

The role of some financial policy variables in reducing the unemployment problem in Iraq for the period (2004-2022)

Batoul Matar Ebadi

Tahani Abbas Fadel Al Mohammad Agha

University of Al-Qadisiyah

Corresponding Author : Tahani Abbas Fadel Al Mohammad Agha

Abstract : This research aims to identify financial policy and the extent of its contribution to influencing the phenomenon of unemployment, creating new job opportunities, and increasing public revenues, as well as addressing public debt and its effects on unemployment. Financial policy has been linked to the nature of economic and social conditions and the problems it faces. The country and this research deal with analyzing the role of fiscal policy and some of its variables represented by public revenues and public debt . The unemployment rate in Iraq during the period 2004-2022 and the extent of the success of the fiscal policy and its support for raising economic growth rates. Some fiscal policy variables (public revenues and public debt) and the growth rate were studied, as were the role of these variables in the unemployment rate and how to reduce this rate.

Search keywords: public income, public debt, work

Introduction: Fiscal policy is a major department of general economic policy tools, meaning it is one of its branches, which the state uses alongside other policies represented by monetary and trade policy and wage and price policy to influence the economic level through the use of some of the variables that make up fiscal policy. Fiscal policy has been the focus of attention of many economists and economic trends because it is an effective tool for achieving economic goals. It affects unemployment through its tools, which we will try to highlight. This research analyzes the role of some fiscal policy variables in the unemployment rate for the study period 2004-2022 and the extent of the success of fiscal policy in reducing the unemployment rate.

The importance of studying :

Analyzing some fiscal policy variables and their impact on the unemployment rate through the use of some fiscal policy variables, which are represented by public revenues and public debt, which affect the size of national income, aggregate demand, consumption, and national output, and thus affect unemployment and affect economic activity in a way general .

The study Problem :

The problem of the study is to explain and reveal the impact of fiscal policy variables on unemployment rates through fiscal policy tools (public revenues and public debt),. The research problem can be formulated with the following question:

Do fiscal policy variables have an impact on unemployment rates? What is the size of this effect?

Study hypothesis:

The research assumes the existence of a relationship with a positive moral impact between financial policy variables and unemployment rates in Iraq .

- There is a relationship with a positive moral effect between government revenues and unemployment rates in Iraq
- There is a relationship with a positive moral effect between public debt and unemployment rates in Iraq .

Purpose of the study :

- 1- Identify financial policy, its objectives, the factors that affect it, its tools, and its role in the Iraqi economy .
- 2- Knowing the development of unemployment in Iraq and what the available and proposed ways are to reduce it through the use of indicators that show the unemployment rates for each year.
- 3- Explaining the impact of each financial policy variable on unemployment rates in Iraq for the period 2004-2022
- 4- Identifying the trends of financial policy in Iraq through its variables, public revenues “and” public debt, and identifying the reality of unemployment in Iraq through analyzing and impacting unemployment indicators in Iraq.

Study methodology:

The research relied on the deductive approach, which relies on facts related to the nature of the unemployment phenomenon in Iraq, and the inductive approach, as the research collects evidence on the nature of the relationship between financial policy variables and unemployment rates in Iraq.

Study structure:

To achieve the goal of the research, it was divided into three sections. The first section is an analysis of the role of public revenues and public debt in the unemployment rate. The second section the relationship between public revenues and public debt and the unemployment rate in Iraq, while the third section specializes in evaluating the role of fiscal policy in Iraq for the period 2004-2022 and the financial analysis of public revenues, public debt, and the unemployment rate in Iraq during the study period.

Previous studies:

- 1-Measuring and analyzing the impact of oil revenues on the general budget, public expenditures, and internal public debt in Iraq for the period (2003-2016)
- 2-The role of oil revenues in enhancing international reserves in Iraq for the period (2004-2021)
- 3-The impact of banking services pricing on revenues in Sudanese banks during the period (1995-2000)

Chapter II

The First Topic

Fiscal policy, a theoretical conceptual framework

First: The concept of financial policy:

The basic concept of fiscal policy was derived from the French word *Fisc*, which means money portfolio or treasury, as the fiscal policy required from its original meaning was public finance and the state budget, as the use of this term became widespread and academic, and the definitions that explain the meaning of fiscal policy differed due to the different stages. Time and economic conditions, as well as the expansion of the state's role in economic and social life. Fiscal policy is defined as a set of measures taken by the state or government regarding the management of financial activities, which are represented by public expenditures, public revenues, and public debt, in order to achieve the basic goal of fiscal policy, which is to provide the important needs of society for goods and services and achieve stability. The economic. (Al-Mashhadani et al., 2018: 180)

It can also be defined as the most important economic policy tools that are relied upon to achieve economic and social goals, especially in light of the increasing expansion of contemporary countries, to varying degrees depending on the nature of their economic systems, degree of development, and resources. (Khalaf, 2008: 335)

Second: Objectives of financial policy:

Financial policy seeks to achieve several goals, the most important of which are: (Al-Wadi, 2010: 193)

- 1- Achieving economic stability: Fiscal policy plays an important role in achieving this goal, especially in times of recession or boom times, as it affects the level of employment, the level of prices, and the level of local income.
- 2- Achieving full employment: The general balance is the balance of total domestic spending and total domestic product at constant prices, and this is done at a level that allows all available factors of production to operate.
- 3- Optimal allocation of resources: The state can, with its tools, achieve optimal allocation of resources by determining the importance and priority of projects that contribute to economic development and projects that contribute to achieving added value to the economy by helping to modernize the means of production.
- 4- Redistribution of income and wealth: through the use of transfer expenditures that contribute to raising the incomes of those with limited incomes in order to achieve justice through the use of public spending channels.
- 5- Banking stability: This goal is considered one of the new goals that began to gain importance in the economies of countries in the twentieth century following the recent economic and financial crises, specifically the impact of the Great Depression and the subsequent financial crises. (Hassan, 2018: 236)

Third: Some financial policy tools:

The science of public finance is divided into public expenditures and public revenues, which include (taxes and public loans) in addition to public debt, and according to the functional performance of the state. Some tools for financial policy can be studied: (Mithan Modern, 1998: 221)

1. Public revenues:

Revenues can be defined as the amounts through which the state can secure the funds necessary to cover its public expenses, as well as to perform the functions and services for which it is responsible. It is also a tool for achieving and influencing the economic and social situation and general goals. (Al-Taher, 1992: 193)

It is also known that it represents various sources of income, whether natural, such as crude oil or taxes and fees achieved by the public sector as a result of providing services and goods, and everything that the state achieves from various sources and resources. (Mashkoo et al., 2014: 315)

Types of revenue:

There are several types of public revenues that can be explained as follows: (Ammara, 2015: 13)

A - Original revenues and derivative revenues: Original revenues are defined as the revenues that the state obtains without resorting to deducting them from individuals' incomes, such as state property revenues. Derived revenues are revenues that the state obtains by deducting them from individuals' incomes, such as taxes, fees, and fines.

B - Ordinary revenues and extraordinary revenues: Ordinary revenues are revenues that recur annually or periodically in the state's general budget, such as taxes. As for extraordinary revenues, they are revenues that do not recur periodically in the general budget. They are irregular and non-annual revenues, that is, they are used to confront a sudden deficit or emergency situation due to extraordinary expenses.

T - Public economy revenues and private economy revenues: Public economy revenues are represented by sovereign revenues, which the state obtains due to its sovereign authority, represented by fees, compulsory loans, and new monetary issuance.

D - Compulsory revenues and optional revenues: The state uses its sovereign authority to collect these revenues, such as taxes, while optional revenues represent optional loans, state property revenues, grants, and subsidies.

2. Public debt :

Public debt means the total balance of direct, fixed-term contractual government obligations towards others, that is, the debts of government units mentioned in government financial statistics, which include both the central government, service bodies, and financial departments. (Al-Muati, 2016: 115)

Public debt can also be defined as a group of obligations that a particular country has pledged to pay to creditors, whether they are internal or external. This debt results in several obligations that are represented by agreements concluded between the government and international institutions and private loans to foreign banks to the government of another country or another project in this country, which is called private debt, and also loans from one country to another country.

Types of public debt:

There are two types of public debt: (Al-Qadi, 2014: 120)

1- Internal public debt:

It can be defined as an agreement between two parties, one of which is the creditor and the other is the debtor. The creditor party (which is individuals or national institutions) provides an amount of money in the national currency to the debtor party (the government) by purchasing treasury transfers or guaranteed government bonds with a guarantee of a pledge to pay the value. The loan and its interest over a specific period. (Hoitfreich, 2016:19)

It is also defined as sums of money that the state obtains from citizens, whether they are natural or legal persons while specifying the terms of the loans and how to repay the loan. (Higher Institute, 2015: 77)

Internal public debt instruments:

Internal public debt instruments can be classified according to the length of the repayment period for the years of debt issued by the government, and they take several forms, the most important of which are: (Ismail and Hazal, 2018: 190)

1- Long-term bonds (government debt bonds): These are bonds that are characterized by the composition of public debt, the long-term part being the long-term part, that is, sold by the central bank and its branches to investors. The authority of the central bank here is characterized by authorizing commercial banks to give full authority to sell them in places where they do not exist. In which any branch of the Central Bank is committed to paying the annual interest earned from the sale of bonds by the Central Bank.

2- Medium-term bonds (public treasury bonds): They are financial bonds, that is, they are checks paid in order to obtain a cash flow. They are also known as debt, that is, instruments that the state often resorts to in the event of an unavailability of financial funds.

3- Short-term debt (general treasury bills): It is a short-term borrowing instrument issued by the state to finance the general budget and address the deficit in it, so they are defined as securities issued by the government, such as short-term loans. The maturity period is short, i.e. its duration ranges from one month to three months to approximately one year, and the primary purpose of these notes is to cover a specific deficit.

2- External public debt:

It is an agreement concluded between two parties, the first party being the local debtor party, represented by the state, and the second party being the external creditor party, meaning representing a second country or a group of countries, or the commercial debt of the foreign private sector. It also includes loans whose source is outside the borders of the state, such as countries or organizations. Or foreign banks, as external debt is usually in foreign currency. The purpose of external public debt is to address the balance of payments deficit or to finance economic projects or any other purposes. (Al-Obaidi, 2011: 165).

Types of external public debt:

External public debt is of two types, on the creditor side and the debtor side. Alternatively, on the creditor side, it may be of two types:

A- Concessional and non-concessional bilateral loans

B- Loans from international institutions

T- Supplier facilities

D- Net deposits of non-residents in the banking system

As for external debt on the part of the debtor, it is of the following types:

A- Government debt

B- Debts of the central bank, i.e. the monetary authority

T- Debts on banks and other sectors, including the private sector.

The second topic

Unemployment, a theoretical conceptual framework

Unemployment is considered a phenomenon that has afflicted many societies, as there are a billion unemployed people distributed throughout the world. It is considered part of the economic cycle, as it appears with the onset of recession and, on the other hand, disappears in the period of recovery, as it was considered a structural problem, that is, the presence of a defect in the structural system of the economy. especially. It arises from an imbalance in the supply of labor and the demand for it, that is, the lack of equality between them. Therefore, unemployment is defined as the difference between the quantity of labor offered and the quantity of labor required. It is also known that it prevents people who want and are able to work from working. (Taqa, 2022: 129)

It is also known, according to the international organization, that it: represents all natural persons who are of working age and are unwilling to work and who are looking for work but cannot find it. There is a period in which unemployment is measured, called the reliance period, and it is usually a week or two. (Daoud, 2010: 183)

There are also reasons that led to the formation of unemployment, which is represented by the lack of full employment of individuals, and among these reasons are: (Amer, 2019: 15):

- 1- Lack of providing new job opportunities
- 2- Increasing numbers of graduates from universities and training centers
- 3- The increasing number of women wishing to work as a result of economic developments and a continuing rise in the cost of living
- 4- Social changes in the lifestyles and behavior of individuals
- 5- Increased consumption has added new dimensions to the problem of unemployment.

Types of unemployment:

The concept of unemployment has gone beyond the traditional meaning and its economic concept has now transcended broader and more comprehensive levels. The types of unemployment can be classified into the following: (Shukr, 2016: 15)

- 1- Frictional unemployment: It is the unemployment that arises in industries, factories, and businesses that are characterized by irregular work, and it means temporary cessation of searching for another profession or due to study and other reasons.
- 2- Structural unemployment: This is the unemployment that arises due to the economy shifting from one specific productive nature to another. The movement of farms from the countryside to the city due to water scarcity and lack of production led to many farmers losing their jobs.
- 3- Seasonal or seasonal unemployment: It is unemployment that occurs as a result of the succession of seasons of the year or as a result of the occurrence of some social events in a specific season of the year, meaning it refers to a change in demand for a specific job due to the change in the season.
- 4- Technical or technological unemployment: This arises due to the development and improvement that arises in work when a new industry emerges, which leads to the spread of the phenomenon of unemployment. Also, this type of unemployment becomes more dangerous the more improvements in the industry increase. It causes widespread changes in work and the need for skilled workers who can accommodate Modern technical development.
- 5- Cyclical unemployment: This arises from a change in the overall demand in the economy, as the economy faces periods of lack of demand, which causes a certain group of the workforce to lose their jobs, and this results in a high unemployment rate in the economy.
- 6- Structural unemployment: It is the unemployment that arises as a result of structural changes in the overall economy, such as the transformation of the agricultural economy into an industrial economy, which requires the labor force to obtain the necessary training and qualifications to ensure that it obtains a job opportunity in the new sector.
- 7- Overt unemployment and disguised unemployment: Overt unemployment or outright unemployment is the presence of individuals who are able to work but do not get jobs It is considered a state of apparent unemployment from work, from which a large part of the available labor force may suffer. Disguised unemployment is not real unemployment, but rather a misuse of the available labor force, which works at a small portion of its capacity.
- 8- Behavioral unemployment: It is unemployment resulting from the reluctance and refusal of the labor force to participate in the production process and to engage in certain jobs because of the social view of these jobs.

The third topic

The impact of fiscal policy variables on the unemployment Rate

First: The effect of public revenues on the unemployment rate:

The relationship between the unemployment rate is estimated from the perspective of each of the GDP, real oil prices, and public revenues, as the results showed that each of the GDP, revenues, and inflation has a weak and significant positive effect on reducing unemployment rates. Human resources are also the axis around which any plan in the comprehensive development process revolves, that is, they are the basis for the success of any economic building, especially since backwardness is not linked to countries as much as it is linked to these resources and manpower on the basis that they are the forces capable of taking on the causes of growth, renewal, and development. Building an economy capable of satisfying the needs of a growing society goes beyond the concept of economic growth or economic development, which means a decrease in the unemployment rate, meaning that humans are the goal of economic development. (Kazim, 2006: 5)

Second: The impact of public debt on unemployment rates:

There are economic effects of public debt on economic activity, as it affects economic variables, the most important of which are saving, investment, and the price level. The impact of public debt depends on the type of public loans, as each type has a different impact on the other, as the real loans, that is, what the government lends from economic units, are divided. Apparent loans, meaning what the state lends from the central bank. In the case of real borrowing, the effect of public debt Saving and investment depends on the source from which the loans were financed. Individuals reduced their consumption and increased their savings to finance public loans. Public debt is an important tool for absorbing and mobilizing the savings of members of society. Public debt is also a tool for increasing the demand for labor and increasing the employment rate through its effects on saving and investment and its role in the development and growth of financial markets. (Al-Amiri, 2020: 78)

Third: The relationship of fiscal policy to unemployment:

There was no unemployment unless the worker's wage was at a sufficient level. If the wage rose above this level, the demand for labor in the market would decrease and its supply would increase, causing the wage to be reduced to a sufficient level and then unemployment to disappear, while in Keynesian ideas there are levels of unemployment. It requires state intervention through its policy to address it, especially in times of depression, to reduce unemployment. Keynes suggested state intervention through its policy to reduce unemployment by following expansionary financial policies to increase effective aggregate demand, he proposed using workers to dig holes in exchange for a wage, and then the next day they fill the holes in exchange for a wage as well. That is, government spending or reducing taxes will increase employment, meaning there is a negative impact on unemployment, and the opposite is true when government spending is reduced and taxes are increased at times. Inflation, will lead to a reduction in wages and then reduce inflation. (Obayori, 2016: 188)

Chapter III

The first topic

Measuring the impact of financial indicators on unemployment rates in Iraq for the period 2004-2022

First: Analysis of the impact of public revenues in Iraq for the period 2004-2022:

Revenues are the main resource for the Iraqi economy, especially oil revenues, as they finance the state's general budget. Through revenues, the state can cover its public expenses and exercise its role in economic activity. However, a decrease in revenues leads to economic stagnation in general, as Iraq is considered one of the rentier countries that depends on Its revenues exceed oil revenues by approximately 90.1%. In the event of a global oil crisis, Iraq loses a large portion of its revenues and cannot cover its expenses, which are represented by salaries and wages, i.e., representing 70.1% of the general budget.

Table (1)

Analysis of public revenues in Iraq

The amounts are one million Iraqi dinars

the year	Public revenues	Annual growth rate %
2004	32982738	-----
2005	40502891	22.9
2006	49232348	21.5
2007	54599452	10.8
2008	80252183	64.8
2009	55209353	-31.2%
2010	69521116	25.9%
2011	99998775	43.7%
2012	119466402	19.4%
2013	113767394	-4.8%

2014	105386621	-7.4%
2015	66470252	63.8%
2016	54409270	-18.1%
2017	77335954	42.1%
2018	106569834	37.8%
2019	107566994	0.93%
2020	63199689	-41.2%
2021	109081542	72.5%
2022	161697436	75.7%

Source: The researcher's work based on the data contained in the statistical bulletins of the Central Bank of Iraq for the period 2004-2022

We note from Table No. (1) the state's general revenues in 2004, amounted to 32,982,739 million Iraqi dinars, and this amount began to rise in the years 2005-2008 due to the increase in global demand for oil, as well as the political conditions that Iraq experienced and the lack of security stability in Iraq. During this period, the Iraqi government followed an expansionary financial policy as a result of the increase in public revenues. In 2007, public revenues amounted to approximately 54 million Iraqi dinars, meaning revenues contributed to the increase with a growth rate of 10%. In 2008, revenues increased significantly, reaching 80 million Iraqi dinars, meaning they contributed to a growth rate of 46%. However, in 2009, revenues decreased, reaching 55,209,353 million Iraqi dinars, meaning their growth rate was 31% due to the decline in oil revenues, the main reason behind this decline is the global crisis that emerged in 2008, although Iraq is not connected to the global economy much, but its economy was not spared the impact of the global crisis, as the global crisis led to a decline in the level of global demand for crude oil, which led to a decline in crude oil prices and thus a significant decrease in Iraq's revenues. A contractionary fiscal policy was followed to reduce the level of public expenditures. In 2010, public revenues increased, reaching 69 million Iraqi dinars, with a growth rate of 25%, and revenues continued to rise in 2011 and 2012. After these years, public revenues decreased in 2013 and 2014, that is, they witnessed a continuous decline because the government followed a policy of expansive public expenditures increased to their highest levels, and revenues continued to decline in 2015 and 2016, reaching 2016 about 54,409,270 million dinars. With a growth rate of 18%, this is due to the political and security instability in Iraq due to the war with ISIS. As for after 2016, that is, during the period 2017-2019, it witnessed a significant increase in public revenues, due to the OPEC agreement, which increased oil prices and increased. Global oil demand which is the main reason for the increase in the percentage of revenues in 2018. As for the year 2020, public revenues recorded a significant decline, reaching about 41%, or 63 million dinars, compared to 107 million dinars for the year 2019. The main reason for this decline is the decline in The level of oil revenues due to the decline in global demand for oil due to the coronavirus pandemic and the decline in global oil prices, as well as Iraq's commitment to reducing production and public expenditures according to OPEC decisions.

Revenues also recorded a significant increase in 2021, reaching 109 million Iraqi dinars, meaning a growth rate of 72%. This reason is due to the rise in oil prices by 59% because oil revenues constitute 87% and amount to 95 million Iraqi dinars.

Iraq also achieved the highest revenues in 2022 due to the increase in financial revenues and oil revenues, as they amounted to 115 million in crude oil revenues, and the remainder are non-oil revenues, meaning 95% of these revenues were relied upon to solve the economic crises facing the country, and the revenues in the year 2022 was subject to two restrictions on financial dispositions due to the absence of the General Budget Law for the year 2022, i.e. spending 1-12% of the total actual ongoing and current expenditures in the budget. The second restriction refers to the allocations contained in the Emergency Food Security and Development Law No. 2 of 2022. The remaining surplus from the 2022 budget will be an opening balance in the 2023 budget.

Second: Analysis of the trend of public debt in Iraq for the period 2004-2022:

Internal debt means the balance of local debt on the government and includes treasury transfers and other facilities that the government obtains from the banking system. In the year 2004, there were major changes in economic policy, and these changes affected the internal public debt, as the government was prevented from borrowing from the Central Bank. Also, in the same year, the Central Bank was granted official independence under Law No. 56, considering that public debt is one of the sources of financing through which the state's general budget deficit is financed, and this deficit in turn is reflected in the structure of economic growth in Iraq.

Table (2)

Analysis of internal public debt in Iraq

The amounts are one million Iraqi dinars

the year	Public debt	Annual growth rate %
2004	5925062	-----
2005	6255577	
2006	6307007	

2007	5193704	
2008	4455568	
2009	8434048	
2010	9180806	
2011	7446859	
2012	6547518	
2013	4255548	
2014	9520018	
2015	32142801	
2016	47362252	
2017	47678795	
2018	41822917	
2019	38331547	
2020	64246558	
2021	69912393	
2022	69495736	

Source: Prepared by the researcher based on the Central Bank's annual data for the period 2004-2022

It is noted in Table No. (2) that the internal public debt fluctuated between increases and decreases during 2004-2008, as the total internal public debt reached 59 million dinars, or approximately 60 million dinars, during the year 2004, and then it began to rise to reach 6,255,578 million dinars in In 2005, at a rate of change of 5.57%, then the internal debt decreased in 2006, reaching 5,307,008 million Iraqi dinars and 4,455,569 million Iraqi dinars During the year 2008, that is, a change of 62.3% compared to the year 2006, due to Iraq's liberation from the economic blockade and restrictions that were imposed on it before 2003, and the increase in oil exports and the rise in their prices, which led to an increase in government revenues and the achievement of a surplus in the state's general budget.

for the years 2009 and 2010, public debt increased due to the decline in government revenues due to the decline in oil prices as a result of the decline in global demand for oil by industrialized countries as a result of the repercussions of the global financial crisis that occurred in 2008, which was reflected in economic activity through a decrease in the volume of Revenues as the internal public debt increased to 8,434,049 million dinars Iraqi, with a change rate of 8.08%. During the period 2011-2013, we find that the total public debt witnessed a significant and continuous decline, as the total public debt reached 4,255,548 million dinars in 2013, with a negative change rate of 0.35% compared to the year 2011, due to the decrease in outstanding debts. The government owes it to redeem the value of government bonds and transfers held by the Central Bank at the end of the year 2012, in addition to the loans granted by the Central Bank to government departments during this year. In addition to the increase in oil revenues as a result of the increase in oil prices in global markets, especially after 2003, during the years 2014-2017, the internal public debt witnessed a significant increase during this period, as the debt increased from 9,520,019 million dinars to 47,678,795 million dinars during the year 2017. And with a rate of change of 0.66%, the main reason for the increase in internal public debt in recent years is due to the shock that the Iraqi economy was exposed to in the second half of 2014, which is represented by the decline in oil prices and the resulting decline in the value of prices, in addition to the increase in expenditures and Especially the military expenditures spent to confront the terrorist organization ISIS, which burdened the budget That is, it caused a clear shortage of liquidity and a deficit in the Iraqi general budget, especially in 2015 and 2016, as the government was forced to resort to internal and external debt to address the financial gap and lack of liquidity that occurred and cover the budget of 2014 and 2015. 2016.

As for the year 2018, the size of the public debt decreased to 41,822,917 million dinars, with a change rate of 12% compared to 2017. The reason for this is due to the improvement of the security and economic conditions in Iraq, the rise in oil prices, and the increase in the volume of government revenues, which contributed to reducing A percentage of this debt. As for the year 2019, the public debt declined to reach 38,331,548 million dinars, with an annual growth rate of 8.34%, due to the improvement as a result of Iraq's victory in its war against the terrorist organization ISIS, the decrease in military spending, and the increase in oil revenues due to the rise in oil prices and overcoming the Corona pandemic.

In 2020, the internal debt recorded an increase of 67% over the previous year, i.e. 64,246,559 million dinars. The reason for this increase is due to the decrease in public revenues due to the deterioration of oil prices, which prompted the government to resort to internal borrowing to reduce the gap between expenditures and revenues in the country. The general budget according to the 2020 borrowing law. The public debt in 2021 also reached 69,912,395 million dinars, meaning an annual growth rate of 8.81% over the previous year, as in Table No. (2). The reason for this increase is attributed to the increase in the state's financial obligations after the Covid-19 crisis the decline in oil prices, and the debt record The year 2022 increased by 7.5% from the first classification of the previous year to reach 69 million dinars. This increase is due to the increase in the payment of remittances to government commercial banks discounted at the Central Bank and bonds by 19% and 111%, respectively.

Third: Analysis of the unemployment index in Iraq for the period 2004-2022:

Unemployment is considered one of the most important requirements for achieving economic growth in Iraq, and in order to achieve this economic growth and achieve optimal use of the labor force and eliminate unemployment according to the foundations determined by the development policy in Iraq, that is, by identifying the supply and demand sides of the labor force and determining the size The reserves the economy needs and their impact on national income The consumption, saving and investment capacity must be influenced to achieve the redistribution of the workforce in light of the planning relationship between the number of workers and the means of production available for work. Iraq is also considered among the group of countries with a medium-sized population, meaning there is a great need for labor of various types and levels.

Table (3) Analysis of the unemployment problem in Iraq

the year	Unemployment rate %
2004	26.9
2005	17.9
2006	17.5
2007	11.7
2008	15.3
2009	15.1
2010	15.2
2011	12.2
2012	11.9
2013	15.1
2014	10.7
2015	14.9
2016	10.8
2017	10.9
2018	22.6
2019	12.8
2020	16.23
2021	16.17
2022	15.55

Source: Ministry of Planning and Central Bureau of Statistics / Primary data from the Ministry of Planning.

In Iraq, there are no accurate data on unemployment that can be used for economic analysis, especially before 2003 due to the political circumstances that the country was going through and the weakness of the statistical system. However, after 2004, the Iraqi Ministry of Planning issued surveys on employment and unemployment on a quarterly and annual basis, the most recent of which was In 2008, the unemployment rate reached 26%, equivalent to 4 million unemployed people Out of the total workforce of 8 million, that is, the percentage is estimated at 50% of the labor force. Unemployment began to decline until 2005 and 2006, reaching 2007, when unemployment reached 11%, then it rose slightly in 2008, reaching 15%. The reason for this decline is due to the improvement. The relative security situation and the Iraqi government employing many unemployed people in government institutions Especially in the security services, that is, in the Ministries of Defense and Interior, unemployment continued to decline to reach 11% in 2011 due to the noticeable improvement in sectoral growth. The increase in global oil prices in that period and the increase in income distribution as a result of openness to government business led to a relative recovery. In the services and business sector and the growing rates of government employment. As she returned Unemployment rates increased in 2013 and 2012 to reach 11.9%, while in 2015 this was due to the contradiction in overall activity rates, as shown by the low growth rates of non-oil output during the period between 2012 and 2015 due to the impact of the global oil crisis, which led to a reduction in government employment. Also contributed to the rise in unemployment rates, as can be explained by the data mentioned In Table No. (4) there are inaccurate data for many reasons, including technical and procedural ones. They only represent apparent or frank unemployment, which does not include the types of non-visible unemployment widespread in the Iraqi economy, most notably disguised unemployment. In 2016, the unemployment rate reached 10%, and the main reason for the decline in the unemployment rate compared to previous years is due to Iraq's possession of a youth population pyramid, which constituted a burden on the ability of the public sector to fully take over and the failure of the private sector to employ the number surplus to the sector's need. The year. Unemployment also rose in 2017, with the unemployment rate reaching 10.9% due to lack of... It provides support for small projects that need simple capital, labor intensity, and security instability in many governorates of Iraq. The absence of solutions and treatment for the problem of unemployment and cooperation between successive Iraqi governments in 2018 led to the unemployment rate rising to 22%. That is, large numbers of graduates enter the labor market every year without finding special jobs in the state for them. Unemployment also recorded an increase until 2020, reaching 16% due to the circumstances of the corona virus pandemic, which stopped and disabled many individuals from working due to the imposition of a curfew and the disruption of economic projects that were under

construction and planned for their reconstruction. As in 2021, the inflation rate rose and continued. For two years due to the effects of the Corona pandemic, until it decreased in 2022. Because of the food security law, which enabled the employment of a large number of workers in all fields and specializations, which led to a decrease in the unemployment rate until it reached 15%. In general, the problem of unemployment in Iraq during the period of study is due to weak coordination between education, the labor market, and its outputs, and to terrorist operations that contribute to the displacement of much of the population, the spread of administrative corruption, the deterioration of security conditions, and the increase in labor supply and, in return, a decrease in demand for work. It has a negative impact on the availability of a suitable climate for foreign investment and private investment in productive projects with a high density of workers and the availability of new job opportunities.

The second topic

Measuring the impact of some fiscal Policy variables on the Unemployment rate in Iraq for the period 2004-2022

This research deals with the use of statistical methods and standard methods to measure the impact of some financial policy variables (public revenues, public debt) on the unemployment rate in Iraq for the period (2004-2022) in order to test the extent to which the following main hypothesis is achieved:

The research assumes the existence of a significant relationship between fiscal policy variables (public revenues, public debt) and unemployment rates in Iraq.

Thus, one of the following two hypotheses will be tested:

H0: There is no significant relationship between financial policy variables and unemployment rates in Iraq

H1: There is a significant relationship between financial policy variables and unemployment rates in Iraq

This is done using modern standard tests and models such as static tests, cointegration tests, the autoregressive distributed slowdown model (ARDL), the error correction model, and using the Eviews13 program.

First: Description of the standard model

The most important stage of building standard models is the stage of describing the standard model, as it works to represent the relationships between the studied variables with mathematical formulas and equations. The model variables and the nature of the relationship between them are determined according to economic theoretical logic

1- Independent variables

-Public revenues (PR)

- Public debt, symbolized by the symbol (TD)

2- Dependent variables

The unemployment rate is symbolized by (UE)

3- Random variables

It is symbolized by the symbol μ_i

Formulation of the model:-

In order to determine the form of the relationship between the studied variables, they must be formulated in the form of mathematical equations. This can be described by using a simple regression model. Each independent variable has a mathematical equation, and the general form of the model consists of the following equation:

$$Y_t = \alpha_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \phi Y_{t-1} + \mu_t$$

Yt: represents the dependent variable

Xt: the independent variable

α_0 : represents the intercept term vector (fixed term) β : represents the slope of the regression function.

ϕ : represents the coefficients of time-lagged variables, μ_t : represents the vector of the random variable:

According to economic theory and approved studies on the relationship between financial variables and unemployment, the relationship is inverse between both public revenues and public debt and the unemployment rate, so the parameters will have a negative sign.

Second: Statistical characteristics of the model variables

For the purpose of knowing the statistical characteristics of financial policy variables and the unemployment rate in terms of fluctuation between the highest and lowest value, the arithmetic mean, and the normal distribution, the necessary statistical tests were conducted, as stated in Table (4).

Table (4) Statistical characteristics of the variables of the studied model

	PR	TD	UE
Mean	82486855	25448144	15.23421
Median	78488954	9057407	15.1375
Maximum	161697437	69912394	26.8
Minimum	32982739	32142805	10.8
Std.Dev	33156084	24115853	4.143241
Skewness	0.602935	0.718174	1.537357

Kurtosis	3.007736	1.954849	6.240843
Jarque-Bera	4.604903	9.992217	63.19694
Probability	0.000013	0.006764	0.0000
Sum	6.27E+09	1.93E+09	1157.8
Sum Sq .Dev	8.24E+09	4.36E+09	1287.484
Observation	76	76	76

Source: The work of the researcher based on the results of the Eviews 13

We note from the results of Table (1) that the Public Revenue (PR) variable achieved its highest value of about 161697437 billion dinars in the year 2022 due to the rise in oil prices and the improvement in the quantities of oil exported production, and the lowest value was about 32982739 billion dinars in 2004 due to the circumstances of political change and what accompanied it. From events in Iraq, an average amounted to about 82,486,855 billion dinars. As for the Jarque-Bera coefficient, it was significant, as the probability value for this variable was about 0.000013, which is less than the standard value (0.05), which means that the variable is distributed normally. While the public debt variable (TD) achieved its highest value of about 69,912,394 billion dinars in 2021, and its lowest value of about 32,142,805 billion dinars in 2015, with an average of about 25,448,144 billion dinars. As for the Jarque-Bera coefficient, it was significant, as the probability value for this variable was about 0.006764, which is less than the standard value (0.05), which means that the variable is distributed normally. As for the dependent variable, the unemployment rate (UE), it achieved its highest value of about 26.8% in 2004 and its lowest value of about 10.8% in 2016, with an average of about 15.2%. As for the Jarque-Bera coefficient, it was significant, as the probability value for this variable was about 0.00000, which is less than the standard value (0.05), which means that the variable is distributed normally.

Standard side results:

- 1-The alternative research hypothesis was verified that there is a relationship with a negative moral effect between fiscal policy variables (public revenues and public debt) and the unemployment rate in Iraq.
- 2-The statistical characteristics of the financial policy variables and the unemployment rate passed the statistical selections in terms of random distribution and were free from a unit root through stationary tests, as the independent variables were not stationary in their natural state.

Conclusions and recommendations:

A- Conclusions:

Through quantitative analysis, econometric analysis, identifying the variables related to the research, and also identifying their impact on unemployment, we reached a number of conclusions, which are:

- 1- The slowdown in public revenues and their inability to keep pace with the growth of public spending due to the weakness in the flexibility of the tax system and tax evasion. There are also other reasons represented by the impact of oil revenues on prices and external conditions.
- 2- The primary goal of fiscal policy is to alleviate social problems by increasing operating expenses.
- 3- Financial policy tools are among the main factors affecting the determination of economic growth rates and influencing the unemployment rate in the world because of the ability these tools have determined financial position of the country.
- 4- The main reliance of fiscal policy on crude oil to finance revenues and expenditures and to overcome public debt as well.
- 5- There was a set of economic conditions and events that Iraq went through during the period 2004-2022, which mainly and negatively affected economic decisions in Iraq.
- 6- It became clear that the economic policy in Iraq during the period 2004-2022 was characterized by a lack of unification between the procedures of the fiscal and monetary policies, as the fiscal policy focused on the expansion of general operational consumer expenditures, while the monetary policy focused on addressing inflation, and the two policies neglected the rest of the problems.
- 7- Iraq suffers from all types of unemployment, especially graduate unemployment, which is one of the most widespread types of unemployment in Iraq.
- 8- Small projects contribute to reducing and alleviating the problem of unemployment in the Iraqi economy due to various circumstances and multiple obstacles at the level of all fields.
- 9- The alternative research hypothesis was verified that there is a relationship with a negative moral effect between fiscal policy variables (public revenues, public debt) and the unemployment rate in Iraq.
- 10-The statistical characteristics of the independent variables (fiscal policy variables) and the dependent variable (unemployment rate) passed the statistical tests in terms of random distribution and were free of a unit root through stationary tests, as the independent variables were not stationary in their natural state, which is the prevailing state in economic variables because they fluctuate during time, but it stabilized after taking its first differences.

B- Recommendations :

- 1- Combating administrative and financial corruption at the level of all ministries, their bodies, and agencies associated with them by implementing the budget objectives and the bodies that disburse financial allocations to them.
- 2- Addressing the imbalance resulting from reliance on the single financing source represented by oil to finance public spending and the necessity of diversifying other revenue sources such as taxes and financial financing.
- 3- Paying attention to private investment activity, giving it financial and economic advantages and immunities, and promoting it through issuing new supportive laws and regulations.
- 4- Encouraging saving in society so that the gross product can be targeted and the required economic growth rates can be reduced.
- 5- Coordination must be reached between the two economic policies represented by fiscal policy and monetary policy, and conflict between them must be avoided, especially fiscal policy and monetary policy because they have a close relationship with each other.
- 6- Creating a clear information base that can be used to treat the increase in the unemployment rate, and it is specific to the numbers of the population capable of work, graduates, and those with advanced degrees, and benefiting from their experience and potential in developing the labor market.
- 7- Increasing awareness of the importance of small projects and clarifying the extent of their role in economic development and their role in attracting labor.

Sources :

First: Arabic books:

- 1- Al-Mashhadani and Al-Obaidi, Khaled Ahmed Farhan, Abdul Khaleq Abdullah, "Principles of Economics," Dar Al-Ayyam for Publishing and Distribution, Amman, 2018.
- 2- Khalaf, Fali Hassan, "Public Finance," first edition, Modern World of Books for Publishing and Distribution, Amman, Jordan, 2008.
- 3- Al-Wadi, Mahmoud, "Public Finance," first edition, Jordan, Amman, 2006.
- 4- Hassan, Basem Abdullah, "The Monetary Effects of Fiscal Policy in Iraq after 2003," first edition, House of General Cultural Affairs, Baghdad, 2018.
- 5- Al-Taher, Abdullah Sheikh Mahmoud, Introduction to Public Finance Economics, King Saud University, Kingdom of Saudi Arabia, 1992.
- 6- Al-Amiri and Al-Helou, Saud Jayed Mashkooor and Aqeel Hamid, A Contemporary Introduction to Public Finance, Second Edition, Iraq, 2014.
- 7- Amara, Rania Mahmoud, Public Finance and Public Revenues, Faculty of Law, Cairo University, Egypt, first edition, 2015.
- 8- Al-Muati and Al-Arabi, Ali and Assaf, Public Financial Administration, place of publication not specified, 2016.
- 9- Al-Qadi, Hassan Muhammad, Public Financial Administration, Al-Academies for Publishing and Distribution, first edition, Baghdad, 2014.
- 10- Al-Obaidi, Saeed Ali Muhammad, Public Finance Economics, first edition, Amman, Jordan, 2011.
- 11- Taqa, Muhammad, indicators of economic progress and methods for calculating them, Amna Publishing and Distribution House, second edition, Jordan, 2022.
- 12- Dawoud, Hossam Ali, Principles of Macroeconomics, Dar Al-Maysara for Publishing and Distribution, second edition, Amman, Jordan, 2010.
- 13- Amer, Tariq Abdel Raouf, the causes and dimensions of the phenomenon of unemployment and its negative repercussions on the individual, family and society and the role of the state in confronting it, first edition, Baghdad, 2019.
- 14- Shukr, Ismail Ali, private sector projects and their role in reducing unemployment, Academic Book Center for Printing and Publishing, first edition, 2016.
- 15- Kazem, Kamel Allawi, Human Development in Iraq, Reality and Requirements, University of Kufa, 2006.
- 16- Al-Amiri and Al-Helou, Saud Jayed Mashkooor and Aqeel Hamid, A Contemporary Introduction to Public Finance, Second Edition, Iraq, 2020.
- 17- Rashid, Dr. Enas Muhammad Rashid, Analysis of the Impact of Public Debt on Government Spending and Economic Growth in Iraq, Iraqi University Journal, 2021.
- 18- Mahdi, Dr. Adnan Abdul Amir Mahdi, The problem of unemployment in Iraq after 2003, its reality, causes, effects, public policy options, Al-Bayan Center for Studies and Planning, 2021.

Second: Magazines

- 1- Ismail and Hazal, Muhammad Nasser and others, The reality of employment and unemployment in Iraq for the period 1997-2004, Technical Journal of Administrative Research, Volume 2, 2018.

2- Al-Mousawi and Al-Fatlawi, Salam Kazem Shanio and Safaa Abdul-Jabbar, "Measuring and analyzing the relationship between the development of internal public debt and economic growth in Iraq for the period 1990-2017," Journal of Management and Economics, University of Karbala, Volume Eight, Issue 1, 2019.

3- Al-Rawi, Dr. Ahmed Omar, Unemployment in Iraq: Reality, Challenges, and Treatment, Iraqi Journal of Economic Sciences, Issue Twenty-Six, 2010

Third: Theses and dissertations:

1- Al-Zubaidi, Batoul Hassan Raddad, Evaluating the performance of the general budget in Iraq for the period 2003-2012, Master's thesis, University of Wasit, College of Administration and Economics, 2014

Fourth: Foreign books:

1-Miithan Modern, public finance, theory, and practice Himalaya house, New York, 1998

2-Holtfrerich, Carl-Ludwig, P. Feld, Lars, Heun, Werner & Illing, Gerhard, (2016) Government Debt: Causes Effects and Limits, German National Academy of Sciences Leopoldina, Berlin