals with their needs and consumer purchases, especially durable goods.
2. Bank credit increases the volume of international trade, by opening documentary credits, as it facilitates and broadens foreign exchange.
3. Bank credit helps in achieving a balanced economy, by distributing credit cash resources to various sectors to ensure its smooth flow for all projects, it was assumed that the amount of credit and the time of granting it are compatible and consistent with the needs of economic activity and economic development plans, and that the increase in granting him helps in the flow of purchasing power if it is not matched by an increase in goods and services at a close rate, inflation will occur, and vice versa, if the economy needs credit flows and the banks do not grant it, the economy will be in a state of contraction, in both cases, this will lead to a loss of balance and a state of instability.
4. Bank credit, through its tools such as contracts, bonds, and bills of exchange, perform the function of settling exchanges, which allows shortening the time of the exchange of goods and services.
5. Bank credit contributes to creating employment opportunities, and increase the purchasing power of individuals, and improving the standard of living for them through its contribution to the expansion of economic activity, thus increasing the national income.
6. The large economic activity is an indication of the success of banking institutions, if those institutions adopted a sound credit policy in granting and monitoring its collection.

The concept of Economic Growth

Economic growth represents the material sum of economic and non-economic efforts in society, there was no clear interest in it, especially before the Industrial Revolution, life was simple, and society used to devote most of its economic resources to producing basic needs, represented by food, clothing, housing and other basic needs for living, the development of production methods historically associated with the development of human capabilities to produce, especially after the industrial revolution, made economic growth take a great deal to know the extent of the development of countries, (Siegel, Charles, 2006: 5). Growth, means an increase in the dimensions or scales of living things, such as increases in height, weight and size, in other words, growth is a quantitative phenomenon that results in changes that were directly measured by quantitative measures (Al-Qatifi, 1999: 9).

The concept of unemployment

The concept of unemployment differs from one society to another, in light of the nature of society, the concepts relied upon, the traditions and the type of work that occupies, there was no sense of unemployment in rural societies that depend on agriculture, the development of industry and the diversity provided in specialization, training and employment opportunities. The problem of unemployment has emerged as a tangible economic phenomenon, the International Labor Organization knew that the unemployed is everyone who is able to work and is willing to work, looking for and accepting him at the level of the prevailing wage, but to no avail, therefore, defining the meaning of unemployment in any society depends on the ability of any individual to obtain a job opportunity, which was

considered an indicator of well-being and social development, Indian economist Amanyasin defined unemployment as (social deprivation), and it's the lack of some basic capabilities and capacities to move and work. (Al-Rubaie, 2008).

The concept of inflation:

The concept of inflation is still subject to the difference between economic schools of thought, the reason for this was that the inflation theory has undergone many developments according to the development of thought, defined inflation in different ways,

it has been concluded that there are three directions in defining inflation, the first of them defines inflation based on its causes, the second is known based on its causes, the third defines inflation based on its manifestations and causes, as follows:

The first trend defines inflation based on its causes, Milton Friedman sees inflation as a monetary phenomenon, and the money balance is the main determinant of the general price level, with every increase in the amount of money in circulation, it is accompanied by a sharp decrease in its value and a rise in prices that represents economic inflation, the relationship is inverse between inflation and currency value, Paul Einzig tried to divide monetary inflation into two steps, money inflation is the first step, price inflation is the second step, then fails to satisfy the money demand, and the imbalance occurs and prices rise. (Khalil, 1982: 585).

3. The practical side

1. Stability test

After performing the partial correlation function test, turns out that the string values were devoid of the partial correlation problem, so we will resort to trend analysis for the string values, to demonstrate that it is free from the root of unity, the strings were still silent, according to the Extended Dicky-Fuller test (ADF) and as in the following table:

Table (1) Unit root test results for the time series variables under study.

Variables	Tabular values			Calculated values	Prob.
	1%	5%	10%		
CR	-2.771	-1.974	-1.602	-3.603	0.0018
m	-2.740	-1.968	1.604	-2.942	0.0065
GDP	-2.754	-1.970	-1.603	-2.498	0.0171
N	-4.297	-3.212	-2.747	-10.367	0.000

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Take a stability test, turns out that all the variables (GDP, inflation, monetary credit), did not achieve stability at the level with its three states, if the calculated T values are greater than the tabular ones, we accept the alternative hypothesis indicating the existence of a unit root for the string values, so the test was repeated for the variables, after taking the first difference for the variables (GDP, inflation), to arrive at the stability of the time series of the two variables, since the calculated T was smaller than the tabular equivalent, we accept the null hypothesis indicating that there is no root unit at a significant level (1%, 5%, 10%), as for cash credit, it stabilized at the second difference, the tabular T was greater than the tabularity, accepting the null hypothesis which states that the time series of monetary credit is void of the unit root, unemployment achieved stability at the level, the calculated T is smaller than the tabular equivalent, the time series is free from the unit root for all variables, three degrees slow down for all variables under study.

Standard Model Estimation

At the previous stage, the stability of the time series was examined, it was proven that it is stable by taking the difference as well as its ability to enter the regression equation, at this stage, the relationship between the independent variable and the cash credit was estimated, its effect on dependent variables and according to the outputs of the statistical program:

1. The regression function of the relationship between monetary credit and GDP:

$$D(\text{GDP}) = 43559.69 - 0.02 D(\text{CR}) \dots\dots(1)$$

$$R^2 = 26\% \quad R^2(\text{adj}) = 19\% \quad f = 3.88 \quad p = 0.000$$

Predictor	T	P
C	2.53	0.02
DCR	-1.97	0.07

Evaluation according to economic criteria:

By noting the indication of the estimated parameters of a model, the indication of the parameter of the independent variable and the dependent variable appears to be mismatched with economic theory, recalling the inverse relationship between monetary credit and gross domestic product, due to the fact that the credit granted by commercial banks goes to consumer purposes (such as buying cars, getting married, building homes, etc.), it is not intended for production purposes, reflects positively on the gross domestic product in Iraq, in addition to the weak effect of monetary credit on GDP, this was confirmed by the value of ($R^2 = 26\%$), as a result of the high dependence of the gross domestic product on major sectors such as oil mainly, followed by agriculture and industry poorly, the weakness of investment bank financing for commercial banks in financing the productive sectors, which increases the gross domestic product.

Evaluation according to statistical criteria:

- A. T-test by comparing the calculated value with its tabular equivalent, which is (1.97), turns out that it is larger than its tabular counterpart, accepting the alternative hypothesis that indicates the significance of the estimated parameters at a significant level (5%).
- B. F-test: by comparing its calculated value of (3.88) with its tabular value at 5% and 10% significance, we find that the calculated is greater than the tabular, accepting the alternative hypothesis, therefore, the researcher succeeded in choosing the model and thus the significance of the relationship to the variables.

2. Building a regression model to show the effect of the independent variable on unemployment:

$$m = 15.42 - 3.91 D(\text{CR}) \dots\dots(2)$$

$$R\text{-Sq} = 48\% \quad R\text{-Sq}(\text{adj}) = 43\% \quad f = 10.19 \quad p = 0.000$$

Predictor	T	P
C	9.32	0.000
DCR	-3.19	0.008

A. Evaluation according to economic criteria:

Previous results show that the reference to the estimated parameter of monetary credit in relation to unemployment is identical with the logic of economic theory, being achieved an inverse relationship, increasing the cash credit granted by commercial banks will help reduce unemployment by 3.91, thus congruence with the logic of economic theory, as for the strength of the relationship explained according to the R-Sq test, reached 48, the remainder of the effect ratio is due to other variables that were not included in the model, the effect of cash credit is relatively weak for the same reasons mentioned, which is the form of loans granted, most of which are consumer.

B. Evaluation according to statistical criteria:

T-test by comparing its calculated value with its tabular equivalent of 3.19, which was greater than the tabular, thus accepting the alternative hypothesis indicating the significance of the estimated parameters.

F-Test by comparing its calculated value of 10.19 with the tabular value at the level of significance of 1%, 5% and 10%, we find that the calculated is greater than the tabular, thus accepting the alternative hypothesis indicating the significance of the overall relationship of the model.

3. Building a regression model for the effect of the independent variable on inflation

After analyzing the data according to the statistical program, to show the effect of cash credit on the inflation rate, the researcher reached the following results:

$$D(N) = -6.09 + 2.74 D(CR) \dots (3)$$

$$R-Sq = 2\% \quad f = 0.29 \quad p = 0.000$$

Predictor	T	P
C	0.89	0.390
DCR	0.543	0.597

A. Evaluation according to economic criteria:

From the previous results it becomes clear that the parameter estimated for monetary credit in relation to inflation is identical with the logic of economic theory, it has achieved a positive relationship, increase the cash credit granted by commercial banks, affects inflation by increasing the ratio 2.74, the fact that the granted loans do not go to development paths, however, the fact that this does not appear on the actual rate of inflation is due to the rapid treatment of monetary policy, this was demonstrated by the very weak force of the credit impact on inflation, values of 2% = R2, this is logical because the process of controlling inflation is a policy undertaken by the Central Bank of Iraq through the currency auction, controls the value of the Iraqi dinar through the currency auction, the remainder of the effect ratio is due to other variables that were not included in the model.

B. Evaluation according to statistical criteria:

T-test show by comparing its calculated value with its tabular equivalent, which was 0.54, it was less than the tabular value, rejecting the alternative hypothesis and accepting the null hypothesis that indicates the significance of the estimated parameters.

F-Test show by comparing the calculated F of 0.29 with the tabular value at 1%, 5% and 10% significance level, the tabular is greater than the calculated, thus accepting the null hypothesis and rejecting the alternative hypothesis.

4. Conclusions

1. The relationship of cash credit with the GDP in Iraq, the benchmark results showed that they contradict the logic of economic theory, the reason is that most of the credit provided by commercial banks in Iraq does not go to production, but rather to consumption (such as buying land, cars, marriage, etc.).
2. The benchmark results show a weak effect of bank credit on inflation in Iraq, as shown $R-Sq = 2\%$, due to the fact that inflation in Iraq is controlled by the monetary policy represented by the central bank through the currency auction, the absence of the impact of cash credit.
- 3- The ratio of cash credit to GDP was 19.1%, it was distributed between 15.1% for government banks and 4% for private banks, considered a small percentage of economic growth, does not meet the needs of development projects in the country, while the pledge credit fell to 40.6 trillion, from 50.9 during the study period.
4. Bias practiced by the government in its activities in favor of its banks at the expense of private banks, we find that government banks control 85.8% of total deposits, as for private banks, 14.2% of those deposits, the prohibition of ministries in all their departments, from accepting instruments whose value exceeds 25 million, withdrawals from private banks.
5. Liquidity stagnation at banks despite reaching high rates, the sector has become unable to operate and invest its assets and deposits it has, to serve the requirements of economic development, achieves suitable profitability for it by exploiting available investment opportunities.

5. Recommendations

1. The commercial banks that grant cash credit in Iraq should, directing credit towards production, a catalyst in increasing economic growth, reducing credit directed towards depreciation by following effective and efficient schemes and continuous monitoring of the extended credit.
2. The monetary policy continues to support the Iraqi dinar and pump the dollar to reduce inflation, results in huge losses for us by sacrificing the dollar reserves, the government's sources of income must be diversified by supporting all economic sectors, and leaving the Iraqi dinar in the face of inflation, the bank credit provided will have a major role in supporting the strength of the Iraqi dinar.
3. The commercial banks in Iraq must take all measures that reduce the risks of non-payment of the borrower and the orientation, towards pumping large amounts of credit aimed at increasing economic growth, especially since the Iraqi commercial banks possess large sums of liquidity, there will be a quantum leap in economic growth if used effectively.
4. The bias with which the government works with banks is not beneficial for the Iraqi economy, must move away from prejudice and leave government and private banks to compete, make it work and diversify its sources of income, which depends mostly on the currency auction and the difference between the official and advertised price.
5. There were great investment plans and opportunities provided by the environment, the Iraqi economy, helps commercial banks to invest cash, achieve suitable profitability, it will help them to leave unethical exploitation, for example the high profit margins they impose.

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