Turkish Online Journal of Qualitative Inquiry (TOJQI)

Volume 12, Issue 8, July 2021: 2623 - 2643

The effect of the size of foreign debts on the monetary policy efficiency to fulfilling monetary stability (Iraq is a case study for the period from 2005-2018)

Saif khadem zaboon , Salam Jasim Mohamme

saif.k.zaboon@kus.edu.iq

Al-Karkh University of Science, Baghdad, Iraq

Abstract

Most of the developing countries resort to external debt to bridge the gap between their increasing expenditures and their limited financial resources, but there is a challenge facing these countries as the high rate of growth of this debt and its accumulation has put many of these countries in a great dilemma and is represented by the inability to sustain these debts. Iraq is one of the countries where debts are accumulated due to the wars , political fluctuations and mismanagement of the economy, as the debt at the end of the study year reached (64.5) billion dollars. Our study came to measure the effect of the volume of external debt on the efficiency of monetary policy in Iraq through achieving monetary stability and targeting inflation rates for the period (2005- 2018) using the Augmented Dickey-Fuller test and the Cranger causality test , the appropriate standard models, in addition to Cranger's causation,. We have dealt in the first and second topics with the identification of external debt criteria for classification of external debt and then the historical development of Iraq's external debt.

In the third topic, we have discussed definition of monetary policy in general and the monetary policy of Iraq after 2003, and the most prominent tools that were followed to achieve monetary control and monetary stability in Iraq.

Key Words: external debt, Foreign Aid, Effectiveness of Monetary Policy, Monetary Stability, Inflation

Introduction

Countries resort to external debt for deficiency in their domestic financial capabilities to meet high growth rates for economic development, to fill the deficit in the balance of payments, or to emergency situations, provided that they pay off the external debt with its interest later, but the mismanagement of the external debt has led to the high rate of growth and accumulation of this debt. This made many indebted countries falter in servicing their debts, i.e. paying off the principal debt and its annual interest, which made them demand scheduling and writing off their debts, which made them enter within the programs of international institutions (such as the World Bank and the International Monetary Fund) to correct the structural imbalances they suffer from.

As for Iraq, its beginning was with the external debt after entering the war with Iran, which made it incur heavy debts in addition to the large compensation that it had incurred after its invasion of Kuwait, and these debts accumulated during the years of the blockade and Iraq was able to reschedule its debts after 2003, which is the year of regime change in Iraq and considered it an abominable debt. .

However, Iraq has returned to foreign borrowing again, due to fluctuations in oil prices, which are the largest source of the country's revenues and high public expenditures as a result of financing the war against terrorism and a desire for development and relying heavily on imports which made the external debt greatly raised and formed (38%,55) of gross national product making the external debt to have an influence on the monetary and economic stability that monetary policy seeks to achieve. Our study came to measure the effect of the size of external debt on the efficiency of monetary policy in Iraq through achieving monetary stability and targeting inflation rates using Augmented Dickey-Fuller and Kranger's causation test to examine this relationship during the period (2005-2018).

The importance of study:

As a result of the restructuring of Iraq’s foreign debts after 2003 and its commitment to the International Monetary Fund’s economic reform program aimed at liberalizing markets and opening them to the outside, encouraging foreign investment and privatizing the public sector in addition to the increase in foreign debt to form a significant percentage of the national product, led to increase the burden on the monetary authorities to achieve monetary stability and fight inflation.

The study Problem:

The high volume of external indebtedness for the purpose of financing operational expenses and war expenditures, and thus the study problem can be formulated with the following question:

Is there an effect for increasing the size of foreign debt on the ability of monetary policy to achieve monetary stability?

Study hypothesis:

To answer the study problem, the following hypothesis was formulated

The increase in the volume of foreign debt has negative effects on the inflation rate and on the ability of monetary policy to achieve monetary stability.

Purpose of the study:

Analyzing the effect of foreign debt on the effectiveness of monetary policy in achieving monetary stability in the Iraqi economy.

The first topic / introduction to the external debt

The first requirement: the concept of external indebtedness:

The phenomenon of external indebtedness is not a new phenomenon as it began with the emergence of modern countries, but the demand for external debt increased dramatically in the period of the seventies and eighties of the last century, as the number of indebted countries in 1988 reached (133) state, largely the developing countries and that because of their desire to develop their economies and get out of the state of underdevelopment and the lack of sufficient internal financial resources to carry out the development process.

Before dealing with external debt, government debt must be defined in general terms, it means a group of what the state has acquired in terms of internal and external debts and their benefits up to a certain date. [2]

It is clear from this definition that the state, in the event of lack of its general revenues, turns to debt and there are two sources of debt, one internal and the other external.

Internal indebtedness can be defined as an agreement between two parties whereby the creditor party provides sums of money in the national currency to the government through their purchase of treasury transfers or government bonds in exchange for a pledge to pay the loan value and interest within a period of time. [3]

As for the external indebtedness, it can be defined as the amounts borrowed by a national economy in which the loan period exceeds one year or more and is payable to the lender by paying in foreign currencies or by exporting goods and services. [4]

The International Monetary Fund, the World Bank, the Organization for Cooperation and Development and the Bank for International Settlements defined it as the total external debt, which is equal to the amount of current contractual obligations that lead to the repayments of the residents of a country towards non-residents. [5]

The external indebtedness can be defined as the sum of the financial or real resources the state obtains from external parties according to an agreement whereby the first party undertakes to return those resources with their interest within a certain period of time.

The second requirement / external indebtedness classification criteria

There are many financial indicators to determine the level of external indebtedness, and through these ratios, external debt can be managed, as these indicators show the size of the indebtedness of the debtor countries, whether high or low, and among these indicators:-

- Index of debt-to-exports volume, goods and services (debt / exports): This indicator measures the total debt at the end of the year to the country's exports, and then the more this indicator increases, the more it indicates that the country suffers from high indebtedness and vice versa. Debt to export volumes in the short term only.
- Index of debt-to-gross national product ratio (debt / gross national product): This indicator reflects the proportion of total resources available to service indebtedness, and therefore the higher this indicator indicates that the country suffers from indebtedness, but this indicator is affected by the degree of the country's development and the ratio of easy debt.
- Reserve index to Short term Debt : A liquidity index defined on the basis of the reserve stock of foreign currencies under the behavior of the monetary authority to the stock of short-term debt .[7]

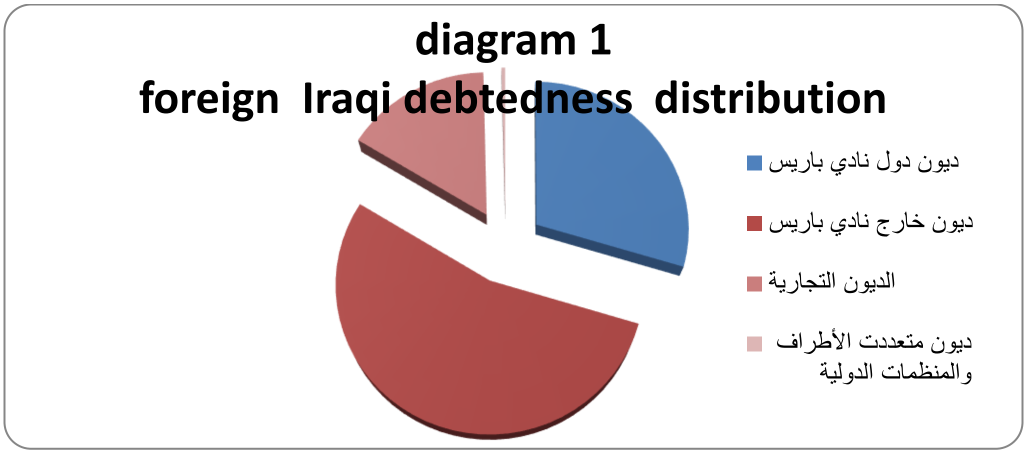
- The index of the ratio of the present value of the total debt service: that is the asset and interest to exports that include goods, services and remittances of immigrants, and the bank adopts the value of exports as it reflects the country's ability to provide foreign currencies to service its debts. This indicator measures the percentage of exports with which the debt is repaid.

- The index of the ratio of the present value of the total debt service to the gross national income: the national income is adopted as a comprehensive criterion for measuring the capabilities of the national economy to generate income and bear the burdens of indebtedness. The last two indicators are considered the best, as the World Bank has defined what is known as the critical value to know what countries suffer from the weight of indebtedness. The country is considered indebted if the debt service index to exports exceeds 220% or if the debt service index to national income exceeds 60% and the country is classified as having medium indebtedness if the two indicators reached three-fifths of the critical value, equivalent to 48% for the national income index or 132% for the exports index. If the average of the two indicators is less than three-fifths of the critical value, then the country is classified as having simple indebtedness. Either the International Monetary Fund has adopted what is deducted from the national product to pay the interest of foreign loans. According to the fund, the natural rate is 4% , but if the rate exceeds 4%, then the country is experiencing difficulties in order to meet its external obligations and in order for the size of the debt to reflect the level of development that any country has reached, the indebtedness indicators are linked with the per capita share of the national income and thus countries can be classified according to individual income levels and indebtedness levels. Low-income and highly indebted countries are the group of countries that the international community is trying to help through what are known as debt relief initiatives for heavily indebted poor countries. [8]

The second topic / Iraq's foreign debt

The first requirement / the historical development of Iraq's foreign debt:

Iraq was not classified among the indebted countries until the beginning of the eighties of the last century, as Iraq entered the Iran-Iraq war and possesses foreign reserves estimated at about (37) billion dollars and exited from the war while it was burdened with debts[9] as the war effort absorbed 75% of the oil revenues that provide about 98% of the state's public revenues. Military expenditures during the period from 1980-1985 amounted to about $ 120 billion, means that more than 245% of the total oil revenues achieved during that period, which amounted to about $ 48.5 billion[10]. Iraq followed a difficult policy during the Iran-Iraq war at the time it maintained spending in the public sector and the initiation of national economic development, which was financed by the foreign country's reserves and financial aid by the countries of the Gulf Cooperation Council, estimated at $ 5 billion and the destruction of export terminals led to a 60% drop in oil exports in 1981, and the subsequent decline in oil exports in 1982, which accompanied the closure of the Syrian oil pipeline, led to the depletion of Iraq's foreign reserves. As a result, the Gulf Cooperation Council countries intervened by providing financial support and support for oil sales in favor of Iraq and led to a claim by the Gulf Cooperation Council states for debts that amounted to $ 49 billion, while Iraq claimed that these funds were provided as assistance rather than loans to help it in its war with Iran. What complicates matters is that most of these sums were not in the contractual form aa it was in the form of transfers, and the parties did not keep all official agreements or even written records, and with the collapse of oil prices in the mid-1980s, the countries of the Gulf Cooperation Council were no longer able to continue their support, which made Iraq seek support from sovereign international creditors such as the Western countries, the Soviet Union and the former Eastern Bloc countries , private international creditors such as banks. These debts took the form of government loans, credit guarantees for export, and bank loans [11] distributed into Paris Club debts amounting to (37.15) billion dollars and debts outside the Paris Club amounted to (76.8) billion dollars, including debts of the Gulf Cooperation Council countries, commercial debts amounting to 20 billion dollars, and multilateral and international organizations debts worth 0.5 billion dollars [12] and can be depicted as follows:



The figure was prepared by the researcher based on the above data

It is clear from the above figure that Iraq's total debts amount to (125.5) billion dollars distributed into four groups that Iraq was able to schedule and delete a large part of the debt.

The first group, the debts of the Paris Club, amounting to 37,158 billion dollars, of which 29.7 billion dollars have been deleted, and the rest has been rescheduled to be completed within 23 years, including 6 years of grace, and the payment installments expire in January of 2028. According to the Paris Club decision and the collective agreement with Iraq, it has deleted 30% of the debts immediately and in harmony with the readiness to have Iraq enter into an agreement with the International Monetary Fund called Emergency Post-Crisis Assistance (EPCA) covering the year 2005 and another 30% to be removed in December 2005 upon agreement with the International Monetary Fund on the SBA agreement and 20% to be deleted in 2008 upon completion of the existing facilitations agreement with Iraq [13] .

The second group is countries outside the Paris Club and has a debt of $ 18 billion and has agreed to settle its debts on the same terms of the Paris Club, so that its debts become at the end of 2018.

The third group is the countries of the Gulf Cooperation Council, and its debt is 40 billion dollars. The UAE has waived seven billion, which is the total of its debts to Iraq.

The fourth group of commercial debts amounting to 20 billion dollars distributed among financial institutions, providers , and direct obligations of the Iraqi official bodies and foreign companies operating in Iraq. A part of the commercial debts whose amounts are less than 35 million dollars were purchased in cash at a rate (10.25%), and the total of the purchased debts reached about (3.9) billion dollars and the purchase amount reached 400 million dollars. As for commercial debts that exceed 35 million dollars, they were purchased with bonds at a rate of 20% of the total debt at an interest of 5.8% annually, and the debt is repaid in 16 semi-annual installments as of 2020, the amount that was bought was 14 billion dollars, and the purchase was 2.8 billion dollars. There are commercial debts that Iraq refused to abide by for several reasons, including that they are not in conformity with the records, or were completed after 1990, contrary to United Nations resolutions, or were not presented at all because of the negligible proportion of the purchase. There are unaddressed (suspended) by some countries, including Turkey, Morocco, Jordan, Libya, Algeria, India [14].

Table (1) shows Iraq's external debt before 2003 until the end of 2018.
Table No. (1) Iraq's external debts before 2003 until December 31, 201

Debt type	**Total amount of debt with Dollar**
Paris Club debt	**5,195**
Countries outside the Paris Club	**1,711**
Debt of major creditors (loan bonds equivalent to 20% of the debt	**2,789**
Debt of large creditors (multi-currency loans	**59,217**
Small creditors' debts	**paid completely**
Debts of Japanese large creditors	**437,000**
Arab Economic Development Fund	**50,883**
Arab Monetary Fund debt	**67,512**
Total debt agreed	**10,310**
Debt of the Gulf Cooperation Council	**27,639**
Debts of other countries	**13,263**
Total suspended debt	**40,902**
Total agreed and suspended debt	**51,212**

* Banking Operations Department at the Central Bank of Iraq

As for the issue of the compensation that was unlawfully imposed on Iraq according to the Security Council Resolution of 1991, its total value was estimated at 351 billion dollars, as more than 85% of it went to Kuwait, and then the lion’s share was the share of the largest American companies such as Hallerton, Shell, Bechtel, and other companies. These compensations were not granted for actual losses, but rather for hypothetical profits that these companies were expected to obtain if their work continued, which stopped after the entry of the Iraqi forces into Kuwait, and these compensations were reduced to 25% and then to 5%, and there are claims for compensations from others, such as Iran, which demands Iraq to pay 600 billion dollars for its war with Iraq [15]

The second requirement / analysis of the evolution of the external debt of Iraq for the period (2003-2018):

The reason behind Iraq's resorting to external borrowing is the political instability and conditions of war that Iraq has witnessed through since the eighth decade of the twentieth century, and the huge sums that have been depleted.

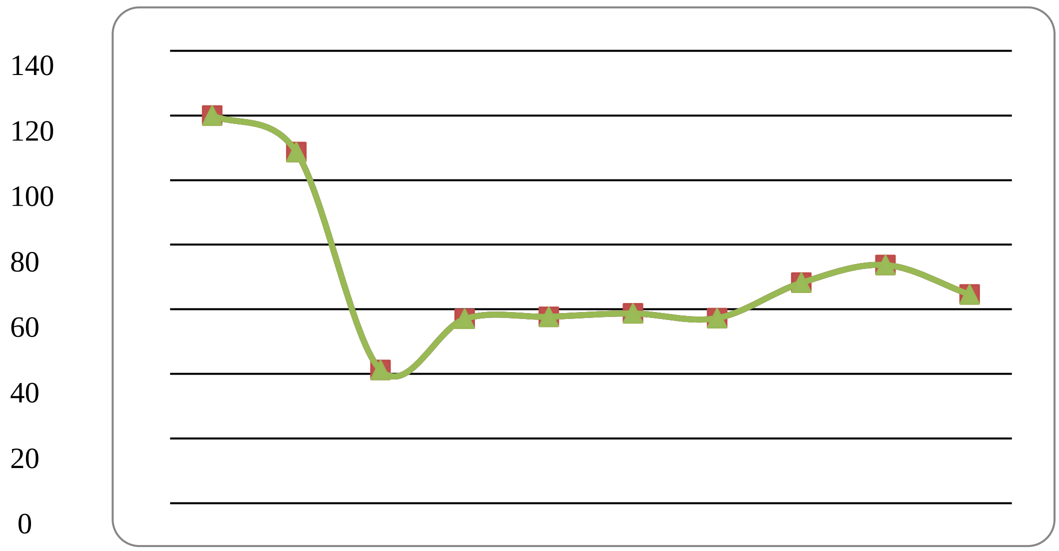
In addition to the economic blockade and compensation for those affected by it , which led to the accumulation of a large amount of debt, as well as the wars of terrorism after 2003 and the increase in military spending for these wars in addition to that, the Iraqi economy is a rentier economy that depends heavily on oil sales, whose prices are not fixed and fluctuate from time to time, all these factors pushed Iraq into external borrowing, the size of which is shown in Table No. (2)

Table No. (2) Development of Iraq's external debt for the period (2003-2018)

year	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Foreign debt	**120000**	**108.658**	**68.826**	**61.134**	**50.201**	**51.522**	**41.211**	**57.025**
year	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Foreign debt	**61.266**	**57.706**	**58.719**	**57.300**	**66.100**	**68,220**	**73,700**	**64,566**

• The Central Bank of Iraq, General Directorate of Statistics and Research, Annual Statistical Bulletin, 2003-2018

Chart No. (1) The evolution of the size of the external debt for the period (2003-2018)



The figure was prepared by the researcher based on the data of Table No. (2)

We note from Table No. (1) and Chart No. (1) that Iraq's debts appeared to be high, as it recorded (120,000) million dollars in 2004, and then the external debt took a decline until it reached its lowest level in 2009, when it reached (41211.1) million dollars. Due to rescheduling the external debt, then it rose again in 2010 to reach (57025.8) million dollars, and in 2011 to (61.266) million dollars, and it continued to rise to reach its highest level in 2017, reaching (73.700) million dollars, and the reason for this increase in the external debt was to fill the budget deficit due to the drop in oil prices, which is the main source of public revenue for Iraq, as the price per barrel reached $ 22 in 2016, which is less than the estimated price per barrel in the 2016 budget. The other reason for the high indebtedness was the high size of public spending , especially the military one , as a result of the war against ISIS in 2014, as well as Iraq's need for economic development.

The third requirement / Indicators of the sustainability of the external debt of Iraq , ratio of external debt to GDP:

The important issue that must be understood about debt is not just its size, but how it is formed and structured, the interest rate it carries, and the country's ability to service this debt without putting restrictions on the economy as a whole. This is often referred to as debt sustainability and one of the main tools used is the debt ratio to GDP .Of basic tools that forms part of the analysis is debt payments as a percentage of GDP or as a percentage of exports.

It is worth noting that there is no ideal debt-to-GDP ratio due to the role of other instruments, and 60% of debt to GDP is still used as a minimum in many credit objectives, while 70% is used as a factor warning of the existence of risk, and as such, the levels set for the years current and future not only affect Iraq's ability to bear debt, but also affect the amount of debt that Iraq receives and the interest rate [16]

Table No. (3) The ratio of external indebtedness to GDP for the period (2004-2017)

Years	**local product**	**Foreign debt**	**Ration of foreign debt to GDP**

2004	**36613**	**108657.7**	**296.77**
2005	**49921**	**68825.6**	**137.86**
2006	**65158**	**61134,4**	**93.82**
2007	**88037**	**50201,2**	**57.02**
2008	**130204**	**51522,4**	**39.57**
2009	**111660**	**41211.1**	**36.91**
2010	**138516**	**57025,8**	**44.16**
2011	**185749**	**61266,5**	**32.98**
2012	**218023**	**57706.2**	**26.46**
2013	**234637**	**58719.0**	**25.02**
2014	**228490**	**57300.0**	**25.08**
2015	**171136**	**66100.0**	**38.62**
2016	**172478**	**68220.0**	**39.55**
2017	**191197**	**73700.0**	**38,55**

* Central Bank of Iraq, General Directorate of Statistics and Research, Annual Statistical Bulletin, 2003-2018

We note from the above table that the debt-to-GDP ratio began to rise and the highest ratios were recorded during the above period and then began to decline to reach (25%.02) in 2013, which is the lowest level reached by this decline, which resulted from the opposite trend of both external indebtedness and GDP. As the external debt decreased to reach (41211.1) million dollars in 2013 after it was (50201.2) and (61266.5) million dollars for the years 2012 and 2011 and the increase in the gross domestic product (234637) million dollars as a result of Iraq's dependence on oil revenues to finance its public spending and not relying on debt to finance its general budget revenues. After that, this percentage started to rise, as it rose to (39%.55 (38.55%) for the years 2016 and 2017 as a result of the increase in external indebtedness due to the decrease in oil export revenues and the war against the terrorist organization after 2014, which caused a decrease in domestic product during that period.

The external debt recorded an increase of (57706.2) and (58719.0) million dollars for the years 2016 and 2017 in comparison with a decrease in the size of GDP (172478) and (191197) million dollars during the aforementioned two years as a result of the emergence of the effects of the global economic crisis and its repercussions on the international oil markets, which prompted Iraq to borrowing to finance the deficit in its general budget and to secure the requirements of the war against terrorist organizations, as can be seen from the above table, the average ratio of external indebtedness to GDP during the period from (2004-2017) has reached (76%), thus Iraq has exceeded the limit of safety and acceptability in its indebtedness and entered the stage of danger.

The third topic / Definition of Monetary Policy and Monetary Policy for Iraq after 2003:

The term monetary policy appeared in the economic literature during the nineteenth century, and the role of monetary policy emerged after the occurrence of economic cycles and the resulting economic problems.

The first requirement - the concept of monetary policy:

There are many definitions of monetary policy, and we will address some of them, as monetary policy is defined as ((the intervention of monetary authorities for the purpose of influencing the money supply and directing the credit using certain monetary means in order to reach the application of some economic goals)) [17]

It has also been defined as ((the procedures used by the monetary authorities to control and regulate the money supply with the intention of achieving certain economic goals)) [18]

And it also defined as ((How the credit is managed and controlled in order to avoid economic cycles) [19]

Or it is defined as ((All decisions and monetary and non-monetary procedures aimed at influencing the monetary system)) [20]

Usually the monetary authority seeks to control the size of the money supply for the purpose of achieving certain economic goals. If the economic policy seeks to curb inflation rates or raise the national currency exchange rate, the central bank can reduce the money supply and raise interest rates or supply the economy with cash supply and reduce interest rates if the goal is to stimulate investment spending and revive the country's economic activity. The monetary policy contains two types of decisions. The first is related to defining the goals that the state seeks to achieve, which is a political and economic decision taken at the government level as it may be taken at the level of the monetary authority. The second relates to the means of monetary policy if they are independent to achieve the goal, which are decisions taken at the level of the monetary authorities, a group of means and procedures applied by the monetary authorities that being dominated over the affairs of monetary and the credit. This domination is achieved by either having effects on the amount of money or the amount of means of payment in line with the surrounding economic conditions. [21]

The second requirement / Monetary Policy of the Central Bank of Iraq after 2003

The most important characteristic of monetary policy in Iraq after 2003 is the issuance of the new law No. (56) for the year (2004) to replace the old Iraqi Central Bank Law No. (64) for the year 1976. Under this law, the Central Bank of Iraq obtained independence, which is represented by the following [22]

Not granting the Central Bank of Iraq direct or indirect credit to the government or any public institution other than what is provided as liquidity support to governmental or private commercial banks and not to receive orders from the government regarding the conduct of monetary policy tools.

Its accounts are to be subject to the external auditor in accordance with the international auditing standards of central; it publishes its reports and financial data on its website, and that these data are published and available to various institutions and the public.

The central bank remains responsible before the political authority for mistake that threatens the safety of monetary stability in the country.

The new law also defined the main objective of the central bank, which is the pursuit of achieving and maintaining domestic price stability and promoting the maintenance of a stable, competitive and market-based financial system, and accordingly the central bank also promotes sustainable growth, employment and prosperity in Iraq. The central bank has relied on quantitative monitoring tools to implement monetary policy and controlling the movement of the monetary and financial market, and among these tools are:

First - Legal Reserve Requirements: Since 2004, the Central Bank of Iraq has set reserve requirements at a rate of 25% of the total deposits at the commercial banks, provided that 20% of these deposits are deposited at the Central Bank, and the banks maintain in its safes appropriate reserves of 5% to provide banking safety requirements , otherwise the central bank of Iraq imposes a punitive interest on banks at a rate of 14.5%, representing the difference between correct and misleading information, as the statutory reserve data provided to the banks did not match the deposits actually [23] as did the Central Bank through its regulatory regulations demanding banks to preserve reserves in form of monetary holdings or deposits at the central bank of Iraq. The banks are not permitted to overdraw on reserve accounts at any time, and these required reserve levels will be the same as the reserve levels for all banks for each class of liabilities that can be compensated. In the event that the bank is unable to maintain the minimum required reserve, the central bank may impose a fine at a certain interest rate. [24]

Second - Foreign currency auction: It is the auction that exercises the function of open market operations in exchanging dollars for dinars, not only to finance foreign trade and needs of the private sector, but also as a monetary policy to intervene to stabilize the exchange rate and control levels of local liquidity and containing the power of public spending that stems from the current expenditures of the state's public budget that produce very high local demand for foreign goods and services in the face of weak domestic production and an increase in individual spending based on the strength of public expenditures in the budget, which is the basis for inflation resulting from demand pressures or overall spending. The contribution of the agricultural and industrial sector constitutes 5% of the composition of the gross domestic product, which made the currency auction a means of absorbing the power of government spending generated from oil rents and feeding the market and its wide needs from the demand for foreign goods and services. [25]

The Central Bank followed the daily auctions to buy and sell dollars on 4/10/2003. The central bank acts as a (central market for foreign currency) and using the method of (orbiting floatation). This auction put an end to the fluctuations of the value of the dinar against the dollar and a convergence between the real exchange rate and the nominal exchange rate. The results of the currency auction can be summarized as follows [26]

- Stability of the exchange rate of the dinar against the dollar.
- Stability of investment climate.
- Increase of attractiveness of the dinar as a store of value.
- Development of buying and selling currencies among commercial banks in the sense of activating the secondary money market.
- Increase in the correlation between the exchange rate and the interest rate and creating a deeper coordination of external transfers.
- Currency auctions helped to achieve a decrease in liquidity by the equivalent of (25) trillion dinars until 2007.
- Improvement of the dinar exchange rate by 40% over what it was in 2003.

- Reducing the phenomenon of dollarization and switching to the Iraqi dinar as a new store of value instead of the dollar.

Third - Bank rate: One of the monetary policy tools is the interest rate. For the purpose of preparing a new monetary policy, the Central Bank ,after 2003, launched freedom of interest rates and left them to the banks to draw them on the basis of the bank's efficiency and the limits of the existing competition with other banks. This last measure generally contributed to reducing interest rates on deposits and credit, but the bank's rate remains the indicative rate at which prices in the primary and secondary markets are determined and interest rates on loans granted through the last resort function of lending as well as overnight investment deposits rates and that the central bank's monetary policy will try to achieve stability by maintaining banking liquidity at levels consistent with the bank rate. [27]

Fourth – Exist Facilitations: It means managing bank liquidity more effectively and easily by encouraging dealings between commercial banks, in addition to empowering the Central Bank to control liquidity. The facilities are divided into two types:-

Lending facilitations : This type of facilitation began in August 2004, when the Central Bank grants facilities to banks based on the basic objectives of the monetary policy in order to maintain a regular, sound, and secure financial system.

Primary credit: the bank grants primary credit as a source of financing support to the bank that is in a safe position from the viewpoint of the central bank. The bank uses this credit for up to 20% of its capital and for a period not exceeding fifteen days or for an additional period with the approval of the central bank at an interest rate of two points above the monetary policy rate , where the interest rate of the primary credit is 8%, currently. [28]

Secondary credit: It is a short-term credit with a maturity period of one month and is considered a source of financing for the bank that is unable to obtain financing from the secondary markets and is granted at an interest rate of three points above the rate of the bank. [29]

Exist deposit facilitations: Began on 1/3/2005, which is to accept deposits in Iraqi dinars and in US dollars exclusively with the aim of absorbing the excess supply from the general liquidity and investing it in return for interest in the case of banks' desire to invest for a period of 7 days. Interest is currently calculated at 4% .[30]

Fifth - The last resort for lending: In case of exceptional circumstances, the Central Bank of Iraq can be the last resort for lending to licensed banks. This support is provided by granting financial aid to the bank for a period not exceeding three months, renewable by the Central Bank of Iraq on the basis of a program that defines the procedures related to the bank and this obligation to grant loans, it is only possible in two cases: [31]

- As the bank is able to provide appropriate additional guarantees and the request for financial assistance is based on the need to improve liquidity.

- This assistance is necessary to maintain the stability of the financial system, and the Minister of Finance issued a written guarantee to the Central Bank of Iraq on behalf of the government to secure the repayment of the loan.

The fourth topic: The effect of the size of foreign debt on the effectiveness of the Iraqi monetary policy in achieving monetary stability:

The first requirement: The effect of the size of the external debt on the ability of the Central Bank of Iraq to achieve monetary stability and achieve development goals:

External loans can be viewed in terms of being loans with positive results or loans with negative results. If these loans contribute to creating financial surpluses and an expansion in production capacity, providing foreign currencies and creating surpluses in the trade balance, they are loans with positive results or productive loans.

Either if these loans are used in non-investment projects, such as spending on consumption, on luxuries, or on the military side, then they are considered negative loans, as they will constitute a burden on the state represented in the repayment of the debt and its interest, or it may raise the level of inflation in the country as the increase in the unproductive external debt will lead to an increase dollars, which leads to an increase in the money supply. In light of the lack of flexibility of the productive apparatus, this will lead to an increase in inflation rates and it can be a positive role for foreign loans as the actual size of borrowed funds has been determined and the absorptive capacity of the national economy has been measured in a manner that achieves benefits that exceed the cost of lending and there are standards and controls for benefiting from these foreign loans.[32]

In order for the debtor country to benefit from external financing, it must achieve a rate of national income growth that exceeds the average interest rate with which it is borrowed.

In order for the country to be able to service its foreign debt (paying installments with interest on the loan), the savings rate must be greater than the achieved investment rate.

In order for the borrower to avoid the troubles of debt service and external pressures, the growth rate of his exports must be greater than the growth rate of his imports and the growth rate of the debt burden.

Monetary stability is one of the main pillars on which countries depend in moving economic activity and creating an appropriate environment for local and foreign investments. Therefore, the monetary authorities (represented by the Central Bank) seek to achieve this goal by maintaining the stability of the general level of prices and the stability of the local currency exchange rate and providing structure affordable interest rates in line with local economic developments and developments in global financial markets

The most important problems facing the Iraqi monetary policy, the escalation of the phenomenon of inflation, was the result of two main factors:

- Supply bottlenecks in the real sector (supply shock), which were mainly focused on the deficit of the fuel and energy supply sector and its negative repercussions on transportation and transportation costs and other production and marketing costs.
- The great impact of aggregate demand or total spending on goods and services in the economy, which was a reflection of the expansion of the phenomenon of current government expenditures, which are of a high consumer nature, which raised the risks of inflation, before the failure of the productive sector.

Reducing inflation and maintaining a stable level of prices is the main goal that the tight monetary policy of the Central Bank of Iraq has sought to adopt since the last quarter of 2006 by focusing on the interest rate and exchange rate signals to stabilize the inflationary expectations of the public and reduce inflation.

The following table can be viewed to show the effect of the size of foreign debt on the Iraqi monetary policy in achieving monetary stability (exchange rate and inflation) and its role in achieving development, unemployment rate and gross domestic product.

The role of the size of foreign debts on the effectiveness of the Iraqi monetary policy in achieving monetary stability and development goals (unemployment rate and gross national product)

Year	Foreign debt	Exchange rate	Inflation	Unemployment rate	GDP
2004	108.658	145.3	27	26.8	33613
2005	68.826	14.72	37	17.97	49921
2006	61.134	14.75	53.2	17.5	65158
2007	50.201	12.67	30.8	11.7	88037
2008	51.522	12.03	7.2	18.23	130204
2009	41.211	118.2	2.8	15.2	111660
2010	57.025	118.6	3.3	15.2	138516
2011	61.266	119.6	6.5	11.1	185749
2012	57.706	123.3	6.1	11.9	218023
2013	58.719	123.5	3.2	16	234637
2014	57.3	121.4	2.2	10.6	228490
2015	66.1	124.7	1.7	10.6	171136
2016	68,220	127.5	1.2	10.8	172478
2017	73,700	1256	0.2	13.8	191197
2018	64,566	1206		13.8	21240.5

Prepared by the researcher based on annual report of the Central Bank of Iraq for the year (2004-2018)
The annual report of the Ministry of Planning, Central Bureau of Statistics for the year (2004-2018)
When looking at the above table, the Central Bank of Iraq was able to keep the exchange rate and inflation rate down and maintain their relative stability, and this is due to the central bank selling the foreign currency through the currency auction and withdrawing increases in the money supply, i.e. carrying out the monetary sterilization process in order to maintain stability of exchange rate and prevent the rise in inflation rates in the Iraq's economy, meaning that the central bank, through targeting the exchange rate, is targeting inflation.

When looking at the above table, we find that an increase in the external debt was not matched by a significant increase in the gross national product or a decrease in the unemployment rates, and this indicates that the external debts go to consumption spending.

We have previously explained that if foreign debts are used in productive investment fields, they will have an active role in achieving the development goal by increasing production, increasing GDP, employing the unemployed and eliminating unemployment. Countries need more debts to extinguish their previous debts with the interest of due debts, and in the end they may fall into the trap of external debt and expose the state to bankruptcy. Without oil and its high prices, Iraq would have been exposed long ago to falling into a debt trap, and unfortunately it is on its way to falling into a debt trap unless the economic policy makers rectify the matter and adopt austerity policies, fight financial and administrative corruption from its roots, and resort to internal debt, even if it has negative effects, but it is less dangerous than the effects of external debt, which may lead to an increase in inflation rates and a depreciation of the currency, otherwise things do not bode well. This can be explained through the standard analysis of the study variables in the following requirement.

The second requirement / standard analysis of the study variables

Due to the small (annual) sample size for the period (2005-2018), the study tended to convert the data to quarterly, relying on the same data (2005-2018), using the Denton method to convert low (annual) occurrences into high occurrences (Quarterly),

The first requirement / analysis of the standard relationship between inflation and external debt (Debt)

First / Stationary Test:

Stationary tests are used to find out the degree of integration of the model variables, through which it determines which model will be used to reveal the nature and extent of the relationship, and through this test it is possible to detect the stationary of the series at (0)I (I)I(2)I (level or first difference or the second difference) by knowing that (stationary) through the value of (Prob.), When the value of Prob is less than 5%, meaning the variable is significant, that is, the variable is stationary , and if it is greater than 5%, it is not significant, i.e. the variable is not stationary.

Table 1 Table 4: Augmented Dickey-Fuller test

(First form)

level				
Without Trend & Intercept	**Trend & Intercept**	**Intercept**		
0.0012	**0.1976**	**0.0319**	**Inf**	**prob 5%**
0.4049	**0.0445**	**0.0097**	**Debt**	

The researcher's work, depending on the study data and the outputs of the Eviews 9 program.

The above table shows that according to Augmented Dickey-Fuller test , the two variables, the inflation rate and the size of the external debt , are stationary at the level. In this case, the normal least squares method can be used without fear of obtaining a false regression. The model estimation results are as follows:

Table No. 5 / Augmented Dickey-Fuller test

Second form

Dependent Variable: INF
Method: Least Squares
Date: 11/23/20 Time: 06:03
Sample: 2005Q1 2017Q4
Included observations: 52

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DPT	2.566125	0.937527	2.737120	0.0086
C	-15.34557	10.04500	-1.527683	0.1329

R-squared	0.130311	Mean dependent var	11.59135
Adjusted R-squared	0.112917	S.D. dependent var	15.40823
S.E. of regression	14.51225	Akaike info criterion	8.225566
Sum squared resid	10530.28	Schwarz criterion	8.300614
Log likelihood	-211.8647	Hannan-Quinn criter.	8.254338
F-statistic	7.491828	Durbin-Watson stat	0.066065
Prob(F-statistic)	0.008560		

It is noted from the above model that the external debt parameter amounted to 2.566125, while the value of the probability parameter was 0.0086, which is less than 5%, which confirms that the parameter is statistically significant, and this means that an increase in external debt by one million dollars leads to an increase in the inflation rate by 2.5 percentage points in the sense that the relationship is positive between foreign debt and the rate of inflation.

This means that the impact of external debt has a negative effect on inflation, as the increase in external debt will lead to an increase in monetization of dollars, which leads to an increase in the money supply and in light of the inflexibility of the production system in Iraq, this will lead to an increase in inflation rates in Iraq. The Central Bank sells the foreign currency through the currency auction and withdraws the increases in the money supply by carrying out the monetary sterilization process in order to maintain the stability of the exchange rate and prevent the emergence of an increase in inflation rates in the Iraqi economy, that is, the central bank, through targeting the exchange rate, targets inflation.

Perhaps this explains the emergence of the coefficient of determination with a very low value amounting to 13%, meaning that the external debt explains only 13% of the changes in the rate of inflation, as well as the weakness of the rest of the statistical tests, while according to the F- test, the model had a total significance as a whole as the probability value prop for the F- test was zero, means that less than 5%.
On performing the Kranger causality test of the model, the following results were revealed:-

(Table 6: Kranger causality test)

Pairwise Granger Causality Tests
Date: 11/24/20 Time: 08:08
Sample: 2005Q1 2017Q4
Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
DPT does not Granger Cause INF	51	8.85866	0.0046
INF does not Granger Cause DPT		1.84833	0.1803

It appears from the above table that there is a one-way causal relationship from external debt to inflation, where the value of the prop was shown to be 0.0046, which is less than 5%, which means that the external debt affects the rate of inflation. The external debt leads to an increase in the money supply when the external debt is monetized, and thus is reflected in the increase in the inflation rate, while there is no effect of the inflation rate on the external debt, which is logical.

Conclusions and recommendations

First / Conclusions:

1. Most of Iraq's external debts are unproductive debts. Most of these debts go to fill the budget deficit or for military purposes. These loans do not contribute to creating financial surpluses, expanding production capacity, providing hard currencies, and creating surpluses in the trade balance, which constitutes a burden on the country in meeting the debt and interest.

2. The average ratio of external indebtedness to GDP during the period (2004-2017) has reached (76%), and thus Iraq has exceeded the safety and acceptability threshold of its debt and entered the risk phase.

3. Iraq is facing a continuous growth in external debt, which means directing the available economic resources to fill the debt , which negatively affects the progress of the economic development process and the implementation of investment programs.

4. There are many foreign loans that had a development objective, but the mismanagement and lack of follow-up on these loans made them incomplete

5. Reducing inflation and maintaining a stable level of prices is the main goal that the tight monetary policy of the Central Bank of Iraq has sought to adopt since the last quarter of 2006, with a focus on the interest rate and exchange rate signals to stabilize the inflationary expectations of the public and reduce inflation.

6. External debt has a negative impact on inflation as the increase in external debt will lead to an increase in monetization of dollars, which leads to an increase in the money supply and in light of the inflexibility of the Iraqi production system, this will lead to an increase in inflation rates in Iraq, but it must be noted that the central bank sells foreign currency through the currency auction and withdrawing increases in the money supply, meaning that carrying out a monetary sterilization process in order to maintain the stability of the exchange rate, preventing the emergence of inflation rates increase in the Iraqi economy, meaning that the central bank, through targeting the exchange rate, targets inflation.

Recommendations:

1- Establishing an economic policy or strategy for debt management and reducing the cost of borrowing to the lowest possible level in a way that ensures that the national economy is not exposed to any financial crisis.

2- Reducing unproductive external debts that go to unnecessary expenditure and rationalizing military and public spending to reduce the budget deficit and thus reduce debts to fill this deficit.

3- Diversity in sources of revenue and not relying on a single source represented by oil revenues and developing other revenues, especially tax revenues through reforming the tax system, which avoids Iraq resorting to indebtedness in the event of a disruption in oil prices, since Iraq depends heavily on oil revenues for its spending.

4- Iraq has to pay its debts and the interest resulting from it according to the timetable prepared for that because the recurring failure to pay off debts and interest reduce the confidence of international institutions and foreign countries towards Iraq’s ability to pay its debts and thus the difficulty of obtaining debt in the future.

5- Investing foreign debts in financing productive projects and investments, their use results in an increase in the productive capacities of the national economy. This type of debt contributes significantly to creating a surplus in the trade balance by increasing exports and reducing imports, consequently, increasing the country's share with the hard currency needed for the development process and servicing the external debt burden.

6- The monetary authorities (represented by the Central Bank) shall seek monetary stability by maintaining the stability of the general level of prices and the stability of the local currency exchange rate and providing an appropriate interest rate structure in line with local economic developments and developments in global financial markets.

Sources

1. Abdel Aziz,i.(2012)" Foreign Debt and Financial Development Strategy for Emerging Economies Policies and Implications" New Economy Journal, Issue 6, Algeria, p.72

2. Ali,i." Internal Government Religion and its Impact on Monetary Policy, Iraq Case Study", Al-Mustansiriya Journal for Arab and International Studies, Issue 39, p. 4
3. Muhammad,a." Trends of the Domestic Religion in Iraq and the Desired Future Path", Al Mustaqbali Journal for Arab Studies, Issue No. 62, 87
4. Zaki,(1985)r," Debt and Development, First Edition", Dar Al-Mustaqbal Al-Ary, Egypt p. 56
5. International Monetary Fund, (External Debt Statistics), Washington, 2003, p. 14
6. Jošić,H.(2013) COMPARATIVE ANALYSIS OF EXTERNAL DEBTINDICATORS IN CROATIA AND SOUTHEASTERNEUROPEAN COUNTRIES ,p3
7. Al-Abbas.B.(2004) "External Debt Management" Journal of Economic Development, Issue 30, Algeria,: p.8
8. - Al-Zarkani,k.(2019)." Analysis of the Relationship between Foreign Trade and Public Debt (Iraq Case Study for the period 20014-2017)", Thesis submitted to the College of Administration and Economics of Wasit University, p. 87
9. Haddad,h.(2017)" The Iraqi Debt, The Journal of International Studies", Issue thirty-third, without, p
10. Al-Tabaqjali,a.(2018)" Iraq's debt, an overview of the debt situation, its origins and its future", Al-Bayan Center for Studies and Planning, p.17
11. Al-Ghariri, A.and. Al-Sheikh, A. (2008) “Iraq's Foreign Debt, Reality and Prospects, Tikrit Journal of Administrative and Economic Sciences, Volume 4, Issue 10. P.90
12. Ali, A (2015), "Public Debt Policy and the Characteristics of the Oil Economy" Research published by the Central Bank of Iraq, p.15
13.

- Federal Budget Strategy 2018-2020, Economic Department, Ministry of Finance, 2016, pp. 12-20
- Adai, N (2016) "Analysis of Public Debt Paths, for the period 2010-2014", Ministry of Finance, Economic Department, pp. 12-22

14. Muhaimid, K. (2017) “The Geopolitical Reflections of the Problem of External Debt in Iraq,” Sir Min Ray Magazine / Samarra University, Volume 1, Issue 22, p. 435
15. Ahmad, M. (2018) “Analysis of the evolution of the external debt of Iraq for the period (2010-2016)” Journal of the University of Human Development, College of Administration and Economics, Volume 4, Issue 1, p. 3
16. Al-Khazraji, W (2009) “Monetary Policy in Iraq between the Legacy of the Past and the Challenges of the Present” published research in a symposium held at the Iraqi Institute for Reform entitled “Monetary policy in Iraq is its money and its holders” p. 3
17. Al-Dulaimi, P (1986) “Money and Banking,” University of Baghdad, 583
18. Saqr, A. (1983) “Macro Politics,” Kuwait Publications Agency, p. 330
19. P. EINZING, Monetary Policy, Ends and means, Harmondsworth, Ed Mid lesex
20. Al-Mashhadani, A. (2012) “The role of monetary policy in achieving monetary stability in the Iraqi economy for the period (((2009 - 2003)” research published in the Iraqi Journal of Economic Sciences (the thirty-third issue (p. 123)
21. Law of the Central Bank of Iraq, No. 56 of 2004, Article 2, Article 3, and Article 26

22. Agwad, S. (2009) "Monetary Policy Obstacles and Economic Reform Programs for the Reality of the Iraqi Economy", Journal of the College of Administration and Economics, Volume 15, Issue 55, pg 138
23. Al-Mashhadani, A (2012) "The Role of Monetary Policy in Achieving Monetary Stability in the Iraqi Economy for the Period (2003-2009)" Journal of Economic Sciences, Baghdad, Issue 33, p. 139
24. Saleh, M. (2011) "Monetary and Financial Policy and Control of Inflation Variables and Exchange Rates", Hamo Rabi Center for Research and Strategic Studies, Baghdad, p. 12
25. Khazraji, D. Monetary policy in Iraq between the legacy of the past and the challenges of the present, previous source,
26. Al-Obaidi, N. (2011) "The current features and trends of monetary policy in Iraq (from adherence to liberalization) and areas of activation", a research published in the Journal of Economic and Administrative Sciences, Volume 4, the eighteenth issue, University of Baghdad, p. 32
27. Al-Khazraji, D. Monetary Policy in Iraq between the Legacy of the Past and the Challenges of the Present, Previous source, p. 8
28. The Central Bank of Iraq and the Development of its Monetary Policy and Banking Supervision, Central Bank of Iraq, p. 3
29. The Central Bank of Iraq and the Development of its Monetary Policy and Banking Supervision, Central Bank of Iraq, p. 3
30. Al-Mashhadani, A. "The Role of Monetary Policy in Achieving Monetary Stability in the Iraqi Economy for the Period (2003-2009)," Ibid, 139
31. Al-Khazraji, D. Monetary Policy in Iraq between the Legacy of the Past and the Challenges of the Present, Previous source, p.9
32. Khalil,m.(2011)" Economic Dependency and the External Debt Crisis of Developing Countries and its Implications for Their Economies with Focus on the Economies of Arab Countries for the Period 2003-2008"AL-Mostansiriyah journal for Arab and international studies, Volume, Issue 34, page106,
33. The Central Bank of Iraq and the Development of its Monetary Policy and Banking Supervision, Central Bank of Iraq, p. 4
34. Moghadasi, S., Elveny, M., Rahman, H.S. et al. A paradigm shift in cell-free approach: the emerging role of MSCs-derived exosomes in regenerative medicine. J Transl Med 19, 302 (2021). https://doi.org/10.1186/s12967-021-02980-6
35. JALIL, A. T., DILFY, S. H., KAREVSKIY, A., & NAJAH, N. (2020). Viral Hepatitis in Dhi-Qar Province: Demographics and Hematological Characteristics of Patients. International Journal of Pharmaceutical Research, 12(1).
36. Dilfy, S. H., Hanawi, M. J., Al-bideri, A. W., & Jalil, A. T. (2020). Determination of Chemical Composition of Cultivated Mushrooms in Iraq with Spectrophotometrically and High Performance Liquid Chromatographic. Journal of Green Engineering, 10, 6200-6216.
37. Jalil, A. T., Al-Khafaji, A. H. D., Karevskiy, A., Dilfy, S. H., & Hanan, Z. K. (2021). Polymerase chain reaction technique for molecular detection of HPV16 infections among women with cervical cancer in Dhi-Qar Province. Materials Today: Proceedings.

38. Marofi, F., F. Abdul-Rasheed, O., Sulaiman Rahman, H., Setia Budi, H., Jalil, A. T., Valerievich Yumashev, A., ... & Jarahian, M. (2021). CAR-NK cell in cancer immunotherapy; A promising frontier. Cancer Science.
39. Widjaja, G., Jalil, A. T., Rahman, H. S., Abdelbasset, W. K., Bokov, D. O., Suksatan, W., ... & Ahmadi, M. (2021). Humoral Immune mechanisms involved in protective and pathological immunity during COVID-19. Human Immunology.
40. Jalil, A.T., Kadhum, W.R., Faryad Khan , M.U. et al. Cancer stages and demographical study of HPV16 in gene L2 isolated from cervical cancer in Dhi-Qar province, Iraq. Appl Nanosci (2021). https://doi.org/10.1007/s13204-021-01947-9
41. Jalil, A. T. (2020). COVID-19 most affected age groups and lethality in Europe, Glob. J. Public Health Med, 2, 179-184.
42. Sarjito, I., Elveny, M., Jalil, A. T., Davarpanah, A., Alfakeer, M., Bahajjaj, A. A. A., & Ouladsmane, M. (2021). CFD-based simulation to reduce greenhouse gas emissions from industrial plants. International Journal of Chemical Reactor Engineering.
43. Turki Jalil, A., Hussain Dilfy, S., Oudah Meza, S., Aravindhan, S., M Kadhim, M., & M Aljeboree, A. (2021). CuO/ZrO2 Nanocomposites: Facile Synthesis, Characterization and Photocatalytic Degradation of Tetracycline Antibiotic. Journal of Nanostructures.
44. Hanan, Z. K., Saleh, M. B., Mezal, E. H., & Jalil, A. T. (2021). Detection of human genetic variation in VAC14 gene by ARMA-PCR technique and relation with typhoid fever infection in patients with gallbladder diseases in Thi-Qar province/Iraq. Materials Today: Proceedings.