

THE ROLE OF MONETARY POLICY IN ACHIEVING ECONOMY STABILITY IN IRAQ (2008-2020)

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Abstract

From 2008 to the present, this article examines the significance of monetary policies in achieving economic stability in Iraq. The research begins with a survey of monetary policies theoretical literature, followed by an examination of Iraq's internal and external economic performance from 2008 through 2020. The study then investigates the monetary policies' impact on economic growth, utilizing the Autoregressive Distributed Lag (ARDL) approach to investigate both the short-run and long-run relationships. The research uses a variety of data sources to analyze the effectiveness of monetary policies in achieving economic stability in Iraq. In the long term, a one-unit rise in average per capita income correlates to a 0.005-point gain in economic stability, reflecting the need to enhance economic policy performance. A steady or decreasing exchange rate causes an increase in economic performance, with a one-unit fall in the exchange rate leading to a 0.01-point increase in the rate of inflation. In terms of the impact of exports on economic stability in Iraq, a 1% rise in exports as a proportion of GDP translates to a 0.018-point gain in economic stability. The money supply, like the rate of interest, has a long-term detrimental impact on economic stability. With the board money and interest rate, the GDP per capita has a detrimental influence on economic stability in the near run.

Keywords: Monetary policies - Economic Stability - Economic Performance -ARDL Model

Introduction

Monetary policies has a common role in maintaining economic stability in any country. This is particularly true for Iraq, which has undergone significant economic challenges in the last few decades, including periods of high inflation, political instability, and conflict. In this context, the role of monetary policies has become increasingly important in achieving economic stability and promoting sustainable economic growth. Between 2008 and 2020, this article target is to investigate the effect of fiscal policies in ensuring stability for economic in Iraq. It will assess the efficiency of monetary policies instruments such as interest rates and the money supply in containing inflation and boosting economic growth. Additionally, the paper will explore the challenges faced by the Central Bank of Iraq in implementing monetary policies, including political instability and external factors such as oil price fluctuations.

Problem Statement:

Iraq has encountered various economic obstacles such as inflation, exchange rate fluctuations, and sluggish economic growth in recent decades. To tackle these issues, monetary policies has

been frequently utilized. Nonetheless, the extent to which monetary regulation has been successful in enhancing economic stability in Iraq is a contentious issue among policymakers and analysts. As a result, the research objective of this study is to assess the impact of monetary policies to supporting economic stability in Iraq from 2008 to 2020.

Rationale:

The value of this study rests in its potential to improve understanding of the function of monetary policies to promote financial stability in Iraq. The study can provide helpful insight into the ability of monetary policies in solving Iraq's economic issues by analysing the effect of monetary policies on key economic indicators. These insights can aid policymakers and researchers in creating and executing effective monetary policies to foster economic stability in Iraq. The study can also provide a foundation for future research on the effectiveness of monetary policies in other countries facing similar economic challenges, contributing to the broader understanding of monetary policies's potential impact on economic stability.

Research Questions:

1. What is the monetary policies: a theoretical framework?
2. How can we evaluate the Iraq economic performance since 2008?
3. What is the relation between long-term and short-term financial stability and monetary policies in Iraq?

Literature Review:

The policies of monetary manipulation is critical for encouraging economic stability in Iraq, where the Central Bank of Iraq (CBI) controls the amount of money and interest rate via a number of methods. The goal of monetary policies is to keep prices stable, stimulate economic growth, and assure financial stability. However, the efficiency of monetary policies in attaining these objectives has been a source of contention among academics and policymakers.

Iraqi monetary policies are conceptually based on the CBI's responsibilities for controlling the money supply and interest rates. The CBI controls the economy's money supply and the interest rate through methods including as open markets, the need for reserves, and discounts. The ultimate goal of Iraqi monetary policies is to maintain price stability, boost economic growth, and ensure financial stability.

The literature review shows that monetary policies have a significant impact on key economic indicators in Iraq. Inflation has been a major concern for policymakers in Iraq, and the literature shows that monetary policies can be an effective tool for controlling inflation. Changes in interest rates and reserve requirements have a significant impact on inflation in Iraq.

Exchange rate volatility has also been a major challenge for the Iraqi economy, and the literature shows that monetary policies can play a role in stabilizing exchange rates. Changes in interest rates and exchange rate interventions by the CBI can have a significant impact on exchange rates in Iraq. Economic growth is another key economic indicator that is affected by monetary policies. The literature shows that monetary policies can influence economic

growth through its impact on investment and consumption. Changes in interest rates and the supply of the money have a significant impact on investment and consumption in Iraq.

To summarize, monetary policies is an important tool for promoting economic stability in Iraq, where the Central Bank of Iraq employs a variety of methods to regulate the supply of the money and interest rate. The literature shows that monetary policies can be effective in controlling inflation, stabilizing exchange rates, and promoting economic growth. However, policymakers must balance competing priorities when formulating monetary policies, and the effectiveness of monetary policies in achieving its goals remains a subject of debate.

Empirical Evidence:

According to the study of literature, the empirical proof on the efficacy of monetary policies to encourage financial stability in Iraq is mixed. Some studies have concluded that monetary policies has been effective in managing inflation and stabilising exchange rates, while others have shown that monetary policies has had a limited influence on growth in the economy.

Conclusion:

The literature review illustrates that monetary policies is a crucial tool for promoting economic stability in Iraq. Monetary policies's impact on important economic indicators such as inflation, exchange rates, and economic growth has been extensively examined, and the data suggests that monetary policies can be successful in tackling Iraq's economic issues. However, the effectiveness of monetary policies in maintaining economic stability in Iraq has been contested, and more research is required to properly comprehend the effects of monetary policies on the Iraqi economy.

Methodology:

A quantitative research methodology will be used in this investigation. Secondary sources, including the World Bank's information base, will be used to collect data, and statistical analysis techniques will be used. The ARDL strategy is used to assess the influence of monetary policies on important economic indices. Additionally, calculate the link between the long sun and the short run.

Research Data Collection:

The dataset of this research will be collected from secondary source, including the World Bank database. The data will include key economic indicators such as inflation, exchange rates, and economic growth, as well as data on monetary policies instruments such as interest rates and reserve requirements.

Data Analysis:

The data will be analyzed using statistical techniques such as ARDL approach to evaluate relation between the short and long run the monetary policies and economic stability the analysis will also include descriptive statistics to provide an overview of the trends in key economic indicators and monetary policies instruments during the period under study.

Conclusion:

This research aim is to look into the influence of monetary policies in achieving economic stability in Iraq between 2008 and 2020. The study may offer information about the efficacy of monetary policies in resolving economic difficulties in Iraq by analysing the influence of monetary policies on important economic indices. This study's findings can help policymakers and researchers plan and implement effective monetary policies to maintain economic stability in Iraq.

The First Pillar

Monetary policies: a theoretical framework

This chapter includes the concept of monetary policies, monetary policies tools, and the economic growth and monetary policies relationship.

First: The Definition of monetary policies:

monetary policies is an economic approach used by central bankers or financial institutions to govern the supply of money as well as credit in a country's finances. The goal of monetary policies is to accomplish financial goals such as stable prices, full employment, and long-term economic growth.¹

Monetary policies are rooted in the correlation between money supply, interest rate, and aggregate demand. If the central bank raises the money supply, interest rates decrease, which boosts borrowing and spending, stimulating aggregate demand. Conversely, if the central bank reduces the money supply, interest rates increase, discouraging borrowing and spending, dampening aggregate demand.

To implement monetary policies, the central bank employs diverse tools such as reserve requirement adjustments, open market operation, and discount rate changes. Open market operation includes purchasing or security of selling government to impact the money and credit supply. When the Federal Reserve purchases government securities, the money supply expands; when it sells securities, the money supply contracts. This method affects interest rates, which in turn affects borrowing and spending decisions made by individuals and corporations. Changes in discount rates affect the interest rate at which banks can borrow from the central bank, Modifications in requirements for reserves, on the other hand, have an impact on the regulations governing the minimum amount of funds banks must hold in reserve against customer deposits. The central bank can use these measures to manage the money supply and foster macroeconomic stability.²

¹ - Taylor, J. B. (1999). **A Historical Analysis of Monetary Policies Rules**. In J. B. Taylor (Ed.), *Monetary Policies Rules* (pp. 319-348). University of Chicago Press.

² -Sarwat Jahan and Chris Papageorgiou:

<https://www.imf.org/external/pubs/ft/fandd/2014/03/basics.htm>

By changing the discount rate, which serves the interest rate at which institutions may obtain funding from the Federal Reserve is altered. When the central bank lowers the discount rate, banks borrow more, expanding the currency supply and encouraging economic spending and borrowing. When the central bank raises the discount rate, it discourages banks from borrowing, causing the money supply to shrink and discouraging borrowing and spending. Changes in the discount rate can have a large impact on the economy, altering interest rates, investment decisions, and consumption patterns. As a result, when executing monetary policies, central banks carefully evaluate the potential outcomes of discount rate changes³

In an economy Monetary policies are a macroeconomic tools that central banks use to the money management and supply of the credit. Its main goal is to reach to a macroeconomic objective as price stable, full employment, and sustainable economic growth. The effectiveness of monetary policies depends on the relationship between money supply, interest rates, and aggregate demand. The central bank implements monetary policies through various tools Changes in discount rates, reserve requirement revisions, and open market operations are examples.

Changes in the discount rate affect the interest rate at which banks can borrow from the central bank. Banks borrow more when the discount rate is cut, leading the money supply to expand and increasing borrowing and spending. Raising the discount rate, on the other hand, discourages banks from borrowing, resulting in a fall in the money supply and a reduction in borrowing and expenditure. Changes in reserve requirements alter the amount of reserves that banks must hold, influencing their ability to lend and create money. Lowering reserve requirements expands the amount of money banks may lend, promoting borrowing and spending, whereas rising reserve requirements restricts lending, discouraging borrowing and spending.

Monetary policies also involves setting a target for the short-term interest rate, known as the federal funds rate in the United States. The central bank adjusts the federal funds rate to achieve its macroeconomic objectives. Lowering the federal funds rate stimulates borrowing and spending by lowering other interest rates, while raising the federal funds rate discourages borrowing and spending by raising other interest rates.

The effectiveness of monetary policies depends on the responsiveness of the economy to changes in interest rates and the money supply. In a recessionary economy with low interest rates, monetary policies can be effective in stimulating the economy by lowering interest rates further. However, in an economy with high interest rates and inflation, monetary policies may be less effective as the central bank may not be able to lower interest rates enough to stimulate borrowing and spending.

³ - Woodford, M., & Walsh, C. E. (2005). Interest and Prices: Foundations of a Theory of Monetary Policies. *Macroeconomic Dynamics*, 9(3),p p 466-470

Despite its potential benefits, monetary policies has limitations and potential drawbacks. One limitation is the time lag between the implementation of monetary policies and its effects on the economy. It can take several months or even years for changes in interest rates and the money supply to have an impact on the economy. Additionally, unintended consequences such as asset bubbles or financial instability can result from the low interest rates and increased borrowing and spending stimulated by monetary policies. Lastly, monetary policies may not address underlying structural problems in the economy, such as income inequality or a lack of investment in education and infrastructure.

Finally, monetary policies are an important instrument for the Federal Reserve to use in managing an economy's money and credit supply. It seeks to accomplish financial objectives such as stable prices, full-time employment, and sustained growth in the economy. The use of monetary policies involves various tools such as discount rate changes, reserve requirement adjustments, and open market operations. The effectiveness of monetary policies depends on the responsiveness of the economy to changes in interest rates and the money supply. However, there are limitations and potential drawbacks to the use of monetary policies, and policymakers must consider these factors when implementing monetary policies.

Monetary policies tools:

The procedures and mechanisms used by central banks or monetary authorities to control the availability of money and credit in an economy are referred to as monetary policies. Monetary policies's key tools include a variety of measures such as open market operations, interest rate changes, and reserve requirement modifications. These instruments allow central banks to influence interest rates, borrowing, and spending decisions, fostering macroeconomic stability and attaining their goals.

1. **Open Markets Operation:** The central bank purchases and sells government debt on the open markets. The central bank introduces money into the country's economy by purchasing assets, boosting the money supply. When it sells investments, it removes money from the economy, reducing the money supply.⁴

2. **Discounted Rate:** The rate of interest at which banks may obtain financing from the Federal Reserve. The central bank can impact the cost of borrowing for banks by modifying the discount rate, which affects their ability to lend and create money. Lowering the discount rate encourages borrowing and spending, which increases the money supply. When the discount rate is raised, it discourages borrowing and spending, causing the money supply to contract.⁵

1) ⁴ - Open Market Operations

: <https://www.federalreserve.gov/monetarypolicies/openmarket.htm>

⁵ - Topic-Pavkovic, B. (2023). Discount rate as a measure of monetary policies for market stabilization: An example of the National Bank of Serbia. *Acta Economica*, pp-75-76,

3. **Reserve Requirements:** The quantity of reserve that institutions are obligated by the Bundesbank to hold. The central bank can influence the quantity of currency that bankers can lend and produce by adjusting reserve requirements. When the Federal Reserve reduces the amount of reserves needed, banks have more money to lend, causing the money supply to expand. Raising the requirement for reserves limits the total amount of money that banks can lend, hence lowering the money supply.⁶

4. **Interest Rate Policies:** The central bank establishes a goal for the short-term interest rate, known as the federal funds rate, which influences the cost of borrowing and lending in the economy. Lowering the federal funds rate lowers interest rates, promoting borrowing and spending, and increasing the money supply. Raising the federal funds rate, on the other hand, raises interest rates, discouraging borrowing and spending and diminishing the money supply. This technique allows the central bank to impact the economy and create macroeconomic stability by regulating the money supply.⁷

Forward Guiding: Forward direction is a monetary policies tool in which the central bank communicates its future policies intentions to the public. By offering explicit information on future policies measures, this communication can influence expectations and behaviour. The central bank can influence borrowing and spending decisions by shaping market expectations, so promoting macroeconomic stability. Forward guidance is a useful tool for central banks to utilise in managing the economy and achieving their goals since it allows them to announce their intentions and affect market players' expectations.⁸

The practise of quantitative easing:- it is a monetary policies tools in which the central bank purchases huge quantities of assets such as government or corporate bonds. This strategy tries to increase the money supply and stimulate borrowing and spending by injecting liquidity into the economy. Quantitative easing is an effective technique for central banks to control the money supply and achieve macroeconomic stability. The central bank can impact interest rates, asset prices, and economic activity by purchasing assets on a massive scale, so encouraging economic growth and stability.⁹

⁶ - weiner, S. E. (1992). The changing role of reserve requirements in monetary policies. Economic Review-Federal Reserve Bank of Kansas City, 77,pp 45-46

⁷ - Bernanke, Ben S. 2020. "The New Tools of Monetary Policies." American Economic Review, 110 (4): p. 950

⁸ - Banco Central do Brasil. (n.d.). Working Paper Series. Retrieved from, p.5

II. ⁹ - QUANTITATIVE EASING EXPLAINED:

III. [HTTPS://WWW.FORBES.COM/ADVISOR/INVESTING/QUANTITATIVE-EASING-QE/](https://www.forbes.com/advisor/investing/quantitative-easing-qe/)

In general, these measures allow the central bank to impact the quantity of money and credit in the economy, hence influencing rates of interest, inflation, and economic growth. The choice and application of these tools is determined by the central bank's specific economic conditions and policies objectives.

Third: The relation between economical growth and the monetary policies:

The economic growth and the monetary policies relationship has long been a topic of interest in economic theory. One perspective is that monetary policies can directly impact economic growth by influencing the availability of credit in the economy. When monetary policies are expansionary, the monetary supply expands, which increases credit availability. This can boost investment and, in turn, economic growth. Conversely, when monetary policies is contractionary, it can reduce the money supply and thus reduce credit availability. This can depress investment and, as a result, limit economic growth. While there is no agreement on the precise nature of this link, policymakers and economists alike should be aware of the different routes via which monetary policies can influence economic development. By carefully considering the effects of different monetary policies actions on credit availability and investment, policies makers can make informed decisions to promote economic growth and stability.¹⁰

Another view is that monetary policies can indirectly affect economic growth through altering long-term interest rates and inflation expectations. The economic growth and monetary policies relationship is complex and has been the subject of extensive research in economic theory. One view is that expansionary monetary policies can increase the money supply, leading to more credit availability and ultimately stimulating investment and economic growth. However, this view also suggests that expansionary monetary policies can lead to higher inflation expectations and long-term interest rates, which can dampen investment and growth. Conversely, contractionary monetary policies can decrease the money supply, leading to less credit availability and potentially slowing investment and economic growth. However, it may also result in reduced long-term rates of interest and expectations for inflation, which can stimulate investment and growth.

Other factors can also impact the relationship between monetary policies and economic growth, including the level of economic development, financial market development, and trade openness in a given economy. Understanding these factors is important for policies makers to make informed decisions about monetary policies and its potential impact on economic growth.

In summary, while the relationship between monetary policies and economic growth is complex and multifaceted, the theoretical literature suggests that monetary policies can impact economic growth through several channels. Policies makers must carefully consider the

¹⁰ - MCSER Publishing. (2014). Mediterranean Journal of Social Sciences, Vol 5 No 15, July 2014,pp 77-79

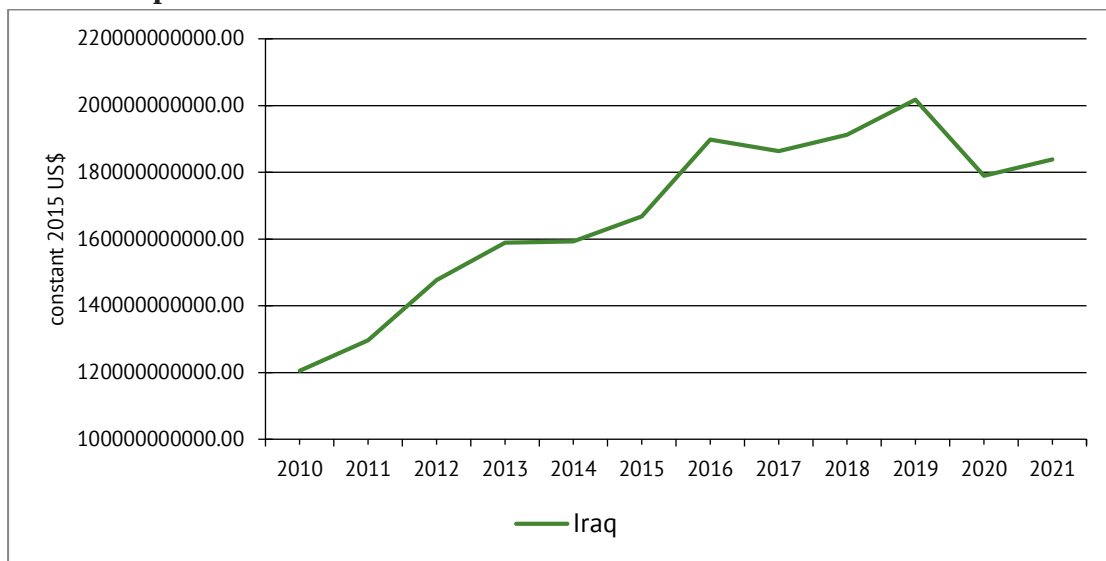
potential effects of their decisions on credit availability, inflation expectations, long-term interest rates, and other factors to promote economic growth and stability.¹¹

The Second Pillar

The internal and external economic performance of Iraq during the period from 2008 to 2020. This chapter deals with the analysis of the internal economic performance of Iraq, which deals with the interest rate, inflation and gross domestic product. It also deals with the analysis of the external economic performance through the exchange rate and exports.

First the Internal Economic performance from 2008-2021)

1- The Development of the Gross Domestic Product from 2008 to 2021."



FIG(1) The Development of the Gross Domestic Product from 2008 to 2021.FIXED PRICE 2015

Source : **GDP (constant 2015 US\$)**

<https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350->

External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP)

Based on the Figure, the trend of Iraq's Gross Domestic Product (GDP) has been fluctuating over the years. It increased from 2010 to 2013, reaching its highest point in 2013. However, it slightly decreased in 2014 and then increased again in 2015. From 2015 to 2019, it continued to increase, reaching its highest point in 2019. However, in 2020, there was a significant decrease in GDP, likely due to the impact of the COVID-19 pandemic on the economy. In 2021, there was a slight increase in GDP, but it has not yet reached the same level as in 2019.

IV. ¹¹ - THE TRANSMISSION OF MONETARY POLICIES:

V. [HTTPS://WWW.RBA.GOV.AU/EDUCATION/RESOURCES/EXPLAINERS/THE-TRANSMISSION-OF-MONETARY-POLICIES.HTML](https://www.rba.gov.au/education/resources/explainers/the-transmission-of-monetary-policies.html)

Overall, the trend of Iraq's GDP has been somewhat volatile, with periods of growth and decline over the years.

With The reference to the GDP Per Capita

This Figure Describe the evolution of **GDP Per Capita** FROM 2008 TO 2021

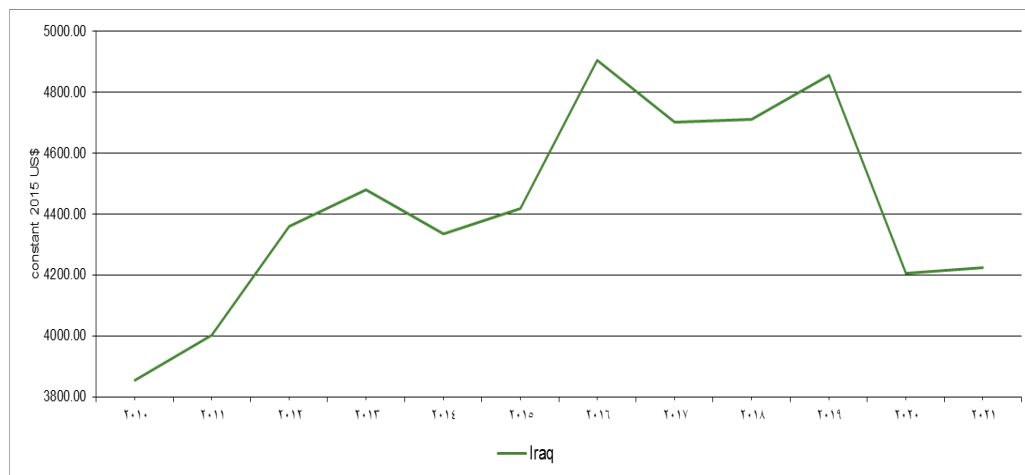


FIG (2) GDP Per Capita FROM 2008 TO 2021 \$

Source : **GDP per capita (constant 2015 US\$):**

<https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350->

External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP)

Based on the provided data, the trend of Iraq's Gross Domestic Product (GDP) per capita has been fluctuating over the years. It increased from 2010 to 2013, reaching its highest point in 2013. However, it slightly decreased in 2014 and then remained relatively stable from 2015 to 2019, with only slight increases each year. In 2020, there was a significant decrease in GDP per capita, likely due to the impact of the COVID-19 pandemic on the economy. In 2021, there was a slight increase in GDP per capita, but it has not yet reached the same level as in 2019. Overall, the trend of Iraq's GDP per capita has been somewhat volatile, with periods of growth and decline over the years.

2- Inflation Rate

This Section Show the Evolution Of the Inflation Rate , Which Is The Key Of Monetary Policies as Shown below

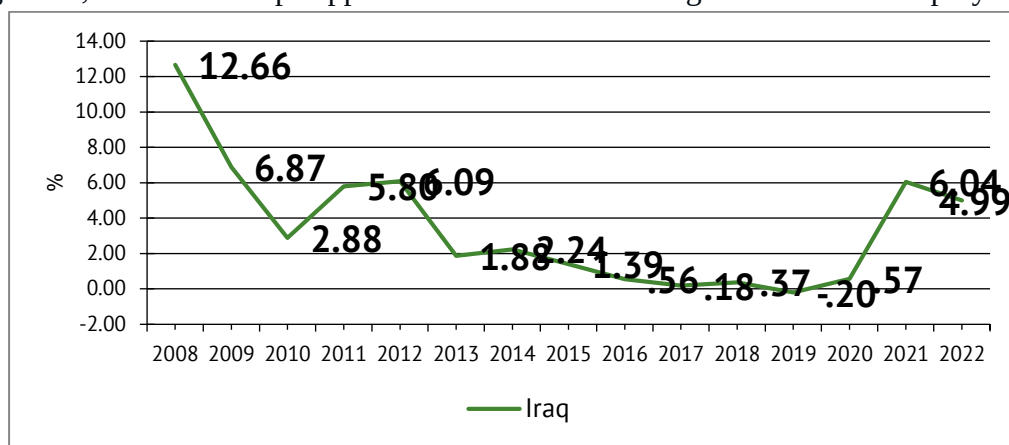
Inflation is defined as an ongoing rise in the overall cost of services and products in an economy. It is an important indication of economic sustainability since it influences a variety of economic factors such as employment, investment, and consumer spending. Financial policies is the method by which a monetary authority, such as the Federal Reserve in the US, regulates the amount of money in a country's economy in order to accomplish its targets of stabilising prices, full-time employment, and economical growth.

The inflation rate is vital in the implementation of monetary policy since it is a critical gauge of the overall health of the economy. When the inflation rate is too high, purchasing power falls, which reduces consumer spending and investment. This can result in a drop in economic

activity and, possibly, a recession. On the other hand, a low inflation rate might lead to deflation, which can have negative economic implications.

Central banks utilise a variety of measures to manage the money supply and control inflation in order to maintain economic stability. They can, for example, change interest rates to influence borrowing and lending behaviour, which can effect consumer spending and investment. They can also change the reserve requirements for banks, which might alter the amount of money available for lending. Furthermore, central banks can engage in open market operations, which involve the purchase or sale of government assets in order to influence the supply of money in the economy.

In conclusion, since the rate of inflation is a key indicator of the overall health of an economy, central banks can control inflation and promote economic stability through money supply management, which can help support sustainable economic growth and full employment.¹²



FIG(3) Rate of Inflation, consumer prices (annual%) 2008-2022

Source : **Inflation, consumer prices (annual %)**

<https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350->

[External%20balance%20on%20goods%20and%20services%20\(%25%20of%20GDP\)](#)

ased on the Figure (3), the trend of Iraq's annual inflation rate has fluctuated over the years. In 2008, the inflation rate was relatively high at 12.66%, but it decreased significantly in 2009 to 6.87%. From 2010 to 2013, the inflation rate remained relatively stable, with only slight increases each year. However, in 2014, there was a slight increase in the inflation rate, and it continued to increase in 2015 and 2016. From 2017 to 2019, the inflation rate remained relatively stable again, with only slight fluctuations each year. In 2020, there was a slight increase in the inflation rate, but it remained relatively low. In 2021, there was a significant increase in the inflation rate to 6.04%, likely due to the impact of the COVID-19 pandemic on the economy. The inflation rate is expected to decrease slightly in 2022, but it will still remain

¹² - **Francesca Caselli, Vitor Gaspar, Gee Hee Hong, Paulo Medas:**

<https://www.imf.org/en/Blogs/Articles/2023/04/12/fiscal-policies-can-promote-economic-stability-and-address-risks-to-public-finances>

relatively high compared to previous years. Overall, the trend of Iraq's inflation rate has been somewhat volatile, with periods of increase and decrease over the years.

3-Interest Rate

The rates of interest are important for encouraging economic stability because they influence consumer and company spending and investment decisions. The cost of borrowing money is determined by the interest rate, which influences the cost of credit for both consumers and corporations. Borrowing is less expensive when rates of interest are low, and individuals and firms are more willing to make purchases and invest, thereby driving the economy to expand. Borrowing becomes more expensive when interest rates are high, and individuals and firms may be less motivated to spend and invest, reducing economic expansion.

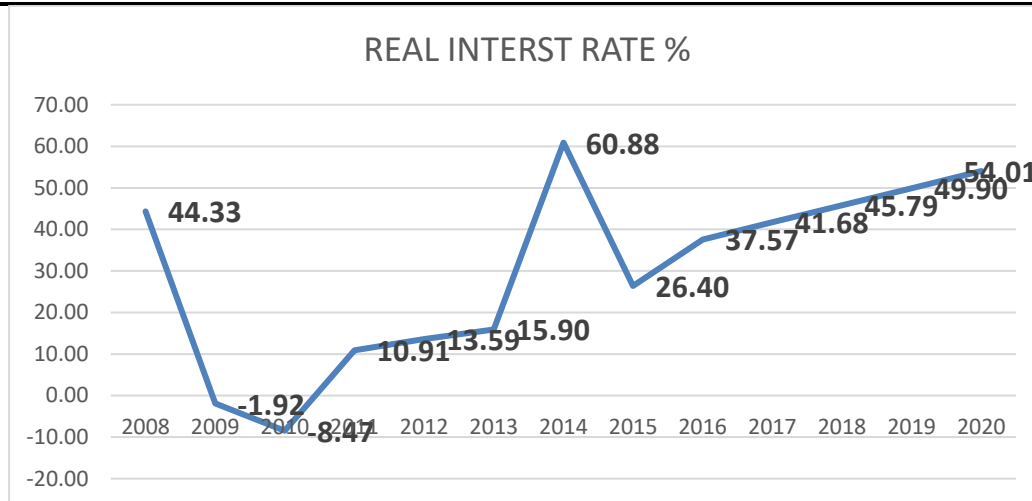
Central banks, such as the Federal Reserve in the United States, employ interest rates to foster economic stability. The federal funding rate, which is the rate of return at which banks borrow to one other instantaneously, can be changed by monetary authorities to affect the cost of financing and lending in the economy. When the economy is growing too quickly and inflation is a concern, central banks may raise interest rates to restrain spending and investment and lessen inflationary pressure. When the economy is in a slump or growing too slowly, central banks may cut interest rates to encourage spending and investment and accelerate economic growth.

Moreover, interest rates also affect other aspects of the economy, such as housing prices, the stock market, and exchange rates. When interest rates are low, housing prices tend to rise as mortgages become more affordable, and businesses may borrow more to invest in expansion, which can increase stock prices. Low-rate of interest can also cause a weaker currency, making exports more competitive and stimulating economic growth.

In summary, interest rates play a critical role in promoting economic stability by affecting consumer and business spending and investment decisions. Central banks utilize the rate of interest as a tool to manage inflation and make a simulation for economy growth. Low-interest rates can lead to higher spending and investment, while high-interest rates can slow down the economy. Therefore, interest rates are an essential tool for policymakers to manage the economy and promote economic stability.¹³

VI. ¹³ - INTEREST RATE INCREASES, VOLATILE MARKETS SIGNAL RISING FINANCIAL STABILITY RISKS:

VII. [HTTPS://WWW.IMF.ORG/EN/BLOGS/ARTICLES/2022/10/11/INTEREST-RATE-INCREASES-VOLATILE-MARKETS-SIGNAL-RISING-FINANCIAL-STABILITY-RISKS](https://www.imf.org/en/Blogs/Articles/2022/10/11/interest-rate-increases-volatile-markets-signal-rising-financial-stability-risks)



Fig(4)

Source : Real interest rate (%)(from 2017 to) estimation according to the historical data

[https://knoema.com/WBWDI2019Jan/world-development-indicators-](https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350-)

[wdi?country=1002010-Kenya&series=1004350-](https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350-)

External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP)

he data provided appears to represent a series of annual percentage changes in an economic indicator or index over a period of 14 years, from 2008 to 2021. Based on the numbers presented, the trend appears to be volatile over the period, with significant fluctuations from year to year.

In 2008, there was a sharp decline of 8.42%, which could indicate a significant economic downturn or recession. However, this was followed by a large increase of 44.33% in 2009, which may suggest a rapid recovery or rebound. In 2010, there was a small decline of -1.92%, followed by another sharp decline of -8.47% in 2011.

From 2012 to 2014, there was a period of steady growth, with annual increases of 10.91%, 13.59%, and 15.90%, respectively. This was followed by a large increase of 60.88% in 2015, which could indicate a strong period of economic growth. The trend continued with increases of 26.40% in 2016, 37.57% in 2017, and 41.68% in 2018.

In 2019, there was a smaller increase of 45.79%, followed by a further increase of 49.90% in 2020. Finally, in 2021, there was another increase of 54.01%. Overall, the trend appears to be positive, with a series of large increases and smaller declines over the 14-year period. However, the trend is also volatile, with significant fluctuations from year to year, suggesting that the underlying economic conditions may have been unstable or subject to external shocks.

SECOND the external Economic performance from 2008-2021)

1- Exchange rate:

Exchange rate and economic stability are closely related, and changes in exchange rates can affect the stable of an economy. Exchange rates refer to the value of one currency in relation to another currency, and they can be affected by a variety of factors, such as economic conditions, political events, and market sentiment.

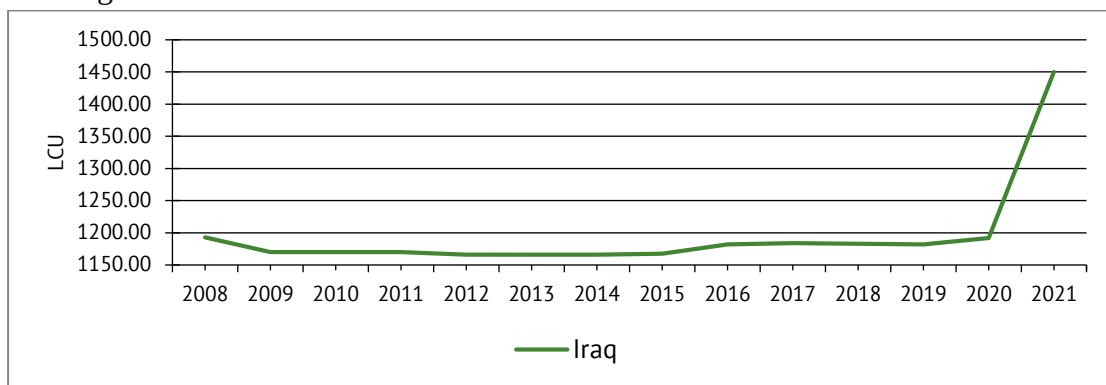
A stable exchange rate can contribute to economic stability by providing a predictable environment for businesses and investors to operate in. A stable exchange rate can also help

to maintain a country's competitiveness in international markets and can make it easier for businesses to plan and budget for international transactions.

On the other hand, a volatile exchange rate can lead to economic instability by creating uncertainty for businesses and investors. A sudden and significant depreciation of a country's currency can lead to inflation, as the cost of imported goods and materials increases, leading to a decrease in purchasing power for consumers and businesses. This can also lead to minimize in foreign investment and economic growth.

In addition, a persistent trade deficit, wherein the value of imports exceeds the value of exports, can put pressure on a country's exchange rate and lead to a depreciation of the currency. This can also lead to economic instability, as it may lead to inflation and a decrease in the country's competitiveness in international markets.

Therefore, maintaining a stable exchange rate is an important aspect of economic stability, and policymakers often monitor and adjust exchange rate policies to ensure stability and promote economic growth.¹⁴



**Fig(5) Official exchange rate (LCU per US\$, period average)
From 2008-2021**

Source: [https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=100210-Kenya&series=1004350-](https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=100210-Kenya&series=1004350-External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP))

External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP)

Based on the data provided, the exchange rate trend for Iraq appears to be relatively stable over the period of 14 years from 2008 to 2021. The amount being exchanged is written as the value of the Iraqi dinar (IQD) relative to the US dollar (USD), and the numbers indicate how many IQD are required to purchase one USD.

From 2008 to 2010, the exchange rate remained constant at 1,170 IQD per USD. This suggests that the Iraqi Central Bank may have been implementing a fixed exchange rate policies during

VIII. ¹⁴-TROY SEGAL: CURRENCY FLUCTUATIONS: HOW THEY AFFECT THE ECONOMY:

IX. [HTTPS://WWW.INVESTOPEDIA.COM/ARTICLES/FOREX/080613/EFFECTS-CURRENCY-FLUCTUATIONS-ECONOMY.ASP](https://www.investopedia.com/articles/forex/080613/effects-currency-fluctuations-economy.asp)

this period. In 2011, the exchange rate remained the same, but then showed a slight decline in 2012 to 1,166.17 IQD per USD.

From 2013 to 2015, the exchange rate remained stable at around 1,166-1,167 IQD per USD. In 2016, the exchange rate increased slightly to 1,182 IQD per USD, followed by another slight increase to 1,184 IQD per USD in 2017. In 2018, the exchange rate dropped slightly to 1,182.75 IQD per USD, and remained stable at this level in 2019 and 2020.

In 2021, the exchange rate increased significantly to 1,450 IQD per USD, which could indicate a major shift in the exchange rate policies or a significant change in the supply and demand for the Iraqi dinar. Overall, the exchange rate trend for Iraq appears to be relatively stable, with occasional small fluctuations and a recent significant increase in 2021.

2- Services and Goods export and imports

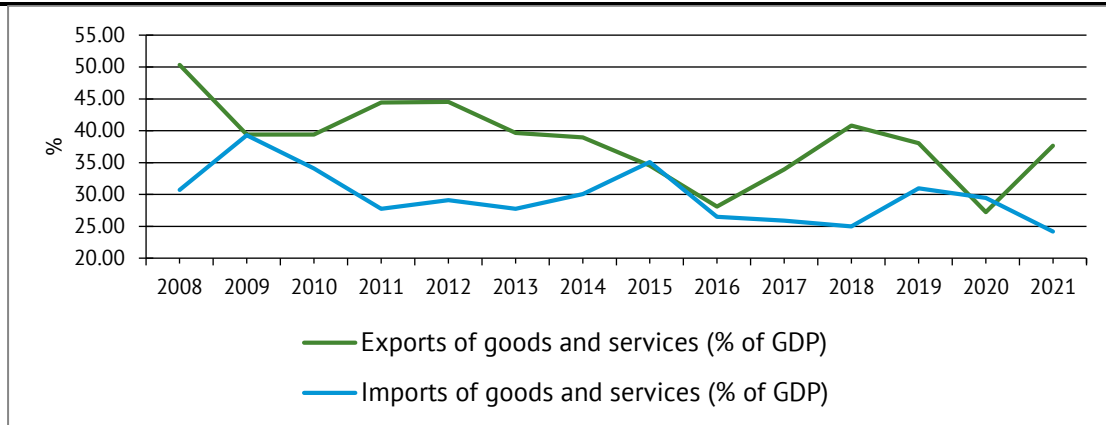
Import and Export are crucial components of a country's economy and can have a significant impact on economic stability. A country's ability to export goods and services can generate income and promote economic growth, while imports can provide access to goods and materials that are not available domestically and can support domestic industries.

Exports can contribute to economic stability by generating foreign exchange earnings, which can be used to support the domestic economy and pay for imports. Export-oriented industries can also create employment opportunities and promote innovation and technological development. However, if a country's exports are heavily dependent on a few commodities or countries, it can make the economy vulnerable to external shocks such as changes in global demand or prices.

Imports can also be important for economic stability, as they can provide access to goods and materials that are not available domestically and can support domestic industries. However, if a country is heavily dependent on imports, it can make the economy vulnerable to supply chain disruptions or changes in global prices.

A balance between exports and imports can be essential for economic stability. A trade deficit, wherein the value of imports exceeds the value of exports, can lead to a strain on foreign exchange reserves and put pressure on the exchange rate. On the other hand, a trade surplus, wherein the value of exports exceeds the value of imports, can generate foreign exchange earnings and support economic growth.

Therefore, maintaining a balance between exports and imports is important for economic stability, and policymakers often monitor trade balances and adjust policies to promote balanced trade and support economic growth.



**Fig(6) Goods and Services of import and export as % of GDP
FROM 2008 TO 2021**

SOURCE: [https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350-](https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350-External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP))

External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP)

The fig(6) represents the percentage of GDP that is accounted for by exports of goods and services and imports of goods and services for a given country over a period of 14 years, from 2008 to 2021.

Services and goods exports as a proportion of GDP started at 50.33% in 2008 and declined to 39.40% in 2009, which could be due to the global financial crisis that occurred during that time. The percentage remained relatively stable from 2010 to 2012, with slight increases in 2011 and 2012. From 2013 to 2015, exports as a percentage of GDP decreased steadily, with a significant decline to 34.51% in 2015. From 2016 to 2018, there was a gradual increase in exports as a percentage of GDP, with a significant increase to 40.80% in 2018. However, this trend was reversed in 2019 and 2020, with a decline to 38.05% and 27.22%, respectively, and a subsequent increase to 37.65% in 2021.

Imports of good, additionally service as a percentage of GDP started at 30.73% in 2008 and increased to 39.29% in 2009, which could be due to increased domestic demand for imported goods during the global financial crisis. From 2010 to 2012, imports as a percentage of GDP declined steadily, with a significant decline to 27.75% in 2011. From 2013 to 2014, imports as a percentage of GDP increased slightly, followed by a significant increase to 35.08% in 2015. From 2016 to 2018, there was a gradual decline in imports as a percentage of GDP, with a significant decline to 25.00% in 2018. This trend continued in 2019 and 2020, with a further decline to 30.94% and 29.43%, respectively, and a slight increase to 24.18% in 2021.

Overall, the trend for exports as a percentage of GDP appeared to be volatile, with significant fluctuations from year to year over the period. The trend for imports as a percentage of GDP was also volatile, but with a more gradual decline over the period. The balance of trade between exports and imports appears to have been in favor of exports for most of the period, with a trade surplus in some years. However, this balance of trade reversed in 2015 and 2018 in favor of imports.

The Third Pillar**The monetary policies impact on the stability of economy**

In this section, a multiple regression model will be constructed to analyze the relation between monetary policies and the stable of economy using a number of variables that can be defined as follows:

Dependent variable: The inflation rate, which measures monetary policies. (INF)

Independent variables: The set of independent variables includes the Gross Domestic Product (Y), which measures domestic economic performance,

The interest rate, (R) The inflow of finances, (M) the rate of exchange, (EX) and exports as a percentage of GDP.(X)

DATA:

Y	R	EX	X	M	INF	YEARS
3215.74	-8.42	1193.08	50.33	35.22	12.66	2008
3659.35	44.33	1170.00	39.40	26.70	6.87	2009
3854.69	-1.92	1170.00	39.42	31.21	2.88	2010
4003.05	-8.47	1170.00	44.42	20.69	5.80	2011
4360.75	10.91	1166.17	44.51	4.17	6.09	2012
4479.47	13.59	1166.00	39.66	15.97	1.88	2013
4333.82	15.90	1166.00	38.94	3.88	2.24	2014
4416.94	60.88	1167.33	34.51	-9.10	1.39	2015
4903.82	26.40	1182.00	28.11	7.03	.56	2016
4702.40	37.57	1184.00	33.92	2.64	.18	2017
4710.98	41.68	1182.75	40.80	2.73	.37	2018
4854.39	45.79	1182.00	38.05	8.44	-.20	2019
4204.18	49.90	1192.00	27.22	15.92	.57	2020
4224.25	54.01	1450.00	37.65	16.66	6.04	2021

Source : The World Bank :data base

1- Unit root test

The variable	Test	Level	f-difference
Inf	0.0297****	√	
Y	0003****		√
M	0.0467****		√
X	0.0015****		√
Ex	0.0077****		√
r	0.0268****		√

After evaluating the steady state of data sets and discovering that all of the parameters excluding that of inflation are stable in first distinctions, a model with error correction will be tried to analyse the short- run and long-run relation between each of the variables.

An ARDL model was implemented to test the impact of monetary policies on the stable of economy stability in Iraq since 2008. The test showed that there is a counteracting relation between a dependent variable (inflation rate) and a set of other independent variables,

and that 79% of the variation in the dependent variable is explained by the independent variables.

$$R^2 = 79 \%$$

$$D.W=1.9$$

The long run relationship

In the long run, a one-unit rise in average per capita income correlates to a 0.005 point gain in economic stability, reflecting the need to enhance economic policy performance. A steady or decreasing exchange rate improves economic performance, with a one-unit fall in the exchange rate leading to a 0.01-point improvement in monetary policy. In terms of the impact of exports on economic stability in Iraq, a 1% rise in exports as a proportion of GDP translates to a 0.018-point gain in economic stability. In the long run, the money supply, as well as interest rates, have a negative impact on economic stability.

As shown in the **table NO A**

The short run

WE CAN RELY ON THE MODEL BECAUSE THE ECM IS NEGATIVE AND SIGNIFICANT:AS DEMONSTRATED IN TABLE (C), GDP per capita has a negative effect on economic stability in the near run when compared to board money and interest rates.

We also perform the bound test to test the long run integration among the independent and the entire dependent variables, and the result shows that the F-STATIC 3.717 is higher than the lower test (2.14) and the higher test (3.34) with a 95% significant lever, indicating that there is a long run relation between economic stability and the entire independent variables.

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13. GDP (constant 2015 US\$)

[https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350External%20balance%20on%20goods%20and%20services%20\(%25%20of%20GDP\)](https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP))

14. GDP per capita (constant 2015 US\$):

[https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350-External%20balance%20on%20goods%20and%20services%20\(%25%20of%20GDP\)](https://knoema.com/WBWDI2019Jan/world-development-indicators-wdi?country=1002010-Kenya&series=1004350-External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP))

15. : Inflation, consumer prices (annual %)

[https://knoema.com/WBWDI2019Jan/world-development-indicators-External%20balance%20on%20goods%20and%20services%20\(%25%20of%20GDP\)](https://knoema.com/WBWDI2019Jan/world-development-indicators-External%20balance%20on%20goods%20and%20services%20(%25%20of%20GDP))

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