

The Role of the Central Bank of Iraq in Coordinating Fiscal and Monetary Policies Applied Study in the Central Bank of Iraq During the Period (2010-2021)

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Abstract:

The research, in its theoretical framework, addressed the economic ideas and theories about monetary policy, its nature, main objectives, and its role in economic activity, it also included highlighting the concept of fiscal policy, the nature of its main objectives that it seeks, and its role in the level of economic activity, after that, it explained the nature of the relationship between fiscal and monetary policy, the interconnection and coordination mechanism between them, and the nature of the positives and negatives resulting from this interconnection, the applied aspect of the research included an analysis of the fiscal and monetary policy in Egypt and Iraq for the period (2010-2021), the research also included measuring and impacting the impact of the domestic public debt in Egypt and Iraq on foreign or monetary reserves.

Keywords: Central Bank, Fiscal policy, monetary policy, public debt in Egypt, and Iraq.

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The First Topic

Research Methodology

This section reviews the methodology adopted in completing the research requirements. It starts with the research problem, its importance, objectives, research hypothesis, and method and then determines the sources of data collection for the theoretical and practical aspects.

Introduction

Many economists believed that there was a real economy, controlled by the government, and a monetary economy, controlled by the central bank, separate from each other, which makes the work of both monetary and financial authorities separate from each other in a way that there is no need for coordination between the two authorities, but practical reality has proven the opposite of this hypothesis, as there are many overlaps between the two authorities, which some called mutual influences, which made the possibility of conflict between them exist, especially in developing countries, and the discussion later focused on the relationship between the monetary and financial authorities, until recently, on the inflationary consequences of monetary financing of the budget deficit, but after that, modern economics has concluded that every action taken by the financial authority has its effects on monetary policy operations, and vice versa, especially since the monetary and financial authorities have different goals that led to

the emergence of a conflict in the application of monetary and financial policies, which disappoints both of them in achieving their goals, and that the weakness in the position of one of the policies will reduce the effectiveness of the other policy, which will affect, sooner or later, the achievement of the overall goals of the economy, therefore, coordination has become necessary.

signal study for (Allan S. Blinder 2005) entitled "Issues in Coordination between Monetary and Fiscal Policy) This study is one of the first studies that dealt with coordination from the theoretical side, this study dealt with the potential gains from the process of coordination between monetary and fiscal policies, through the traditional goals-tools model, it also showed the expected effects that arise from the government budget constraint on monetary policy, in addition to the potential gains from the coordination process and the reasons for lack of coordination, the study concluded that coordination is of great importance, but it may not be effective in all cases, in addition, in the event of a conflict between the two authorities, it is necessary to consider which of the two policies has the correct point of view and then give it complete dominance, the study considered that this is the optimal coordination between the two authorities, note Study for (Bernard Laurens and Enrique G. de la piedra 2007), titled "Coordination between monetary and fiscal policies ", analyze This is amazing the study Interaction between Policies Cash and finance, Stressing on necessity coordination Policies on two levels different, they are investigation Goals Politics General and procedures Institutional and operational coordination, this study is considered the theoretical basis for the International Monetary Fund's proposals on coordination between the central bank and the Ministry of Finance of developed countries, the study reviews arrangements Institutional to manage Politics Cash that trying isolation the bank Central on finance the general budget deficit, by ensuring its independence and the existence of legal arrangements that prevent lending to the government , and also examine the study, arrangements Institutional to manage religion year, and finally review this is amazing the paper Practical mechanisms to ensure Coordination effective at the operational level, such as cash programming and management of government cash balances, etc.

The study concluded that coordination is a necessary condition for achieving high growth rates and stability in the general price level, and that effective coordination requires sustainable and credible economic policies, in addition, establishing rules for the operation of monetary and fiscal policies is not sufficient to achieve stability without the existence of institutional arrangements for coordination that support these rules ,and that institutional and operational arrangements in developed countries are ineffective in economies undergoing transition because financial markets are not well developed and interest rates do not play a significant role in allocating financial resources in the economy, in addition to the backwardness of financial markets, also, in developing countries, the role of coordination committees is more useful than other arrangements, as it provides information about the objectives of both policies, the study indicates that **Inflation and Public Debt Reversals in the West African Monetary Zone (WAMZ) Economies 2023)** The research focused on the causes of inflation and public debt reversal in the West African Monetary Zone (WAMZ) economies. Several factors influencing public debt reversal and inflation, including weak institutions, high government spending, influence from external shock and lack of proper revenue mobilization, were discussed, the impact of these factors on the "WAMZ" economies has also been examined, these countries suffer from high inflationary pressures, increasing borrowing costs and slow economic growth. Policies and other methods implemented by the WAMZ economies to address these challenges have also been evaluated, the last section of the research looks at the challenges these economies face in implementing the policy responses stipulated to address public debt reversals and inflation.

Importance of research

The importance of this research stems from the benefits that the economy reaps from the coordination process, and that it will make both policies agree on common goals that mitigate or eliminate current and future differences between the central bank and the government, and thus increase the effectiveness of the monetary and fiscal policies, which leads to increased economic stability in general and stability of the general price level, as a goal of the macro economy, in particular.

Research problem

The weakness in the coordination process creates a state of imbalance and economic instability, and both policies become unable to achieve their goals in the required manner, especially stability in the general price level.

Research hypothesis

Coordination between monetary and fiscal policies achieves the objectives of the Central Bank of Iraq.

Research objective

Explaining the coordination mechanism between monetary and fiscal policies and its impact on achieving market balance, especially in developing countries such as Iraq as a case study.

Research Methodology

The research relied on the descriptive approach with regard to the theoretical framework, and on the analytical approach with regard to the case study in this research, which is Iraq.

In order to cover the research topic, it was divided into three chapters, the first chapter focused on the theoretical framework of both monetary and fiscal policies and the interaction between them through three topics, the first and second topics addressed clarifying the concept, tools and objectives of both monetary and fiscal policies, respectively, while the third topic focused on discussing the interaction between the two policies through scientific and practical issues, as for the second chapter, it included the mutual effects and coordination of both policies through two topics, the first topic focused on the monetary effects of fiscal policy through four channels, in addition to the financial effects of monetary policy, while the second topic discussed the theoretical framework of coordination, the third chapter was concerned with coordination between monetary and fiscal policies in Iraq through two topics, the first topic focused on the general trends of both policies in Iraq after 2003, while the second topic focused on the institutional arrangements for coordination in Iraq, Finally, the conclusions reached by the research came, and then the recommendations included in it, which the researcher hopes will be applicable, to verify the service of our country and its people.

The second topic

The first axis: the concept of fiscal policy

First: The concept of fiscal policy

Fiscal policy is one of the tools of economic policy and the most effective in influencing economic activity. In the past, fiscal policy was a means by which the government obtained revenues to cover the necessary public expenditures of the guardian state, after the Great depression, fiscal policy became effective in addressing the crisis through its elements (public expenditures and public revenues2009). Thus, fiscal policy became an important economic and social role in increasing the national product and real income of individuals and eliminating unemployment, in addition to its role in providing public

spending for the state, thus, it has economic and social goals, this development in the state's financial role was reflected in the concept of fiscal policy and many definitions emerged, some of them defined it as "a set of changes that occur in both taxes and government spending that would affect the gross domestic product." It is also known as "the use of expenditures and taxes to change the output of the overall economy, meaning that changes in both government spending and taxes will lead to a series of effects on economic activity that ultimately contribute to raising the gross domestic product to the level that the financial authority in the country aspires to." (Arthur Sullivan, 2014)

It is also known as "the change in taxes and public spending to affect aggregate demand. Fiscal policy always tries to change the levels of aggregate demand, consumption and investment, in a way that achieves balance with aggregate supply to spare the economy many of the negative effects resulting from general imbalance, fiscal policy is also known as "the policy by which the government uses expenditure and revenue programs to produce desired effects and avoid undesirable effects on national income, production and employment, this is the desired goal of fiscal policy, which is to achieve desired effects, such as economic stability and redistribution of income more fairly, and avoid undesirable effects on important economic variables. Fiscal policy combats inflation, low growth rates, high unemployment and inequality in income distribution.

It is clear from the previous definitions that there is a similarity between economists in their definition of fiscal policy, so it can be defined as "the change in government expenditures or net taxes to change total spending and gross domestic product and achieve other local economic and social goals." therefore, the government's options in changing the levels of government spending and taxes are what determine the extent of the state's desire to achieve certain levels of welfare for society and economic stability in the country. (R.Schiller 2003)

Second: Financial policy tools

In order for fiscal policy to achieve its desired goals, it must have effective tools that fiscal policy uses to influence and control economic activity, the tools of fiscal policy can be discussed as follows: (Vito tanzi;2006)

A: Overhead expenses

Public spending is the most important element in fiscal policy and it determines the fate of the state because it involves many tasks and burdens that it undertakes to achieve and is considered a tool through which the government determines the relative size of the public and private sectors and thus how much of the national product is consumed by the government instead of the private sector, Public spending is defined as "an amount of money used by the state or one of the public bodies with the aim of satisfying a public need, it is concluded from this definition that public spending must be in cash form, taking into account the development of the economic system in which money has become the main driver and also to achieve the principle of justice, public spending must also achieve a public benefit and the main source of funds used in the process of public spending is from taxes, spending. In addition, the person in charge of spending must be the state or one of its institutions, the spending is not considered public if it is carried out by an individual or an institution not affiliated with the state, even if the spending is in cash and achieves a public benefit. (Younis, 2004)

B: Public revenues

Public revenues are the second tool of fiscal policy, and fiscal policy cannot work without having sources through which it can obtain the funds necessary to carry out its various tasks, public revenues are divided into:

➤ Revenues from national income

It is the revenue derived from the circular stream of a country's national income, in other words, the regular revenues that the state obtains from the incomes generated by natural and legal persons within the country. It is divided into:

Firstly: Tax: It is a mandatory cash amount imposed by the government on individuals and companies without direct compensation to finance public expenditures according to the taxpayers' ability to pay. It is clear from the definition that the tax has a monetary nature and is mandatory, and that the government is the entity that collects it. The government seeks through the tax to achieve several goals, the most important of which are:

Financial goal:(Financing government expenditures): The primary objective of taxation is to obtain revenues for the government, therefore, the state can, through imposing taxes, cover the costs of public goods and services provided by the state.

Economic goal: The tax aims to allocate available economic resources to specific channels that the government considers the best channels for achieving the welfare of society by imposing taxes on areas that do not serve economic activity and providing tax exemptions on productive investments that can contribute to achieving economic growth.

secondly: Drawing

It is an amount of money collected by the state or a public figure from individuals in exchange for a special service provided to them or in exchange for a special benefit that accrued to them from this service, it is clear from the definition that the fee must take the form of cash except in exceptional cases such as wars, and that the state is the one that obtains the value of the fee and that it is in exchange for a service provided by the state and from which the person benefits, in addition to the element of compulsion in payment, the book of public finance distinguishes between legal compulsion, which is the case in which the individual is forced to request the service and has no choice in requesting it or not, such as judicial fees, and moral compulsion, which is the case in which the request for the service is left to the desire of the individuals themselves without compulsion from the law to request that service, therefore, the individual is free to request the service or not, but if he requests the service, he must pay the fee set for it.,(R.Cauvery2010)

C: Domain (state property):

These are the revenues that the state obtains from movable funds such as goods and services provided by the state, and immovable funds such as real estate, mines, forests and oil wells. State property is divided into two parts: the first is the public domain, which is prepared for the public benefit and for all individuals and the costs of spending on it are covered by taxes, the second is the private domain, which is the money prepared for economic exploitation and which can be financed through public debts and monetary issuance, it is noted that domain revenues have declined in all countries in the modern era, such that they no longer constitute an important resource that benefits them in financing their expenses, except for oil countries, which depend on oil as a primary source of funding for government activity, as the domain in these countries still constitutes an important percentage of the state budget.

D: Domestic public debt

Public debt is another source of financing for public expenditures, but it is sometimes an exceptional source. When traditional revenues are unable to meet the state's spending obligations, this means that expenditures are greater than public revenues, which causes the state budget to be in deficit. To cover this deficit, the state resorts to borrowing from

natural and legal persons within the country. Accordingly, the internal public debt is defined as "the money that the state obtains by resorting to the public, commercial banks, or other financial institutions in exchange for their pledge to pay a specific annual interest on the amounts paid and to return the value of these amounts in one payment or in installments according to the terms of the debt.

The domestic public debt is divided into several sections, including short-term, medium-term and long-term debts. Short-term debts are debts that are contracted for a very limited period, usually not exceeding one year, and are usually contracted to address the temporary deficit in the general budget, as the state issues treasury bills and sells them to the central bank due to the decline in tax revenues. Individuals or commercial banks may purchase these bonds and rediscount them at the central bank, which leads to an increase in the money supply, these debts are characterized by low interest rates due to their high value, as for long-term debts, they are those debts that exceed five years, and the state resorts to this type of debt to finance large investment projects or to confront wars and disasters, meaning that they are an exceptional source to cover the budget deficit, debts are also divided into compulsory debts, which are debts that individuals and banks are forced to subscribe to, and optional debts that subscribers are free to own or not, they are also divided into productive debts, which are debts spent on a project, an investment that generates revenues that pay off the principal of the debt and the interest due on it, and a sterile debt, which is the debts spent on projects that do not generate revenues to pay off the debt and its interest.(Al-Hajj, 2009)

Third: The objectives of fiscal policy and the mechanism of its tools

Fiscal policy has multiple objectives, some of which are economic and others are social, and the political authority, represented by the government, seeks to achieve them, the most important of which are:

A- Satisfying public needs

Governments aim to satisfy the various needs of society that individuals cannot satisfy alone or provide completely or efficiently, therefore, public finance and financial policy seek to achieve this goal, however, we must remember that there are no fixed boundaries between public and private needs, what is considered a public need in a particular country or time is considered a private need in another country or time, therefore, the matter of determining public and private needs depends on the prevailing economic and social philosophy in society, therefore, public needs are expressed as those needs that public bodies satisfy, whatever those needs may be. (HLAhuja, 2010)

B- Optimal allocation of resources

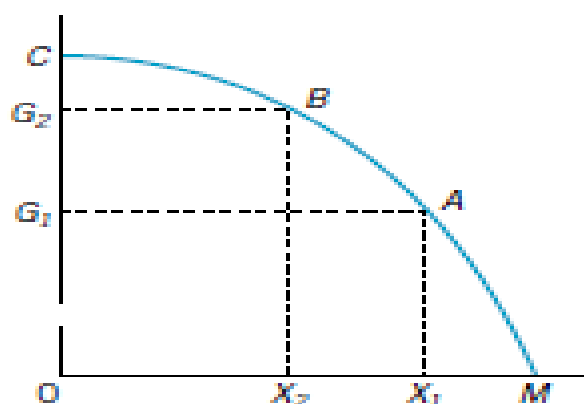
Since the available economic resources are relatively scarce and economic needs are unlimited, the allocation of resources is one of the main tasks of fiscal policy, these resources must be used in a way that satisfies both public and private needs, the optimal allocation of economic resources cannot be achieved without state intervention. the market system, which the classicists talked about a lot as being characterized by efficiency in allocating resources, is incapable of allocating economic resources in a way that achieves the public interest because the benefits and costs of the market system differ greatly from the social benefits and costs, which are the best standard that can be relied upon to achieve the optimal allocation of resources from the point of view of society, because relying on private benefits and costs will show many negative effects in the economy, such as unemployment and inflation, the market system, in its attempt to search for profit, targets the group with high purchasing power, and thus the groups with limited income will be directed to less resources, which does not lead to satisfying their needs, even the market system that achieves economic efficiency, from the classicist point of view, theoretically achieves it under certain conditions such as economic

freedom and the availability of a fully competitive market, but practical reality has proven the opposite, and that lack of freedom and monopoly in the market is prevalent. Hence, financial policy had to intervene to achieve economic efficiency in allocating resources from the point of view of Society. (Al-Ali, 2009)

The government's provision of public goods and services requires it to own labor, equipment, buildings, and land, the real cost of producing public goods and services is the value of private goods and services that must be sacrificed when resources are transferred from the private sector to the public sector, the main way to transfer these resources to the public sector is through taxes. The government will then spend resources on establishing projects and producing public goods such as roads, security, the judiciary and education, however, the production of public goods and services and the transfer of resources from the private sector must be within certain limits, these limits can be illustrated by the production possibilities curve as in the following figure: (Hassan Awada and Abdul Raouf Qatish; 2013)

Appearance (1)

Allocation of resources between public and private needs in the case of full employment



Special goods and services during the year

David N. Hyman, Public finance, 10th Ed, South-Western Cengage Learning, Ohio, 2011, P: 6

It is noted from the figure above that when the government's production of public goods and services increases by ((OG1to(OG2)) The private sector's production of private goods and services will decrease from((OX1))to((OX2))This indicates that the government must compare the benefit achieved by producing public goods and services with the private goods and services sacrificed in a way that achieves economic efficiency and the optimal distribution of resources.

C- Achieving economic stability

The goal of economic stability, or what is known as stability policies, includes maintaining real growth rates for the economy and reducing unemployment rates as well as achieving a balance between aggregate demand and aggregate supply, through taxes and public expenditures, in the event of a recession, the level of employment is lower than the level of full employment, which means bad unemployment and slow growth rates in the economy, which motivates the financial authority to reduce taxes in a way that leads to an increase in the amount of income available to individuals, which will lead to an increase in demand for goods and services and thus to an increase in production to meet the increasing demand, as the increase in production levels will require an increase in employment rates, which increases income and thus the demand

for goods and services and increases employment and raises growth rates accordingly, also, reducing taxes and providing tax exemptions will lead to reducing the burden on productive projects, which allows projects to reduce the prices of their products, which leads to an increase in demand for them and the employment rate will increase to cover the increasing demand. (Abdul-Hay:2018)

As for public expenditures, the government seeks to increase them, which leads to the distribution of new incomes that contribute to increasing demand and increasing production, employment and income accordingly, the state must finance this expenditure from internal or external public loans, or the issuance of currency, or increasing taxes on savings, because these revenues were not used by individuals for spending, and relying on them will lead to an increase in national income without affecting private spending. (Al-Ali, 2002)

D- Redistribution of income

The goal of income redistribution is one of the social goals of fiscal policy, which emerged as a goal following the Great Depression and Keynes's ideas for treating it, the only function of state finance was to provide public goods and services, and it was believed that the state's financial role should not be confused with other social and economic considerations, however, practical experiences have proven that fiscal policy creates important social and economic effects through its role in redistributing income among members of society. Income redistribution means redistributing money from rich taxpayers to the poor who deserve it and benefit from social welfare. (R.Cauvery and others;2010)

Axis II: The concept of monetary policy

First: The concept of monetary policy

The concept of monetary policy is relatively new, as it appeared in the nineteenth century, and it is one of the most developed and changing concepts in terms of the importance of its impact on economic activity, monetary policy was the only treatment, through the money supply, for all economic imbalances and to reach economic balance automatically until the global crisis occurred in the thirties of the last century, when the economist Keynes came up with new ideas to address that crisis and reduced the importance of monetary policy, while acknowledging that money has a role in economic activity, but he gave monetary policy a secondary role that made it lose the confidence of economists during the next two decades, until the emergence of monetary thought at the hands of Milton Friedman and he returned to monetary policy its effective role through studies that proved the strong impact of the money supply on all aspects of the economy, since then, monetary policy has become the most important arm of economic policy in general and has become an essential and effective element for solving the problems that plague the economy, whether at the local or international level. Countries have begun to use it alongside other policies such as fiscal policy, trade policy and price policy to influence economic activity through its impact on Investment, production and income, and this is what made economists interested in many regular studies of all aspects of monetary policy, and therefore the concepts of monetary policy varied and multiplied, and it was defined as "all the measures taken by the monetary authority to create a deliberate impact on the nature and volume of money to achieve a specific goal of economic policy, i.e. controlling the volume of money supply and the cost of money, which represents the interest rate, as well as the supply of credit, which is considered by many to be the essence of monetary policy. (SKSingh,2008)

The economist knew it (Mishkin;2018,405) as "managing the money supply and interest rates, and the person responsible for managing monetary policy is the central bank, which uses certain technical means and methods through which it regulates both the

size of the money supply and the movements of interest rates in accordance with the economic structure, monetary policy is also defined as "a set of rules, means, methods, procedures and measures undertaken by the monetary authority to influence the money supply in a manner consistent with economic activity to achieve certain economic goals during a certain period of time, meaning that the monetary authority does not follow policies on an unstudied or random basis, but rather it proceeds through certain rules and laws set for central banks through which they can use their tools in a way that enables them to take countermeasures against any case of imbalance at the appropriate time in order to achieve the economic goals set in advance for them as a basis for launching.

From the above, monetary policy can be defined as "all decisions and measures taken by the central bank."

The government to control and manage monetary variables that directly or indirectly affect general economic variables. "That is, all measures taken by the monetary authority, primarily, as well as by the government, to influence the money supply, the volume of credit, interest and exchange rates, and other monetary variables, in order for these measures to achieve specific goals. (R.Cauvery, 2010)

Second: Monetary policy objectives

Most economists and economic policy makers agree that the objectives of monetary policy are close to the objectives of general economic policy, as they are considered part of it and an arm of its arms, and that the importance and priorities of these objectives change according to the economic problems facing the country and differ from one country to another, and this applies to the historical development of monetary policy objectives, the objective of price stability was the only objective of monetary policy until Keynesian ideas came after the Great Depression and showed that high employment rates are a fundamental problem and should be included as a second objective of monetary policy, after world war II and due to the widespread destruction that included the countries participating in the war and the countries that gained their independence after the end of the war, economists included the objective of economic growth as a basic and common objective for all countries of the developed and developing world, due to spending policies to rebuild countries and the large number of imports, the balance of payments of many countries suffered deficits, which necessitated the intervention of monetary policy and made the balance of payments balance another objective of monetary policy, these objectives are considered common objectives for all countries, with the addition or removal of some objectives according to the different economic situations between different countries of the world, so they will be addressed according to their historical development.(Rebec Archive, 2021)

A - Stability of the general price level:

The general price level is one of the most important economic variables that have an effective impact on the economic structure, large changes in the price level have negative effects on the overall economic life. When looking at the repercussions of inflation, which is a state of continuous rise in the general price level, we find that it leads to an unfair redistribution of income between lenders and borrowers and a deterioration in the value of the local currency, which makes it lose its value as a store of value and many other repercussions, therefore, there is a consensus among economists on the need to achieve stability in the general price level, however, there is disagreement among economists about the reasons for changes in the general price level, a situation such as inflation has been theorized by economists in an attempt to explain it, consequently, economists have also differed about the role of monetary policy in achieving stability in the general price level. (Abdul-Hay, Ahmed Mohamed;2019)

B - Stability of exchange rates:

Exchange rate stability is one of the important objectives of monetary policy due to its effects on the balance of payments and thus its impact on the country's exports and imports, as well as the risks that may befall speculators due to instability in the exchange rate, which prompted decision-makers to pay attention to the exchange rate as a goal of monetary policy. Stability of exchange rates is considered a goal derived from stability in the general level of local prices. Fluctuations in exchange rates have many causes, some of which are related to changes in monetary policy itself, some of which occur due to changes in the prices of basic commodities, and other causes that push monetary policy to intervene and maintain stability of exchange rates. (Vito Tanzi, 2006)

C- High rate of use:

Maintaining high levels of employment has become one of the most important goals of monetary policy, because unemployment is a cause of increased crime and social ills, in addition to economic problems such as the lack of exploitation of resources and the decline in production and income, which leads to a decrease in taxes collected by the government and thus a shortage in government services provided to individuals and many other negative effects, which has prompted some countries to enact laws related to employment and labor. (Adel Falih Al-Ali; 2009)

As is known, there are several types of unemployment, such as frictional unemployment, structural unemployment, and cyclical unemployment. Monetary policy is ineffective in reducing levels of frictional and structural unemployment, which are best solved through microeconomic policies such as training and development programs, increasing the use of technology, providing correct information to workers about the labor market, and other treatment methods, cyclical unemployment is a macroeconomic problem that occurs during periods of recession, so the monetary authority tries to eliminate unemployment levels associated with economic recession. (Abu Al-Douh, 2006)

D- Encouraging economic growth:

It is a major objective of monetary policy because it determines the country's living standards in the long term, and therefore it is a goal that all governments in developing and developed countries aspire to, the effectiveness of monetary policy lies in encouraging continuous economic growth through its ability to influence the interest rate, which is one of the determinants of investment, as well as encouraging banks to increase credit and loans in order to increase economic growth rates, meaning adopting expansionary monetary policies that lead to an increase in the money supply and a reduction in the interest rate, which leads to an increase in economic growth rates, which is considered one of the objectives of monetary policy in the long term, to achieve their goal of economic growth, monetary authorities follow expansionary policies that lead to an increase in the money supply and a reduction in the interest rate, reducing the interest rate will lead to an increase in investment and thus an increase in economic growth rates greater than the initial increase in investment due to what is called the investment multiplier. (Rebec Archive 2021)

E - Achieving balance in the balance of payments:

The balance of payments appeared as a goal of monetary policy after World War II and the collapse of the gold standard. Economists believed that the deficit or surplus in the balance of payments would disappear automatically, as the freedom of the general price level to rise and fall would automatically correct any imbalance in the balance of payments, however, Keynesian economists realized that the imbalance in the balance of payments could not disappear automatically and called for adopting specific spending policies to correct imbalances in the balance of payments, i.e. giving importance to fiscal

policy in correcting these imbalances, while giving a less important role to monetary policy in this area, this situation continued until the monetary thought emerged, confirming that the balance of payments is a monetary phenomenon and not a real one, and that any imbalance in the balance of payments is the result of an imbalance in the money market and not in the (real) commodity market. Since then, economists have continued to give an effective role to monetary policy in correcting imbalances, which prompted some economists to say that monetary policy is the most effective in correcting external imbalances. (Hamed Abdel Majeed Daraz;2012)

Third: Monetary policy tools

The central bank uses a set of means and procedures to manage the money supply and credit, and through these means the central bank achieves the objectives of monetary policy, the tools of this policy are divided into two types, which are: (Abdul Hamid, 2006)

➤ Indirect monetary policy tools

The central bank uses these tools to achieve the objectives of monetary policy indirectly by relying on market forces and allowing them to play a role in it, indirect tools are divided into three traditional tools, which are: (Abdullah, Samir, 2016)

1- Open market operations:

Open market operations refer to the purchases and sales of securities, often government bonds, by the central bank in the financial market to achieve monetary policy objectives. The central bank attempts, through these buying and selling operations, to influence economic activity, and this influence occurs through two mechanisms:

The first mechanism It is through influencing banks' reserves and the monetary base, the central bank can exercise relatively precise control over banks' reserves and the monetary base by manipulating the central bank's securities portfolio, if the central bank wanted to increase banks' reserves and the monetary base, it would enter as a buyer of bonds in the securities market, either from commercial banks or from the public, in both cases, the commercial banks' reserves would increase, when buying bonds from commercial banks, these banks would give up part of their securities to the central bank, when the central bank pays the value of these securities to the commercial bank, the commercial banks' reserves would increase directly, when the central bank buys bonds from the public, the effect on banks' reserves would be similar, individuals would obtain checks drawn on the central bank equal to the value of the bonds they sold to the central bank, and these checks would be deposited in individuals' accounts with commercial banks. (Abdullah, Samir, 2016)

The second mechanism is through the impact on interest rates. Open market operations affect interest rates on loans as well as interest rates on securities. When the central bank enters as a buyer of securities, it will increase the banks' cash reserves, as explained above, and thus the monetary base in the economy will increase, which will lead to a decrease in interest rates on overnight loans that banks charge each other, the central bank will monitor this type of interest rate to ensure that open market operations have had the intended effect, because interbank interest rates are linked to all other interest rates in the economy, as they are closely linked to interest rates on deposits and loans, Therefore, a decrease in interest rates on loans will stimulate investment, which will lead to an increase in aggregate demand and thus affect economic activity. (Mohamed Omar;2006)

2- Re-discount price:

It is the interest rate charged by the central bank when commercial banks rediscount their papers from the central bank, this instrument is called by this name because the

central bank makes commercial banks buy securities from their customers at a "discount" and then "rediscount" them at the central bank to obtain loans. Thus, it represents the cost of borrowing from the central bank, (Tariq Al-Hajj;2009)

The central bank uses the rediscount rate tool to influence the cost of borrowing from the central bank. If the central bank wants to increase the monetary base, it will reduce the rediscount rate, which makes borrowing from the central bank less expensive compared to other sources of borrowing. With other factors constant, this will lead to an acceleration of borrowing from the central bank and thus more reserves will be poured into the banking system, which will lead to an increase in the ability of banks to create money and thus increase the monetary base. The central bank also tries through the rediscount rate tool to influence interest rates. a change in the rediscount rate usually causes changes in other interest rates. This is because the central bank is considered one of the sources of lending, but it is not the only source. A decrease in the rediscount rate will make borrowing from the central bank more attractive than borrowing from other sources, and thus the demand for credit from these sources will decrease, which will prompt them to reduce interest rates on loans provided by them to increase the demand for credit from them. (Al-Dulaimi, 1990)

3- Legal reserve requirements:

Reserve requirements are defined as "the percentage of reserves that the central bank requires from commercial banks, the central bank tries through reserve requirements to produce three different effects on the financial system, the central bank changes the reserve requirement percentage in order to change the size of the money multiplier, if the central bank reduces reserve requirements, the reserves of commercial banks will increase and thus their ability to create money will increase, which will lead to an increase in the money multiplier, which is inversely related to the legal reserve requirement, this will lead to an increase in the monetary base by a greater percentage than the increase in bank reserves caused by reserve requirements. (Bradley R. Schiller;2003)

The change in reserve requirements also results in a change in the amount of excess reserves. When the central bank reduces the legal reserve requirements, a portion of the assets of commercial banks will be converted from required reserves to excess reserves. Consequently, commercial banks will use these excess reserves, either by lending or in the financial market, which leads to an increase in the money supply and thus increases aggregate demand, Interest rates also respond to changes in reserve requirements. A decrease in reserve requirements leads to a decrease in interest rates because credit becomes more available and less expensive, due to the increase in excess reserves, which will lead to an increase in investment spending and thus an increase in the level of economic activity. (Arthur O'Sullivan et al;2014)

➤ Direct monetary policy tools:

The central bank may sometimes resort to direct intervention to influence bank credit. The monetary authority wants to direct credit to specific sectors, determine the type of credit granted, or encourage certain types of spending and productive investments, the most important direct tools of monetary policy are the following:(Al-Amin,Magdy;016)

1- Literary persuasion

The method of literary persuasion refers to the central bank authority presenting its recommendations and suggestions to commercial banks, the central bank may suggest to commercial banks to regulate or expand credit or transfer it to certain sectors of the economy, it is worth noting that the suggestions or recommendations of the central bank do not have the force of law, as they are advice and guidance, although the central bank may follow the method of threats to transform these suggestions into legal orders that

support these suggestions, the success of this method depends on the importance of the central bank to commercial banks, the more large commercial banks there are, the less the authority of the central bank will be, and consequently the effectiveness of moral persuasion will decrease, it also depends on the degree of coordination between central banks and commercial banks. (Adel Fleih Al-Ali;2006)

2- Direct Actions

The method of literary persuasion may not be effective in influencing commercial banks, so the Central Bank may resort to taking corrective measures against defaulting commercial banks. The Central Bank may give general instructions to all commercial banks or special instructions to defaulting banks only, this method is considered effective because the Central Bank imposes penalties on banks that violate the instructions, such as preventing rediscounting facilities, or it may refuse to grant loans to banks whose loans exceed their capital and reserves, and the matter may reach the point of canceling the registration of the violating commercial bank. (Fredric2004)

3- Margin requirements (security margin)

Companies and individuals (speculators) may resort to using securities - mostly government bonds - that they possess as collateral to obtain loans from commercial banks, the commercial bank agrees to give the loan in return for a margin of guarantee, which is defined as "the difference between the market value of the bonds and the value of the loan, for example, if a speculator buys bonds worth 100 million D.A., and the margin of guarantee estimated by the Central Bank was 25%, then he must pay 25% in cash, i.e. 25 million D.A., and borrow the rest from commercial banks, If the Central Bank sees that commercial banks have over-lent to speculators, it may resort to raising margin requirements, for example, to 40%, which reduces the value of loans that the commercial bank can provide from 75% of the market value of the bonds to 60%, and thus reducing the margin requirements places a quantitative restriction on the value of loans provided against the bonds. (SKSingh;2008)

4- Consumer Credit Regulation

This method is considered a measure of controlling the credit granted to the consumer to purchase durable goods. Individuals sometimes resort to commercial banks to obtain a loan when they are unable to purchase some durable goods due to a shortage in their resources. The Central Bank can regulate consumer credit by setting certain rules to regulate the installment sale of durable consumer goods. This is done through: (Chakrabarty, 2011)

- **Change the minimum down payment** When the central bank imposes on commercial banks to raise the amount of the initial payment from 20% to 40% of the loan value. This will inevitably lead to a decrease in demand for consumer credit.
- **reduce loan maturity period** When the loan maturity period is reduced, for example, from three years to two years, this will lead to an increase in the number of payments as well as an increase in their value, which will constitute a burden on the borrower and thus reduce the demand for this type of credit.
- **interest rate change** When the central bank raises the interest rate on consumer credit, this will lead to a decrease in demand for it.
- **Deleting and adding some goods from consumer credit:** When the number of goods for which the commercial bank can grant loans decreases, consumer credit will certainly decrease.

5- Selective control methods

These are the means that affect specific sectors instead of focusing on the overall

economy. The main reason for these means is that the government wants to transfer money to specific sectors that it believes are necessary for national development, a common example of selective means is credit control means, which are used to influence specific types of credit to achieve specific economic goals. The following are some of the means of credit control: (Al-Amin, Magdy;2017)

- Interest rates vary according to the type of credit. Interest rates for credit granted to sectors that the government wants to encourage are low, and conversely, the Central Bank raises interest rates on credit granted to sectors that the government sees as not beneficial to national development.
- Increasing the credit quotas granted to desirable sectors and thus reducing the credit quotas granted to undesirable sectors.
- Requiring the approval of the Central Bank when the credit exceeds a certain limit.

However, one must be careful not to overuse this tool. Individuals may borrow on the basis of using these loans in areas specified by the government, but in reality they use them in completely different sectors. (David;1992)

The third topic

The practical side

➤ Financial policy axis

The data provided regarding the size of public revenues in the table below indicate that they range between high and low, therefore, the Iraqi government seeks to increase revenues by diversifying their sources by increasing taxes and increasing the size of the public domestic debt to undermine the government budget deficit and to achieve economic reform policies and confront the unemployment rate. As a result of the political events in Iraq, which were reflected in the decrease in the size of public revenues compared to public expenditures, the percentage of revenues from the gross domestic product decreased as a result of the events of political instability during that period, as well as the Corona epidemic, which led to a decline in the level of investments and the government resorting to a borrowing policy, the relative importance of borrowing and financing the deficit through domestic borrowing increased, and the relative importance of current revenues and grants decreased, however, the relative importance of taxes did not change despite the failure to implement the progressive tax system that was proposed as a way to achieve social justice, therefore, the general budget deficit increased in response to the expansionary policy during that period, as shown in the table. (Teitel, K., & Machuga; 2010)

**Table No.(1) Actual general revenues of the Iraqi budget for the period (2010-2021)
(billion/dinar)**

Growth rate %	General revenues Amounts in billions	Year
15.04	70178223	2010
42.06	99697658	2011
20.18	119817224	2012
-4.98	113840076	2013
-7.42	105386623	2014
-31.16	72546345	2015
-25.00	54409270	2016
42.13	77335955	2017
37.80	106569834	2018
0.93	107567000	2019

-93.73	6742522	2020
-6.26	6319968	2021
-2.12	78367558.17	Average

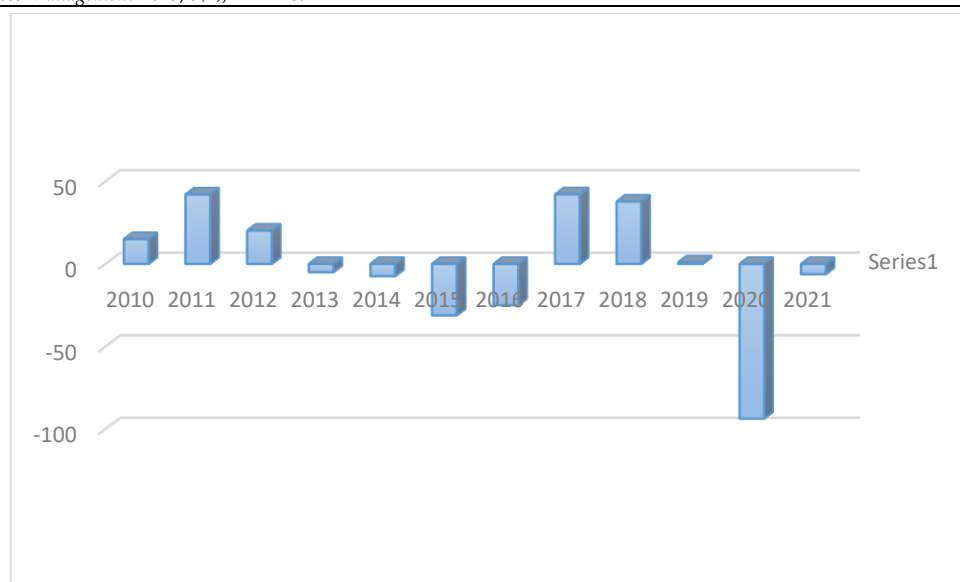
Source: Prepared by the researcher based on data from the Central Bank of Iraq

*Growth rate = current year – previous year / previous year*100

From the above table, the following is noted:

The global economy is greatly affected by price fluctuations. Oil, the economies of consuming countries recover during times of declining oil prices, and vice versa for producing countries, the decline in oil prices will lead to confusion in the implementation of development plans and to a noticeable contraction in economic activity due to the significant reduction in total government spending, which depends entirely on oil revenues, which is the main driver of the wheel of growth and economic activity.

Oil revenues constitute the dominant part of the state's revenues (almost 95%), which is a very high percentage and represents a blatant dependence and a clear picture of a one-sided economy, which affects the state's spending capacity in both its operational and investment aspects. Consequently, all development plans and projects, government spending and new appointments in the government depend on the volume achieved from oil revenues, which in turn depends primarily on oil prices and less on the volume of exports, as this is subject to Iraq's share in OPEC and other considerations.. There was a gradual increase in revenues during the years (2011-2014) as a result of the rise in oil prices in those years, as it represented the largest proportion of the state's revenues. After that, oil revenues declined, which was due to the decline in oil prices, which reached \$44.81 per barrel as an average for the year 2015. If we realize that non-oil revenues do not add more than 3 trillion dinars to oil revenues from the total quantitative revenue of the government, as public revenues amounted to (72,546,345) billion Iraqi dinars, then the problem appears clear, as the 2015 budget had allocated 70% to current spending and 30% to the investment budget. Accordingly, the revenues achieved in 2015 were only sufficient to cover 77% of the operating budget expenses alone, which resulted in stopping the implementation of most of the investment budget and stopping most of the projects under implementation. The Iraqi economy witnessed a clear financial crisis in 2015, represented by the clear deficit in the federal general budget resulting from the Iraqi economy being exposed to a shock. The double impact of the decline in oil prices in global markets to less than (50) dollars per barrel since June 2014, in addition to other challenges represented by the high costs of the war on terrorism, which negatively affected the budget, in addition to the expenses of housing and supporting the displaced in displacement camps and paying their dues, which created additional pressures on economic resources, as well as the additional financial burdens imposed by the decision to transfer the salaries of members of self-financing companies to central financing and the high costs of rebuilding the liberated areas that were damaged by military operations, and this is offset by the scarcity of non-oil imports and Iraq's lack of a policy of diversifying sources of income. As a result, in the year (2016), revenues decreased as a result of fluctuations in oil prices and security instability, as revenues amounted to (54,409,270) trillion Iraqi dinars, and in the years (2017-2018-2019), respectively (77,335,955) (106,569,834) ((107,567,000 billion Iraqi dinars). Revenues witnessed a gradual increase as a result of the rise in oil prices and security stability, and then began The decrease in revenues as a result of the repercussions of the Corona pandemic around the world in the years (2020-2021), as the year 2021 had the lowest revenues in the general budget compared to the previous year, amounting to (6,319,968) billion Iraqi dinars, as shown in the following figure based on the data in the table



Source: Prepared by the researcher based on data from the Central Bank of Iraq

The shape (2)

Actual public revenues of the Iraqi budget for the period (2010-2021)

➤ Monetary policy axis

It is one of the most effective means that the central bank resorts to in order to regulate the money supply. The initial goal in changing the legal reserve ratio is to deduct a portion of the deposits and keep them with commercial banks for the purpose of facing emergency situations such as sudden withdrawals. Banks keep this ratio either by law, as in most countries of the world, or by banking custom and tradition. (Traditions as in Britain. The central bank can influence, through this tool or means, the ability of commercial banks to grant credit by changing the legal reserve ratio in order to reduce the amount of liquidity available to commercial banks. Here it must be noted that the ability of the central bank to influence depends largely on the degree of its influence on the credit decisions of commercial banks.

It is also noted that there is an inverse relationship between the legal reserve ratio and the money supply. Accordingly, whenever the economy suffers from inflationary pressures, the central bank resorts to raising the legal reserve ratio by reducing the cash balances available to commercial banks, reducing their ability to grant credit, and reducing the money supply. Conversely, in the event of an economic depression or recession, the central bank resorts to reducing the legal reserve ratio to encourage credit expansion and achieve economic activity.

The means of changing the legal reserve ratio is (The Requirement Reserve Ratio is an effective tool in influencing economic activity for the central bank, due to two main reasons. The first is that its impact on the amount of money in circulation is limited to the decisions of the central bank primarily and is not affected by the decisions of commercial banks, as is the case with other operations such as the rediscount rate, the second is that its use does not require the existence of developed financial markets or the public's desire to buy and sell bonds and securities, as is the case with open market operations, however, these features should not lead to an exaggeration in estimating the effectiveness of this tool, as there are many determinants for its open application, the most important of which is that it is not certain that this tool will have an effective impact on economic activity in times of recession, as reducing the reserve ratio and increasing banking liquidity may not at the same time lead to an expansion in credit

demand, especially in the case of pessimistic expectations, changing the reserve ratio has a direct, quantitative and immediate impact on the reserves of commercial banks, and the central bank cannot carry out this process at close and repeated times, this policy treats all banks on the same scale, i.e. banks with a deficit and banks with a surplus, considering that this ratio is the same and is imposed on all types of banks, the impact of this tool is limited to banks that fall under the authority of the Central Bank. As for non-monetary financial institutions such as specialized banks, investment banks and insurance companies, they are not subject to changes in the legal reserve ratio. The following table shows:

Table No. (2) Money supply in Iraq for the period 2010-2021

Growth rate%	Cash display Amounts billion dinars	Year
14.3	60386086	2010
19.5	72177951	2011
4.6	75466360	2012
16.2	87679504	2013
3.5	90727801	2014
-9.0	82595493	2015
6.6	88081993	2016
1.5	89441338	2017
6.7	95391000	2018
8.4	103441000	2019
15.6	119609000	2020
2.0	122037000	2021
6.3	90586210.5	Average

Source: Prepared by the researcher based on the annual financial stability report issued by the Central Bank of Iraq.

*Growth rate = $\frac{\text{current year} - \text{previous year}}{\text{previous year}} \times 100$

From the table it was noted that:

The money supply has been steadily increasing until 2014, due to the link between the growth of the money supply and government spending. In the years 2010 - 2014 (The years preceding the crisis, government spending was increasing annually as a result of the rise in oil revenues, as the money supply increased by 50% in 2014 compared to 2010, as a result of the increase in the process of monetization carried out by the Ministry of Finance for oil revenues, to meet its need for current and investment spending. As for 2015, as a result of the significant decline in crude oil prices, public revenues declined significantly, and this was negatively reflected in government spending, as the Iraqi government significantly reduced investment spending and identified specific investment projects to continue working on, while work was stopped in the largest percentage of projects and current expenditures had a share of the reduction, but relatively less than the reduction witnessed by investment expenditures. As for the years 2016 and 2017, the money supply increased by 7% and 2% respectively as a result of the increase in prices in the two years as well as the years (2018-2019-2020-2021) witnessed a continuous increase in the money supply as a result of the increase in oil revenues, as the money supply increased at a high rate than it was in the years, as a result of the increase in the monetization process carried out by the Ministry of Finance for oil revenues, to meet its need for current and investment spending, as also in the following figure.



Source: Prepared by researchers based on data in the table

The shape (3)

Money supply evolutionM2 in Iraq (2010-2021)

The fourth topic

Conclusions and recommendations

First: Conclusions

1-Monetary and fiscal policies have external effects on each other. Most of the monetary effects of fiscal policy are related to the government budget constraint, while the fiscal effects of monetary policy are related to the extent of the central bank's independence and its ability to resist government pressure not to finance the budget deficit.

2-Each country and each stage of economic development has a different coordination method. The institutional arrangements for coordination and the degree of convergence between the monetary and fiscal authorities depend on the degree of economic development.

3-There are three main reasons, common to most countries in the world, for the lack of coordination between the central bank and the government, namely the difference in objectives, economic models followed, and future expectations of both authorities.

4-Coordination between the monetary and fiscal authorities cannot take place without institutional and legal arrangements that establish sound rules that govern the macroeconomy.

5-After a year2004: Important economic changes occurred in Iraq. The Central Bank of Iraq gained its independence, which enabled it to set the policy it deemed appropriate. The government obtained large economic rent resources, which put the state's general budget in a state of continuous surplus. An actual deficit did not occur except in the years 2013 and 2015.

Second: Recommendations

1-Fiscal policy must play a major role in controlling the general price level, and this can be achieved by the government focusing on the real investment sector, especially the housing and energy sectors, which are of great importance in calculating the consumer price index.

2-Using the general budget surplus to pay off the government's external or internal debts or establishing sovereign funds through which these surpluses are invested.

3-Increasing the effectiveness of both policies by correcting the shortcomings in preparing and implementing the state's general budget, in addition to increasing the flexibility of monetary policy by finding practical solutions to develop the financial market, which will increase the effectiveness of the interest rate.

4-Working to increase the credibility of both policies by increasing the effectiveness of the Central Agency for Statistics in collecting and analyzing data in a more detailed and accurate manner, and thus announcing sound economic decisions, which reduces the problem of continuous reconsideration of announced decisions, which causes both the government and the Central Bank to lose their credibility.

5-Increasing the transparency of both authorities by announcing the main and important indicators of the general budget, including expenditures, revenues, profits and losses of the Central Bank, etc., as the existence of secret data regarding financial and monetary policy leads to ambiguity that makes both authorities lose transparency.

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