

# The Credit Policy and its Impact on Iraq's Balance of Payments for the Period (2012 – 2022).

<sup>1</sup> Dr. Esraa Mohammed Nathir Younis, <sup>2</sup> Dr. Abdulqader Nayyef Tayyeh

*Department of Islamic Banking and Financial Sciences, College of Islamic Sciences, Aliraqia University, Iraq.*

*esraa.m.nathir@aliraqia.edu.iq ; abdulqader.n.tayyeh@aliraqia.edu.iq*

## **Abstract:**

What distinguishes the world today is the increasing interconnections of economic relations between countries. This is the result of the significant developments that the world continues to witness, in addition to the growing essential requirements necessary for development in both developing and developed countries. Every country now seeks to establish international economic relations and agreements, whether bilateral or multilateral. The increase in these relations has been fuelled by the rising movement of people internationally, as well as the movement of factors of production, various goods, services, raw materials, and capital. All these relationships lead to economic and external accounting operations, requiring revenue collection and external payments, which result in obligations that must be settled within a specific time period. Therefore, each country must prepare a detailed plan for the transactions between the country and the outside world, which is known as the balance of payments. Given the great importance of the balance of payments, all countries strive to maintain its stability through a set of policies and necessary measures. Stability in the balance of payments is essential for maintaining overall economic balances, contributing to achieving the desired economic goals for the country's economy. The credit policy, including monetary policy, is one of the key policies used by a country to intervene in economic activity, direct it according to desired goals, and address economic imbalances.

**Keywords:** *Credit Policy, Balance Of Payments, Exchange Rate, Interest Rate, Open Market, Legal Reserve, Gross Domestic Product (GDP), Inflation, Money Supply.*

## **Introduction:**

The credit policy, including monetary policy, has been and remains one of the important policies that governments of both developing and developed countries focus on to correct their economic conditions. In addition to the importance of external balance in achieving equilibrium at the level of macroeconomic variables and accelerating the development process to the levels the country aspires to, it is essential to conduct an analytical study of the credit policy and its impact on the Iraqi balance of payments.

## **Research hypothesis**

There is a significant impact of credit policy on the Iraqi balance of payments during the period (2012-2022), as changes in credit policies lead to fluctuations in the balance of payments through their impact on financial and trade flows.

## **Research objective**

The aim of the research is to know the impact of credit policy on the Iraqi balance of payments and to analyze the relationship between them for the period from 2012 to 2022.

## **Methodology**

The method followed in the research is the descriptive method in addition to the analytical and statistical method to show the impact of the relationship between the variables studied within the framework of the research.

## **Chapter one: Theoretical Aspect of Credit Policy and the Balance of Payments:**

### **1. The concept of credit policy - its pillars and tools**

#### **First: The concept of credit policy**

Each bank sets its own credit policy, known as the lending policy in conventional banks, and the investment and employment policy in Islamic banks (Ali, 2019, 89). This policy clarifies the areas for which it provides credit facilities, the types of clients it deals with, the basic conditions for the different types of credit facilities, and the administrative authorities that have the right to grant and determine the limits of credit facilities.

Credit policy is defined as a set of principles that regulate the method of studying and granting credit facilities, the types of activities and economic sectors that can be financed, how to estimate the amounts of required facilities, their types, due dates, and main conditions. It also sets the general guidelines that govern the bank's activities in the decision-making process regarding granting and monitoring credit facilities, ensuring the proper deployment and optimal use of its funds to achieve the best return. It also includes taking any necessary precautions if any negative developments occur in any element that the bank relied upon in its credit decision. Through this, it aims to achieve safety, profitability, liquidity, and meeting the community's needs (Al-Sisi, 1997).

Credit policy represents a set of decisions issued by the bank's senior management, which specify the criteria, conditions, scope, and authority for granting bank credit. These decisions are based on the credit strategy derived from the national strategy at the macro level. They represent both short-term and long-term goals and consider the direction and framework of the national credit strategy. This requires the banking system to develop corresponding plans and policies, taking responsibility for developing and managing its activities within this framework by setting detailed, step-by-step plans and analytical methods to implement the policy. The credit policy aims to enhance, diversify, and improve banking services without violating established banking norms and practices. Regarding the factors to be considered when formulating a credit policy, it is essential to consider both internal and external factors. Internal factors relate to the organizational, administrative, and operational conditions within the bank, while external factors involve the circumstances and conditions affecting the banking environment in which the bank operates. The impact of these factors may vary from one credit policy to another, depending on their significance and interconnections with other factors. However, it can be said that the more realistic and applicable the credit policy is—by taking all factors into account—the more effective it will be. Therefore, the credit policy should consider the following (Arshid et al., 1999).

#### **Second: Components and pillars of credit policy**

The credit policy has essential components and pillars that define its features and represent the minimum requirements that must be adhered to by any good credit policy. It is important to note that there is no unified credit policy for banks due to the differences in the nature of banks, their objectives, and the size of their expertise, in addition to other determinants and factors. However, there is no disagreement about the basic components of credit policy, which are generally agreed upon, while the differences arise in some detailed respects (Alfi, 1997).

The main pillars and components of credit policy include the following:

1. The determination of the regions and geographical areas covered by the bank's branch services depends on several factors that play a key role in defining the geographical scope of the bank's activities. This scope changes based on these factors, as they are closely related to the determination of the bank's reach. The credit policy should reflect these

changes by considering them as soon as they occur, ensuring that the negative effects of this change are overcome. This should be updated based on the bank's expansion and spread. Additionally, the bank's goals and the nature of its activities significantly influence the geographical scope of its operations. These, in turn, are affected by the prevailing economic conditions, which play a major role in determining the geographical scope of the bank's activities. The economic cycle, whether in times of growth or recession, also impacts the bank's expansion plans and operations.

2. The credit policy defines the economic sectors and activities that the bank will focus on, specifying the types of loans and credit facilities offered to these sectors, as well as the acceptable guarantees for them. The credit policy determines the economic fields and activities that align with the bank's objectives and grants credit facilities accordingly, while considering the geographical and regional dimensions and the country's economic structure. The economic structure plays an important role in defining the scope of economic activities included in the credit policy. Additionally, the level of economic development impacts the scope and extent of the credit policy. Therefore, the economic policy determines the types of credit facilities exclusively for the goal of "optimizing time and effort" when processing credit applications, which helps in the automatic sorting of requests. The size and types of credit facility ceilings require the credit policy to be based on considerations related to the sources of funds, the nature and size of the bank's activities, as well as the general economic conditions, allowing for effective management of liquidity and market risks. This determination includes the objectives of the credit facilities, the due dates for loans, the currency in which the loan is granted, the repayment mechanism, and the acceptable guarantees for these facilities. Moreover, it is essential to periodically review and update the credit policy in accordance with relevant developments.
3. The credit policy must define interest rates, administrative expenses, and maturity dates, as these are crucial elements for planning the profitability and liquidity of the bank in both the short and long term. It is essential that the credit policy specifies the interest rate on credit facilities according to market conditions and the bank's situation, while also aligning with the central bank's policy, which may sometimes intervene in setting interest rates as part of the main monetary policy indicators. The policy should ensure that the interest rates remain within an allowed margin, which is influenced by factors such as the discount rate, cost of funds, competition, maturity dates, profitability, liquidity, and risk levels. The credit policy must also define the administrative fees and expenses, which are collected in the form of "fees and commissions." These must be set and regulated to maintain a balance that does not weaken the bank's competitiveness or burden it with high costs, which could negatively impact its profitability, capital strengthening, and overall performance. Furthermore, the pricing of interest on various loans, credit facilities, and the nature of guarantees is closely linked to the maturity dates, which the credit policy must determine. This should be done based on factors such as the objectives of the credit, the guarantees provided, the cash flow realization dates from the borrowing client's activities, and the availability and nature of the bank's funding sources. The policy must consider the suitability between uses and sources in terms of cost-efficiency, sufficiency, and maturity periods. Thus, the credit policy must take all these factors into account when setting the maximum limits for the maturity periods of credit facilities, ensuring effective risk management, especially liquidity risk.

4. The credit policy must establish conditions and criteria for granting credit and credit concentration limits. It defines the creditworthiness boundaries for managing facilities within these limits concerning the conditions and criteria for granting bank credit. This serves both the executive management and internal and external supervisory levels. The credit policy specifies the boundaries and technical indicators that govern the granting of bank credit, based on the nature of the activity, the bank's goals, its ability to bear risks, and its financial capacity. The criteria and conditions should be clear and precise, including the minimum creditworthiness for a client, which encompasses (personal characteristics, financial capability, capital, guarantees, and general economic conditions). The severity and rigor of these criteria reflect the bank's policy and approach to managing risk levels. It is necessary to focus on balancing borrowing and self-financing in client activity financing to avoid risks, such as credit concentration risk. Credit concentration risk emerges when there is an imbalance between credit diversification and concentration. A high concentration level indicates greater risks, whereas a diversified credit portfolio reduces these risks. Thus, the credit policy determines the credit concentration limits based on the client, activity type, asset size, and guarantees, while considering the legally defined ratios that ensure risk distribution. This prevents excessive credit concentration in a limited number of clients, which increases risk. The level of risk varies from one client to another based on asset size and investments. Consequently, the credit policy should account for the distribution of credit facilities to diversify risks. This involves spreading the credit portfolio across different economic activities and placing restrictions on high-risk activities. It also emphasizes monitoring the types of guarantees and their credit acceptance ratios when granting credit.
5. The credit policy must clearly define the scope of credit authorities and responsibilities according to the levels of the bank's organizational structure. Each level is authorized to review and approve credit facility applications, ensuring they comply with the credit policy. The scope of credit authority depends on the bank's size and organizational structure. Smaller banks tend to centralize authority, while larger banks use a delegation model with different forms of delegation, including individual, collective, or credit committees. Each level has authority within its limits, and if a credit facility request exceeds these limits, it is escalated to a higher administrative level for further review, including recommendations for approval or rejection. It is important to note that defining the forms of authority delegation is crucial for the performance and integrity of the credit policy. This process directly influences the speed of execution, ease of supervision, and responsibility allocation. It also impacts the reliance on individual decision-making and the nature of relationships between different administrative levels. Moreover, the democratic approach in decision-making plays a significant role. However, the board of directors retains broader powers that exceed the limits of lower administrative levels, as it is the highest authority and directly responsible for formulating the credit policy and determining the forms and limits of delegations within the organizational framework.
6. It is essential for the credit policy of a bank to define the data and reports needed for oversight and auditing, according to predefined models necessary for monitoring and auditing activities. These reports should be submitted periodically or as needed, depending on the requirements of the relevant regulatory bodies. The aim is to facilitate comparison, matching, and analysis of the bank's conditions and performance. This

includes the analysis of key factors, focusing on risk-based management using classification methods subject to the central regulatory authority. The reports should address elements such as capital adequacy, asset quality, management, profitability, and liquidity, in order to detect risks and ensure compliance with the established controls and guidelines (Basle Committee, 1997).

On the other hand, it is essential for customers to be informed about the nature of the bank's services, activities, procedures, and achievements. This is crucial for promoting banking habits and increasing financial awareness among them. Such transparency has a positive impact on enhancing trust in the bank, facilitating the execution of banking transactions, and supporting the marketing of banking services. This, in turn, improves the bank's overall activity and strengthens its financial position. Therefore, it is necessary for the credit policy to provide customers with at least the minimum information related to the terms and procedures for granting credit facilities offered by the bank, as well as other banking services. This information should be regularly updated to reflect any changes and developments in the bank's policies and procedures related to credit facilities.

**Third: Credit instruments.** The most important credit instruments are commercial papers and financial papers. The first are considered short-term credit instruments, while the second are long-term credit instruments. In addition, paper money is considered among the credit instruments, and we will explain it in detail (Hashish, 2004, 148).

- **Commercial papers:** These are short-term instruments, the most important of which are bills of exchange, promissory notes, checks, and treasury bills. The most important thing that distinguishes these papers is the speed of their circulation and they're not being restricted by the conventional restrictions and rules of civil law. Custom also enters into providing a large amount of security for them and establishing a degree of trust in them.
- A bill of exchange is a document or paper issued by the creditor, i.e., the owner of the bill, to the debtor, i.e., the drawee, to pay a third person, the beneficiary, on a specific or determinable date or upon sight, a specific amount.
- A promissory note is a document in which the debtor, i.e., the issuer of the note, undertakes to pay a specific amount on a specific date or upon sight to the beneficiary. The undertaking to pay may be to the bearer of the note, and in this case the note is known as a bearer note.
- A check is a paper that includes an order issued by the drawer to the drawee to pay a specific amount to the beneficiary or to the bearer, upon sight.

In addition, there is a short-term credit instrument that is not a commercial paper, although it is similar to it, which is treasury bills. Treasury bills are a short-term government debt bond, usually for three months. This bond is usually bearer-owned and includes interest on the debt it bears for the benefit of the beneficiary, and it can be discounted at commercial banks.

- **Securities:** are long-term credit instruments, the most important of which are stocks and bonds, and they are as follows:
  - Shares are a type of ownership right. Shareholders are partners in the capital and therefore do not receive interest, but rather make profits or bear losses depending on the financial performance of the project that issued the shares.
  - Bonds are credit instruments that may be issued by governments or projects. Subscribers to these bonds are not partners in the capital, but rather are merely creditors. Therefore, they must receive interest at a fixed rate that is determined in advance, and their right to collect the debt from the entity that issued it continues.

- Paper money is considered a credit instrument, and there is no better evidence of this than the fact that it is sometimes called credit paper money. This indicates that individuals' acceptance of it and its circulation among themselves depends on the degree of their confidence in the issuing party, which is the state, and that the central bank has the right to issue this paper money as it is the state's bank. Money enjoys the advantage of its general acceptance as a medium of exchange and its complete liquidity.

**The second requirement / Balance of payments and its components**

**First: Concept of the Balance of Payments:** The balance of payments is a window through which the national economy views the global economy, and vice versa, as it is the record in which all economic transactions linking the national economy with the global economy are listed. These transactions involve reciprocal credit and debit relationships, covering the movement of goods, services, and capital. The balance of payments holds significant importance in economic analysis at the national level because it reflects the degree of integration between the domestic economy and the global economy. Additionally, the economic transactions recorded in it reflect the structure of production, the strength of the national economy, its competitive ability, and its response to the development of global productive forces. There are several concepts of the balance of payments, including:

- The definition of the balance of payments was mentioned in the Balance of Payments Reference issued by the International Monetary Fund as a statistical statement that provides, in a systematic and organized manner, the economic transactions taking place between a particular economy and the outside world during a specific period of time (International Monetary Fund/ Balance of Payments Reference - Washington 1996).
- The balance of payments is a statement that records the value of rights and debts arising between a certain country and the outside world as a result of all types of economic exchanges that arise between residents of this country and residents abroad during a certain period, usually a year (Amin, 2008: 1).
- It is a statement in which economic transactions are placed in the form of rights and debts between persons residing in the state and persons residing in other states, usually for a year (Al-Issawi, 200: 1).

**Second: The importance of the balance of payments:** The information contained in the balance of payments helps decision-makers in formulating economic policies related to the state's financial and economic strategies on one hand, and its trade activities on the other. It also clarifies the impact of international economic operations and policies on the national income level, and the extent of the national economy's reliance on international aid. In this context, the balance of payments is used as an indicator to evaluate the prospects of success for future economic policies and development, to assess repayment ability, and to determine appropriate exchange rate policies. It is important to emphasize that a surplus in the balance of payments is not always an indicator of prosperity, nor is a deficit always a sign of bankruptcy. However, it is essential to investigate the causes and potential of the deficit, as the continued existence of a deficit over long periods is undoubtedly an indicator of fundamental economic difficulties and problems (Abdullah, 2007, p. 215).

The economic transactions that link the country with the outside world are the result of its integration into the international economy, and thus they measure the international position of that country. (Raed, 2013, 32)

The balance of payments data also reflects its own implications that express the economic conditions of the country, regardless of the time period covered by the study of this data.

Therefore, recording these international economic transactions in itself is a vital issue for any national economy, for many reasons, including: (Ahmed and Ghazlan, 2012, 232) (Al-Sariti, 2009, 226: 227) (Abdul Majeed, 2001, 90)

- Reflects the strength of the country's national economy: - The structure of these economic transactions reflects the strength of the economy, its ability and degree of adaptation to the variables affecting the international economy, because it reflects the size and structure of both exports and imports, including the factors affecting it, such as the size of investments, the degree of employment, the level of prices and costs, etc.
- It shows the forces determining the exchange rate: - The balance of payments reflects the supply and demand for foreign currencies and shows the impact of economic policies on the structure of foreign trade in terms of the volume of exchange and the type of exchanged goods. This leads to following up and knowing the extent of development of the country's economic structure and the results of its economic policies.
- It helps in planning and directing the country's foreign economic relations: - The balance of payments is an important tool that helps public authorities in planning and directing the country's foreign economic relations due to its comprehensive structure. Such as planning foreign trade from the commodity and geographical side, or when setting financial and monetary policies. Therefore, the information recorded in it is necessary for banks, institutions, and individuals in the fields of finance and trade.
- It measures the external position of the state: - The economic transactions that link the state with the outside world are the result of its integration into the external economy, and thus reflect the external position of the state.
- The balance of payments is considered a source of information: - related to exchanges that entail obligations towards others, or those transactions that follow means to cover these obligations.
- Balance of payments reflects the degree of development of a country's economy: - Studying the balance of payments of a country enables us to identify the degree of development of that country. In an advanced industrial country, manufactured goods constitute a large part of its exports, while imports consist mostly of raw materials and food commodities. In contrast, developing countries, whose exports are mostly raw materials and often depend on a very limited number of raw materials in their exports, perhaps a single material. As for their imports, they consist mostly of manufactured goods and sometimes some food commodities.

**Third: Components of the balance of payments:** The balance of payments consists of four main sections, which are as follows:

(Current account, unilateral transfers, capital account, net reserves of monetary gold and foreign exchange reserves and various other liquid assets)

**The current account is divided into two sections:**

1. Trade balance: It records visible trade operations, meaning exports and imports of goods.
2. The invisible trade balance, meaning exports and imports of services. The general rule in recording transactions is that the value of each export of a good or service is recorded on the credit side as it leads to the entry of foreign currency (hard currency), while the value of each import of a good or service is recorded on the debit side as it leads to the exit of foreign currency.

**Unilateral transfers** represent the second part of the balance of payments accounts. They refer to transfers made by one party without any corresponding obligation, such as a country

(residents in a country) providing aid, grants, or rewards to another country (non-residents). The difference between these transactions and other transactions in the balance of payments is that they are made by one party, not two parties. For example, an export transaction represents a bilateral deal, while unilateral transfers do not entail any obligation from the second party. Examples of unilateral transfers include workers' remittances. The recording of these transactions in the balance of payments, in terms of credits and debits, follows the same rule as explained previously.

**Capital account:** This account records capital flows into and out of the country and is divided into two sections:

1. Long-term capital account includes capital flows that are longer than one year, i.e., due for repayment after one year or more, and includes the following (long-term loans, direct investment)
2. Short-term capital includes short-term official transactions such as current deposit movements between banks and deals to buy and sell stocks and bonds that are due for repayment in a period of less than one year for residents and non-residents. Here we point out that the movement of liquid banking assets is subject to a special rule for recording entries in them, as the entry of cash into them represents an increase in the liabilities of the banking system, and therefore they are recorded on the debit side, and vice versa in the event of the exit of cash from them, which is considered a reduction of its liabilities, and this is recorded on the credit side (Al-Qadi and others, 2011, 8).

**Net official reserves of monetary gold, foreign exchange, and liquid assets** represent the deficit and surplus in the balance of payments from an economic perspective as the result of the net balance of current transactions, i.e., the current account. Unilateral transfers and capital transactions, i.e., the capital account, come into play here. When the debit side exceeds the credit side, it indicates a deficit in the balance of payments, and the opposite is true in the case of a surplus. The role of this account, i.e., the official reserves and short-term capital movement account, is to settle the (deficit or surplus), reflecting the net changes in liquid international reserves in order to carry out the mathematical settlement for the net deficit or surplus. After this settlement, the balance becomes mathematically balanced, although true equilibrium is achieved under specific circumstances. Liquid international reserves consist of the following: (net monetary gold, foreign currency reserves, liquid assets held by official monetary authorities such as the central bank - foreign bank deposits, foreign monetary gold held by the central bank - International Monetary Fund resources, and the country's share of Special Drawing Rights).

#### **A paragraph of pure error and omission**

Although the balance of payments accounts is balanced in principle, imbalances arise in practice as a result of shortcomings in the source data and the means of preparing the data. This imbalance is called one of the usual features of the balance of payments data, net errors, and omissions (Abdul Nabi, 2012, 12).

**The third requirement: Economic factors affecting the balance of payments.** There are some economic factors that greatly affect the balance of payments and its components. We mention the most important of them:

- **Interest rate changes** / The change in interest rates affects the movement of capital. When interest rates increase, the inflow of capital increases with the aim of investing it through owning high-yield bonds. Conversely, when interest rates decrease, capital goes out, which leads to a deficit in the balance of payments. This is because other financial

centers are more attractive to investors, as capital moves to financial centers with low interest rates in order to benefit from the difference in interest rates.

- **Inflation** / The phenomenon of inflation leads to an increase in the prices of local goods to become relatively higher than foreign prices, which leads to a decrease in the country's exports and an increase in its imports at the same time, as the prices of foreign goods will become cheaper and more suitable than the prices of local goods, which makes foreign goods more attractive to residents of the country compared to local goods, and thus a deficit occurs in the balance of payments (Al-Hajjar, 2005: 64).
- **Exchange rate** / Changes in exchange rates affect the balance of payments. When the external value of the currency increases, the competitiveness of locally produced goods and services in global markets decreases. The opposite is true in the case of a decrease in the exchange rate, as the competitiveness of exports of goods increases, which positively affects the balance of payments (Bouada, 2018: 30).
- **GDP growth rate** / Where the gross domestic product represents the final goods and services valued at market price during a specific period of time, usually a year, or it is the total value of final goods and services produced within the country during a year (Salima, 2016: 121). If the increase in incomes in a particular country leads to an increase in demand for imports, but in the case of a decrease in incomes, the opposite happens, as the decrease in incomes decreases the demand for imports (Ayad, 2018: 22).

## **Chapter Two: Analysis of Credit Policy in Iraq and its Development for the Period (2012/2022)**

The credit policy in Iraq is practiced by the Central Bank of Iraq, commercial and specialized banks, and other credit institutions. After 2012, Iraq witnessed major economic, political, and security changes that affected the credit policy and its indicators. These changes led the Central Bank of Iraq to adopt a variable and flexible credit policy to adapt to local and international economic and financial conditions. The most prominent features of the credit policy in Iraq are as follows:

- Determine the main interest rate of the Central Bank of Iraq and adjust it as needed to influence interest rates in the financial and credit market.
- Determine the mandatory and optional reserve ratios for commercial and specialized banks and amend them as needed to affect their ability to grant loans and financing.
- Implementing open market operations to buy and sell government and private securities and bonds to influence market liquidity and money supply.
- Determine the official exchange rate of the Iraqi dinar against the US dollar and other foreign currencies and adjust it as needed to affect foreign trade, the balance of payments and cash reserves.
- Providing refinancing, discounting, guarantees and credit facilities services to banks and other financial and economic institutions to support productive, investment and development sectors.
- Implementing control and supervision over banks, financial and credit institutions, and imposing the necessary rules, standards, and controls to ensure the safety and stability of the financial and credit system.

In this section, we will explain how credit policy affects the balance of payments by changing the money supply, determining the exchange rate and interest rate.

**The first requirement** / Monetary policy tools and bank credit in Iraq

The central bank has tools and means that it uses to influence the control and direction of credit. The most important of these tools are (the policy rate, open market operations, the policy of adjusting the legal cash reserve ratio). Through them, the monetary authorities represented by the central bank can use them to control credit. These tools are known as (indirect quantitative control of credit), as their goal is limited to influencing the quantity or size of credit as a whole, regardless of the uses of this credit (Al-Samman et al., 2009: 252).

**Table (1):** Monetary policy tools and bank credit in Iraq for the period (2012/2022)

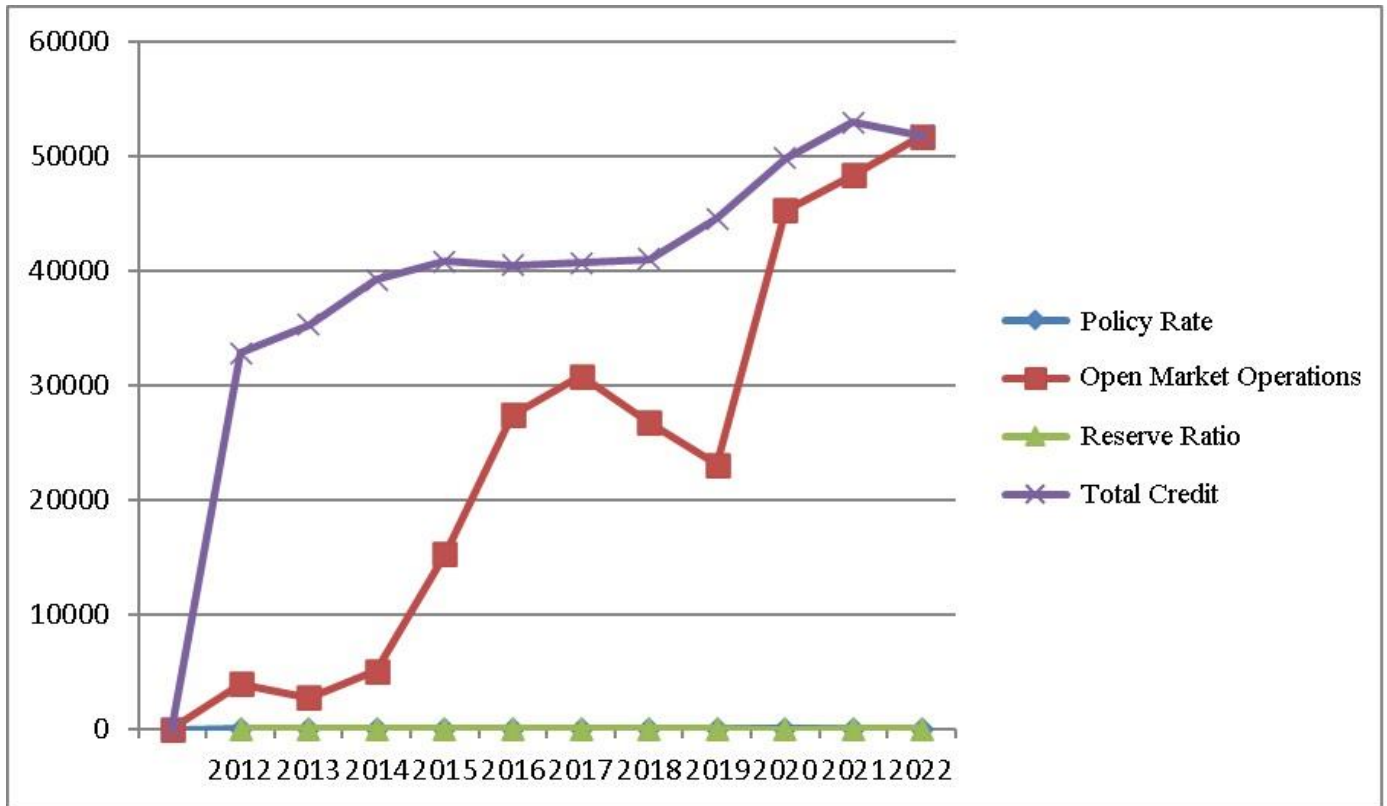
Year	Policy Rate (Discount Rate) %	Open Market Operations (Billion Dinar)	Reserve Requirement %	Total Credit (Billion Dinar)
2012	6	3,926	15	32,856.00
2013	6	2,722	15	35,318.70
2014	6	5,103	15	39,213.80
2015	6	15,281	15	40,805.90
2016	4.33	27,414	15	40,508.20
2017	4	30,834	15	40,717.90
2018	4	26,743	15	41,020.50
2019	4	23,089	15	44,579.40
2020	4	45,318	13	49,817.70
2021	4	48,343	15	52,971.50
2022	4	51,789	16	51,861.00

**Source:** Prepared by the researcher based on data from the Central Bank of Iraq, Department of Statistics and Research, Annual Statistical Bulletin, various years.

**Figure (1):** Monetary policy tools and bank credit in Iraq for the period (2012/2022)

**Source:** Researcher’s work based on data from Table (1).

Through the diagram, it becomes clear to us that the total credit follows the changes in open market operations, which shows the importance of this policy and the changes that occur in it



and its great impact on credit policy in Iraq. As for the policy price and the legal reserve ratio, they enjoy a kind of stability and do not affect the total credit in Iraq.

**The second requirement** / the development of monetary policy variables in Iraq

The Monetary Authority is constantly following up on economic changes at the local and global levels, through their direct or indirect impact on the Iraqi economy, in an effort to achieve and maintain economic and financial stability. The most important goal is to achieve stability in the value of the national currency, by working to maintain a reserve of foreign currencies that covers (100%) of the volume of the monetary mass issued in Iraqi dinars by the Central Bank of Iraq.

**Table (2):** Development of monetary policy variables in Iraq for the period (2012/2022)

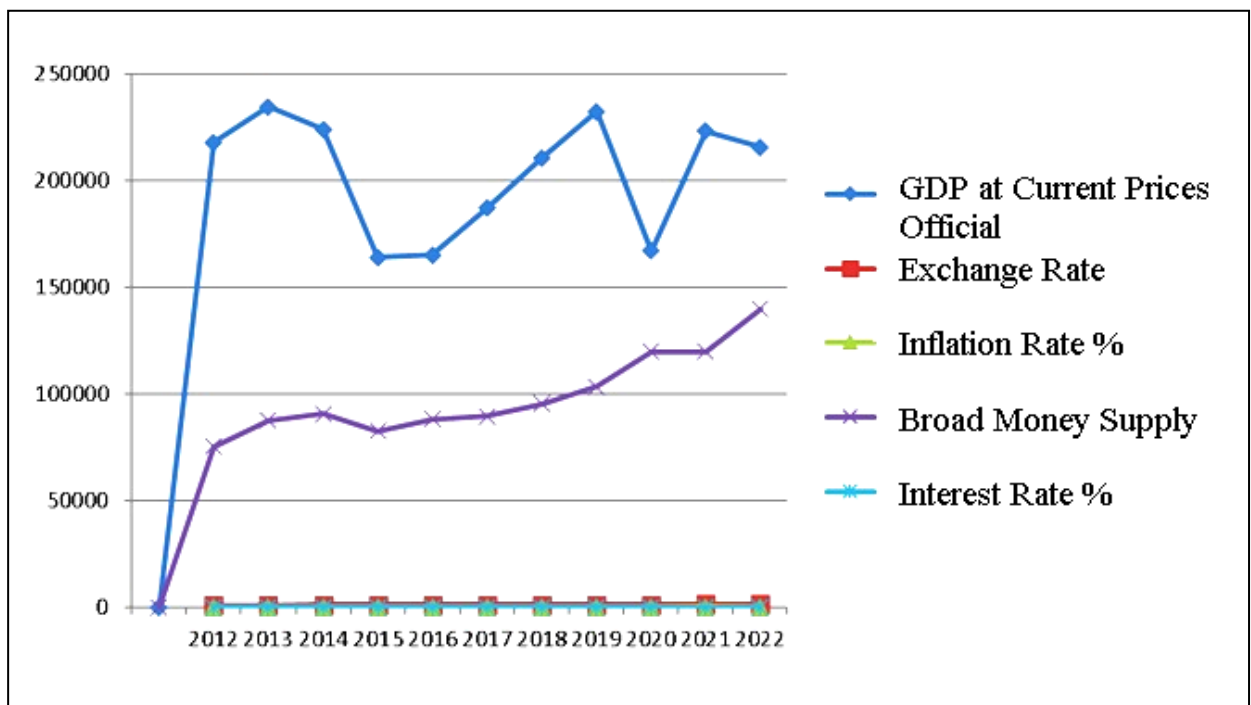
Year	GDP at Current Prices (Million USD)	Official Exchange Rate	Inflation Rate %	Broad Money Supply (Million USD)	Interest Rate %
2012	218,032.10	1166	5.6	75,466	6.8
2013	234,637.70	1166	2.4	87,679	6.6
2014	224,185.70	1188	2.2	90,728	6
2015	164,010.90	1187	1.4	82,595	5.8

2016	165,156.60	1190	0.5	88,082	5.7
2017	187,217.70	1184	0.2	89,441	5.5
2018	210,810.70	1209	0.4	95,391	5.3
2019	232,345.20	1196	0.2	103,441	5.2
2020	167,037.20	1190	0.6	119,906	5.2
2021	223,123.20	1351	6	119,906	4.2
2022	215,661.50	1460	5	139,886	6.6

**Source:** Prepared by the researcher based on data from the Central Bank of Iraq, Department of Statistics and Research, Annual Statistical Bulletin, various years.

**Figure (2):** The development of monetary policy variables in Iraq for the period (2012/2022)

**Source:** Prepared by the researcher based on data in Table (2)



From the diagram above, it is evident that developments and changes have occurred in broad money supply, increasing progressively due to the expansion in issuing local currency after replacing the old currency post-2003. This growth was further supported by rising wages and salaries, increased expenditures by the Ministry of Finance (especially current and investment expenditures), and an increase in foreign reserves held by the Central Bank. The monetary expansion continued, peaking at \$139,886 million in 2022. Similarly, the Gross Domestic Product (GDP) at current prices in the years 2012, 2013, and 2014 amounted to \$218,032.1 million, \$234,637.7 million, and \$224,185.7 million, respectively. However, during the years 2015, 2016, and 2017, GDP experienced a decline due to the country's security situation. Subsequently, it began to rise again, but in 2020, it dropped to \$167,037.2 million due to the COVID-19 pandemic and the resulting global lockdowns and decreased demand for oil, which negatively affected Iraq's oil exports and GDP. In the subsequent years, GDP recovered, reaching

\$223,123.2 million and \$215,661.5 million. This recovery was attributed to the improvement in global health conditions, which led to an increase in Iraq's oil exports.

**The third requirement:** The development of the Iraqi balance of payments for the period (2012/2022)

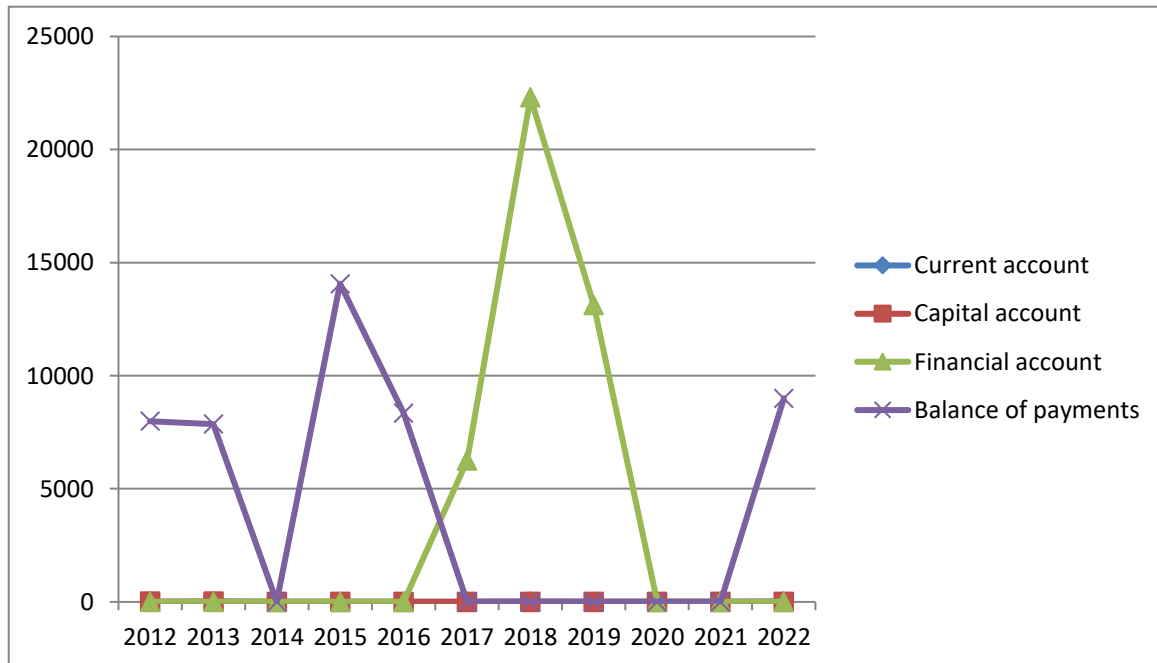
The balance of payments is considered one of the important indicators to show the country's position in international economic relations, i.e., with the outside world. As for Iraq, which is considered one of the developing countries that suffers from an imbalance in its balance of payments and continuous imbalances, this is clear from the following table, which shows the basic accounts in addition to the balance of the Iraqi balance of payments for the period 2012 - 2022.

**Table (3):** Development of the Iraqi balance of payments for the period (2012/2022) of the gross domestic product (million dollars).

Year	Current Account	Capital Account	Financial Account	Balance of Payments Balance
2012	13.6	7	-25,430.70	7,986.80
2013	6.9	20.3	-5,503.60	-7,860.90
2014	6.9	9.5	-15,456.10	-0.011871
2015	1.7	-1.5	-16,363.40	-14,065.70
2016	1.3	0.5	-2,834.50	-8,344.10
2017	8	0.9	-6,251.60	2,701.20
2018	15.1	5.8	-22,302.50	6,595.80
2019	6.7	11.1	-13,120.70	8,724.60
2020	3.5	-8.1	-4,600.00	-0.049
2021	11.7	17.5	-3,200.00	-4,200.00
2022	20.2	27	-2,500.00	9,000.00

Source: Prepared by the researcher based on data from the International Monetary Fund, the Annual Book of Payments Statistics, and data files / available online.

**Figure (3):** Development of the Iraqi balance of payments for the period (2012/2022) of the gross domestic product (million dollars).



Source: Researcher's work based on data from Table (3)

From the data in Table (3) and its corresponding diagram, it is evident that the main accounts of Iraq's balance of payments experienced significant fluctuations due to the positive and negative developments in the Iraqi economy during the study period. At the current account level, there were years of surplus, attributed to the improvement in the value of the local currency and the rise in interest rates during those years. However, in 2015 and 2020, a significant deficit was recorded. This was due to the deterioration of Iraq's security situation in 2015 and the decline in global oil prices in 2020 resulting from the COVID-19 pandemic, coupled with Iraq's heavy reliance on oil exports, which negatively impacted its balance of payments. Regarding the capital account, surpluses were observed in 2012 and 2013, as shown in Table (3). However, the subsequent years witnessed consecutive and ongoing deficits due to the security issues in Iraq, which led to a capital flight abroad. For the financial account, deficits were recorded in the early years of the study period, followed by surpluses in 2017, 2018, and 2019, consecutively. The financial account then returned to a deficit, continuing until the end of 2022. Similarly, the balance of payments balance showed a surplus in the initial years but transitioned to a sustained deficit until 2022, when it reverted to a surplus of \$9,000 million. These sharp fluctuations in the balance were due to the volatility in Iraq's oil exports and their sensitivity to the country's internal and external conditions.

### Chapter Three: The Impact of Bank Credit on the Balance of Payments in Iraq for the Period 2012-2022.

This section of the research focuses on the applied aspect of credit effectiveness and its tools in influencing the balance of payments during the period under study. Within this framework, the assumed economic logic suggests that the credit policy tools have an impact on the balance of payments. This relationship may be either direct or inverse, depending on the economic conditions of the country. Based on this assumption, a Multiple Linear Regression equation was conducted, presuming a linear relationship between the dependent variable (balance of payments) and the independent variables (open market operations, legal reserve, and banking credit).

**The first requirement:** measuring and analyzing the impact of credit policy on the Iraqi balance of payments.

To verify the validity of the research hypothesis, which states that (there is a statistically significant relationship between credit policy and the Iraqi balance of payments for the period under study (2012-2022) at a significance level of (.05)) and according to the requirements and reality of the Iraqi economy for the period under study, the policy price was excluded because it enjoys relative stability for the period under study. The results of estimating the regression line equation were as follows:

Transactions The model	Slope coefficient	Standard coefficient	Determination factor	Morale Sig	F value	Morale Sig	correlation
Fixed	-368	-	0.560		2.96	0.103	0.748
Open Market	-299.6	-----		0.029			
Legal Reserve	1296	-----		0.267			
Total Credit	0.787	-----		0.034			

Source: Prepared by the researcher based on the outputs of the SPSS statistical program.

It is clear from the table () above that:

- The model is not statistically significant at a significance level of (.05), but it is statistically significant at a significance level of (.10), as is clear from the table above, where the F value reached (2.96) and Sig reached (0.103), indicating the essentiality of the model at a significance level of 10%.
- There is a significant effect of the independent variables (open market operations, legal reserves, total bank credit) on the dependent variable (balance of payments) at a significant level of 10%.
- Regarding the coefficient of determination R-Square, it indicates that the change in the Iraqi balance of payments for the period under study is explained by the independent variables (open market operations, legal reserves, bank credit) by a percentage of (56%).

The equation of the multiple regression line between the variables under study can be formulated as follows:

$$0.787x_3 + 1296x_2 + Y = - 368 - 299.6x_1$$

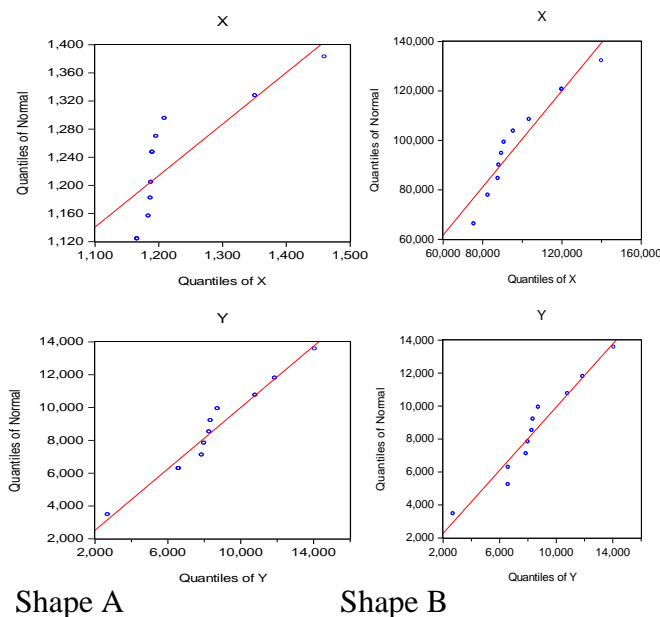
The above equation shows the following:

- The slope coefficient for the independent variable (open market operations), valued at - 299.6, indicates an inverse relationship between the independent variable and the dependent variable (balance of payments) during the period under study. This means that an increase in open market operations by one-unit results in a decrease in the balance of payments by the slope coefficient value. This aligns with economic logic, as open market

operations involve the sale and purchase of government securities or treasury bonds, transferring funds to the central bank. This process affects bank deposits and their reserves, thereby influencing their credit-providing capacity. This, in turn, affects the money supply and aggregate demand, including the demand for imports, which impacts the balance of payments. This effect is particularly evident in the Iraqi economy during the study period, which heavily relied on imports to meet aggregate demand.

- Regarding the slope coefficient for the independent variable (legal reserve), valued at 1296, it reflects a direct relationship between the independent variable and the dependent variable (balance of payments). This indicates that changes in the legal reserves of commercial banks by one unit lead to positive changes in the balance of payments by the slope coefficient value. This finding aligns with economic logic, as the legal reserve ratio, a crucial monetary policy tool, regulates commercial banks' credit generation capacity. A reduction in this ratio encourages commercial banks to expand credit facilities and loans, which increases aggregate demand. Consequently, this affects the balance of payments by influencing either an increase in exports through higher production surplus or an increase in imports driven by aggregate demand. The legal reserve impacts the balance of payments through its effect on expanding or contracting credit provided by commercial banks.
- The slope coefficient for the independent variable (credit volume), valued at 0.787, signifies a direct relationship between the independent variable and the dependent variable (balance of payments). This implies that an increase in the volume of credit granted by one-unit results in an increase in the balance of payments by the slope coefficient value. This outcome aligns with economic theory, which suggests that credit expansion operates in two directions. The first direction involves enhancing employment through a robust production base, leading to a production surplus for exports, thereby improving the balance of payments. The second direction relates to increased aggregate demand stimulated by credit expansion, which raises the demand for imports to meet rising consumption. This dual effect reflects the reality of Iraq's rentier and mono-structured economy during the study period.

**The second requirement:** The causal relationship between the money supply, the exchange rate, and the Iraqi balance of payments. This research, in the context of identifying the impact of credit policy on the Iraqi balance of payments for the period 2012-2022, there is a research necessity that requires identifying the causal relationship between the money supply and the exchange rate with the balance of payments, as they constitute one of the most important tools of monetary policy that overlap with bank credit. Within this framework, the research is concerned with identifying the causal relationship according to Granger's concept of causality in the short term for each of these variables and the balance of payments. Before analyzing this relationship, it can be inferred from the figure below:



The features of the relationship are clear from the above figure, as figure A shows both the direction of the money supply and the balance of payments, which took an upward trend for the period under study, while figure B shows both the exchange rate and the balance of payments, where it is noted from the figure that the two variables took an upward trend for the period under study. Within this context, this axis will be concerned with identifying the causal relationship in the short term for Granger, the results of which showed the following:

- The causality relationship between the money supply and the balance of payments, where the results of applying Granger causality were as follows: -

### Pairwise Granger Causality Tests

Date: 11/20/24 Time: 12:58

Sample: 2012 2022

Lags: 2

Null Hypothesis:	Obs	F-Statisti...	Prob.
DY does not Granger Cause DX	8	0.00472	0.9953
DX does not Granger Cause DY		24.5299	0.0138

**Source:** Eviews statistical program outputs

The hypothesis of the existence of a causal relationship is accepted if the probability value is less than 0.05. From the table above, it is clear that the first difference (DY) does not cause the first difference (DX), i.e., the balance of payments does not affect the short-term money supply. This is what is observed since  $P = 0.9953 > 0.05$ .

As for the first difference (DX), it causes the first difference (DY), meaning that the money supply in the causal relationship test affects the balance of the balance of payments in the short term, as the F statistic is (24.5299) with a probability of (0.01), we accept the hypothesis that the change in the money supply causes, according to (Cranger), changes in the balance of the Iraqi balance of payments for the period 2022-2012.

In conclusion, the causal relationship test shows that the money supply X affects the balance of the Iraqi balance of payments Y for the period under study, which is a logical explanation, as the money supply plays an important role in stimulating the demand that is met in the Iraqi economy through imports, which affects the change in the balance of the balance.

- The causality relationship between the money supply and the balance of payments, where the results of applying Granger causality were as follows:

Pairwise Granger Causality Tests

Date: 11/20/24 Time: 15:15

Sample: 2012 2022

Lags: 2

Null Hypothesis:	Obs	F-Statisti...	Prob.
DY does not Granger Cause DX	8	0.60900	0.5998
DX does not Granger Cause DY		0.30158	0.7597

From the above results it is clear that the first difference (DY) does not cause the first difference (DX) where  $P = 0.5998 > 0.05$ , i.e., the balance of payments balance does not cause the changes that occur in exchange rate fluctuations.

The first difference (DX) does not cause the first difference (DY) where  $P = 0.7597 > 0.05$ , meaning that the exchange rate does not cause the changes that occur in the Iraqi balance of payments for the period under study, and these results indicate the reality of the Iraqi economy, which depends to a large extent on oil exports.

### Conclusions

1. The research data revealed clear and persistent imbalances in the Iraqi balance of payments, along with a lack of full coordination between economic policies, including fiscal and monetary policies. This has resulted in notable distortions in the Iraqi balance of payments.
2. The results of the multiple regression equation test to measure the impact of independent variables (open market operations, legal reserve, and bank credit) on the dependent variable (balance of payments) in Iraq during the period under study indicate that these variables influence the balance of payments, as reflected in the slope coefficients of each variable: (-299.6, 1296, and 0.787), respectively, consistent with economic theory.
3. According to the Granger causality test for the short-term relationship between the money supply and the balance of payments, a unidirectional causality was found from the money supply to the balance of payments. This indicates that changes in the money supply cause changes in the balance of payments during the study period.
4. Regarding the short-term causality relationship between the exchange rate and the balance of payments, the results indicate that fluctuations in the Iraqi exchange rate

during the period 2012–2022 do not cause changes in the balance of payments, nor does the balance of payments cause changes in the exchange rate. These results, which are inconsistent with economic theory, underscore Iraq's heavy reliance on oil, where fluctuations in its prices and export quantities drive changes in all Iraqi economic variables, including the balance of payments.

### **Recommendations**

1. Work on enhancing coordination between monetary policy and economic policies to make them more effective in addressing the country's economic problems. Implement further economic reforms in both monetary and fiscal areas to align with the current state of the Iraqi economy.
2. Iraq should strive to benefit from regional and international experiences in resolving economic issues and work on diversifying sources of foreign currency revenues.
3. Focus on diversifying commodity and service exports while reducing reliance on oil exports, particularly given the global volatility and instability of oil prices.
4. To attract financial investments, it is necessary to create a conducive and appealing investment environment in Iraq by ensuring political and economic stability through stable interest rates that draw international investments.

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