THE EFFECT OF IMPLEMENTING THE FINANCIALLIBERALIZATION POLICY ON ECONOMIC GROWTH IN IRAQ: ANALYTICAL STUDY FOR THE PERIOD (2003-2015)

Rajaa Khudhair Abbood Al- Rubaye, Babylon Education Directorate

ABSTRACT

Increasing attention from the majority of countries in the world. It has been shown that the economy's ability to overcome negative economic conditions is linked to the size of reforms and policies. Financial liberalization in view of the contribution of the financial sector to economic efficiency and the liberalization of stability. Macroeconomics that include reform and price stability, fiscal reform, exchange and trade systems, restructuring of economic activities Dah allocation of capital resources and redirecting new savings and investment flows. Therefore, the efficient and efficient financial sector is the ideal channel for mobilizing domestic savings and mobilizing them in the form of credit and investment tools, and then directing it towards the more lucrative sectors and economic activities. This sector also contributes to attracting and attracting foreign investments in order to provide additional financial resources to support economic growth and development country.

Iraq is one of the countries that adopted the principle of financial liberalization after 2003 after the sector suffered from policies of marginalization and financial repression for many years. Its actions are reflected in the independence of the Central Bank and the freedom of interest rate and exchange rate as well as the currency auction and the laws of currency exchange and foreign exchange. But these measures were in stages in proportion to the capacity of the national economy and the circumstances surrounding it.

The research has proved by analyzing the indicators of financial liberalization based on data issued by the Central Bank of Iraq, that the procedures of financial liberalization have positive effects on economic growth, but that are in stages and commensurate with the specificity of the Iraqi economy, because the rush in those actions may generate negative effects reflected on the effectiveness Performance.

INTRODUCTION

Importance of Research

The importance of the research lies in the fact that financial liberalization, lifting restrictions on the financial system and easing the severity of strict financial control, albeit partially, is a new experience that many countries of the world have sought to implement because of its importance in increasing the volume of foreign direct investment through the liberalization of capital movement as well as the liberalization of the interest rate and price The exchange that contributes to raising the volume of credit to finance economic development projects and achieve economic growth in all economic sectors in Iraq.

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

Research Problem

The research problem stems from the fact that financial liberalization needs a developed financial system and a sophisticated banking infrastructure that provides a set of laws entrusted to it, and bears a great deal of responsibility and transparency in its application, while the opposite may lead to negative effects in the economy, especially that the Iraqi economy is a rentier economy that carries Many of the structural problems and imbalances that may hinder the implementation of liberation programs, but it can be applied gradually and in proportion to the capabilities and qualifications of the Iraqi economy is guaranteed by a package of laws to ensure the achievement of economic growth.

Research Objective

The research seeks to achieve the following objectives:

1 Clarify the nature of financial liberalization and its most prominent variables and methods.
2 Exposure to some indicators of financial liberalization and their relationship to economic growth

Fourth: Research Hypothesis

The research starts from the hypothesis that there is a positive and moral relationship between financial liberalization and economic growth in Iraq.

Financial liberalization and economic growth theoretical aspects:

In the last decades of the last century until the beginning of the twenty-first century, the world witnessed rapid and successive economic transformations, which were characterized by the release of market forces, the liberalization of trade exchanges, the movement of capital, the removal and reduction of legislative and regulatory restrictions, and an attempt to accommodate these transformations that the world is currently experiencing and which push the economies of the world towards adopting mechanisms Economic liberalization in general and financial liberalization in particular, and the most prominent of these variables is the collapse of the Soviet Union and the transformation of socialist regimes towards a market economy and the increasing trend towards establishing regional economic blocs. The experiences of regional integration in the second half of the last century were able to provide economic benefits and benefits that individual countries are unable to achieve, which are embodied in obtaining economies of scale and production specialization, which contributes to raising the competitiveness of member states and contributes to increasing economic growth rates, as well as the establishment of the World Organization Trade and the liberalization of trade in financial services (OMC), as well as the growing role of international institutions (The International Monetary Fund and the World Bank) in the Department of Economic Affairs (Nabila et al., 2017).

The International Monetary Fund and the World Bank Most of the developing and developed countries, as a solution to facilitate the transition from a planned economy to a market economy, all these factors found their solution in the emergence of the concept of financial liberalization and the emergence of the concept of steady internationalization in production, capital, marketing and technology, and internationalization means (the global spread of modernization in a world dominated by capitalism, where capitalism has become The monopoly

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

regulates production processes at the international level instead of the national one and achieves maximum profitability at the level of projects whose units are spread globally) (Al-Shammari, Mayh Shabib, 2015). While the financial restraint is defined as those measures and decisions that seek to restrict the financial system through the following: (Midiani & Talhawi 2015):

1. Administrative determination of debit and credit interest rates.
2. Imposing high taxes on the banking sector.
3. Raising the legal reserve imposed on commercial banks.
4. Putting strict restrictions on freedom of entry to the financial sector in general and the banking sector in particular.
5. Restrictions on the movement of capital.

LITERATURE REVIEW

Study and Analysis of Indicators of Financial Liberalization in and their Relationship with Economic Growth in Iraq

There are several indicators that can be relied upon in analyzing the relationship of financial liberalization with economic growth by analyzing the data of these indicators issued by the Central Bank of Iraq and official bodies in a comparative study to prove that there is a relationship between these indicators and the rates of economic growth in Iraq.

Average per capita GDP indicator:

The indicator of the average per capita GDP is one of the important indicators in which to measure the extent of the reflection of financial liberalization on economic growth. The indicator is linked to many variables related to the gross domestic product, especially that the Iraqi economy is renter economy that depends on oil by 95%, and this rentierism made it an economy affected by global oil prices as well as international crises, and thus this is reflected in the fluctuation of the value of the average per capita share of output, as we note in Table 1, the GDP for the year 2003 amounted to about 26990.4 million Iraqi dinars, which rose in 2006 to about 47851.4 million Iraqi dinars, while the average per capita share for the same years amounted to (1024, 1661) million dinars, while the GDP for the year 2007 about 48510.6 million dinars, it rose to about 57751.6 million dinars in 2010, it rose to reach about one million dinars in 2015 compared to the change in the average per capita share of increase for the same years to about (1634, 1775,5, 1922.1) million dinars, and this means that there is a positive relationship between the liberalization policies related to the exchange rate, the independence of the Central Bank of Iraq and interest rates with economic growth whose indicators reflect the average per capita share of the years studied. There is no doubt that the increase in GDP came as a result of Iraq’s openness to the outside world and the flow of oil exports after stopping for years, which increased the country’s financial revenues after the rise in oil prices to astronomical figures in the years 2014 and the following years. This liberalization had other repercussions on reducing the severity of the situation. Inflation and reducing unemployment levels, by increasing the volume of employment in public jobs for the state, coupled with the relative development of the private sector (Al-Basri et al., 2009) shows in Table 1.

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

Table 1
IT SHOWS INDICATORS OF ECONOMIC GROWTH IN IRAQ FOR THE PERIOD (2003-2015) MILLION IRAQI DINARS

Years	Percentage the change %	Average per capita GDP, excluding oil	Percentage change %	Average per capita GDP	The share of oil in the output %	Percentage change growth %	GDP excluding oil	Percentage the change %	GDP
2003	-	502.8	-	1024.7	51	-	13243.6	-33.1	26990.4
2004	61.4	811.4	49.62	1533	48	66.3	22024.6	54.1	41607.8
2005	11.7	906.3	1.32	1553	42	15.1	25342.2	4.4	43438.8
2006	10.2	998.4	6.92	1661	41	13.5	287 63.9	10.2	47851.4
2007	-5.52	943.3	-1.6	1634	43	-2.7	27999.4	1.4	48510.6
2008	-3.88	906.7	-0.79	1621.5	45	3.3	28920	6.6	51716.6
2009	8.85	987	6.58	1728.2	44	8.1	31252.2	5.8	54721.2
2010	6.17	1047.8	2.85	1777.5	42	8.9	34044.6	5.5	57751.6
2011	5.88	1109.5	7.41	1909	43	8.6	36988.9	10.2	63650.4
2012	9.45	1214.4	9.75	2095	43	12.3	41541	12.6	71680.8
2013	4.55	1269.7	2.88	2155.8	42	7.3	44560.1	5.5	75658.8
2014	-9.03	1155	-6.29	2020.2	44	-6.7	41586.4	-3.8	72736.2
2015	11.5	1287.8	-4.86	1922.1	33	14.4	47563.5	-2.4	70990.3

Source: Column (1 and 3) Ministry of Planning, Central Statistical Organization, Annual Statistical Group, for different years

FDI/GDP Ratio of Inflows to Gross Domestic Product Index

The foreign investment index is one of the main external factors that affect the credit decision-making and determine the effectiveness and strength of economic competition in the country. Foreign investment also has a major role in developing the technological and scientific capabilities of economic and social institutions, and its role in determining the regional position of the country is highlighted, and from the observation of the Table 2 We find that the percentage of foreign investment in the output is low, reaching about 1.73 for the year 2010, which reflects the decline in attracting foreign investment in Iraq compared to many Arab countries, as the percentage in the Emirates was about 4.4% in 2008 and Lebanon to about 12.7% in 2010, and 6. 4% in Saudi Arabia for the same year this means that Iraq needs to use and implement many special laws that make it an attractive environment for foreign investment related to interest rates, freedom of external transfer and a lot of legal guarantees to protect the investor Table 2.

Table 2
INDICATOR OF THE RATIO OF INWARD FLOWS OF FOREIGN DIRECT INVESTMENT TO THE GROSS DOMESTIC PRODUCT (FDI/GDP) MILLION FOR THE PERIOD (2004-2015)

The years	Percentage of foreign investment in GDP	Gross domestic product	Incoming foreign investment FDI
2004	2.17	41607.8	300
2005	1.64	43438.8	515
2006	0.85	47851.4	383
2007	1.71	48510.6	972
2008	2.15	51716.6	1.856
2009	2.23	54721.2	1.452
2010	1.73	57751.6	1.426

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

2011	3.9	63650.4	2082
2012	5.6	71680.8	3400
2013	8.1	75658.8	5131.2
2014	7.8	72736.2	4781.8
2015	5.8	70990.3	3468.5

Source, The Arab Corporation for Investment and Export Credit Guarantee, Annual Investment Report 2010, Kuwait, 2010, the dollar has been converted into the dinar according to the exchange rate of 1200 dinars to the dollar.

Index of Total Exports and Imports to GDP:

This indicator is one of the important indicators in measuring the extent of financial and banking liberalization, liberalization of the exchange rate, reduction of restrictions on exports and low taxes on imports. From noting Table (3), we find that this indicator has taken varying proportions according to the economic and security conditions in the country, as it reached in 2003 about 89% It increased in 2005 to about 100%, decreased in 2006 to about 1.02% due to the security situation and terrorist operations. It is noteworthy that Iraq is one of the developing countries that depend mainly on oil by more than 90% in the absence of diversity in other economic resources available in the country This dependence makes a dysfunctional economy affected by changes in oil prices and international crises, which is reflected in the reduction of the trade balance and the increase in the proportion of merchandise exports over imports.

Therefore, it can be said that financial liberalization, the trend towards market blocs, the establishment of the World Organization, the liberalization of services trade (OMC), and the increasing role of international institutions in managing economic affairs, allows the Iraqi economy to free trade by easing restrictions on it, as well as reducing tax rates according to the position and need of the Iraqi economy, including The volume of exports encourages imports, and thus increases the volume of financial revenues entering the country, which is reflected in the increase in economic growth in the country.

Table 3
TOTAL EXPORTS AND IMPORTS TO GDP IN IRAQ FOR THE PERIOD (2003-2015) (MILLIONS OF US DOLLARS)

The years	GDP dinars	Total exports and imports dollar	Imports	Exports
2003	26990.4	20019.6	9933.5	10086.1
2004	41607.8	18124765	18106955	17810.0
2005	43438.8	43699.6	20002.2	23697.4
2006	47851.4	49236.9	18707.5	30529.4
2007	48510.6	57878.7	18288.7	39590
2008	51716.6	97497.3	30171.2	63726.1
2009	54721.2	74715.2	35284.8	39430.4
2010	57751.6	89091.6	37328	51763.6
2011	63650.4	120313	40632.5	79680.5
2012	71680.8	141970.2	47798.6	94171.6
2013	75658.8	139745.9	49976.5	89769.4
2014	72736.2	129181	45200.1	83980.9
2015	70990.3	76629.7	33188.2	43441.5

Source: Central Bank of Iraq, General Directorate of Statistics and Research, Annual Bulletin for different years. The exchange rate was adopted at 1200 dollars for the dinar when converting

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

Index of the Volume of Financial Intermediation:

It is also called the money supply index, which represents the money supply (term deposits, current deposits, and liquid money) to the gross domestic product (M2/GDP) and (McKinnon) believes that the high percentage of this indicator reflects a significant role of financial intermediation (Ben Mazzou et al., 2013). This can be analyzed by addressing the indicators of financial depth in Iraq and the extent of their relationship with financial liberalization. From the observation of Table (4), we find that the financial intermediation index for 2003 amounted to about 33.82%, decreased in 2006 to 22.02%, due to the poor security conditions and political instability. And the conditions of terrorism at that time, bringing the ratio to 34.72% in 2009, due to the improvement in the security situation and the relative stability in the general conditions in the country. This means that banks have taken a major role in lending operations and in increasing the volume of banking activity, and that they have benefited from the financial liberalization measures that the country seeks. In fact, banks have lent to the private sector and small projects as well as the advances of employees and the public sector, which is reflected in the movement of economic activity and the increase in aggregate demand variables, which Increases the volume of investment and improves the banking environment.

Table 4
INDEX OF THE VOLUME OF FINANCIAL INTERMEDIATION IN IRAQ FOR THE PERIOD (2003-2015) MILLION DINARS

The years	M2/M1	C/GDP%	M2/GDP	M1/GDP %	Credit to private sector C	GDP	Cash offer Wide M	Cash offer the narrow M1
2003	1.2	1.88	33.82	28.08	387326	20562256.4	6953420	5773601
2004	1.13	1.63	30.21	26.67	620267	38058543	11498148	10148626
2005	1.29	1.78	27.46	21.35	950287	53386428.6	14659350	11399125
2006	1.36	1.97	22.02	23.57	1881014	95587954.8	21050249	15460060
2007	1.24	2.39	24.15	19.49	2387433	111455813	26919996	21721167
2008	1.24	2.53	22.2	17.95	3978301	157026062	34861927	28189934
2009	1.22	2.96	34.72	28.55	4646167	130642187	45355289	37300030
2010	1.17	5.1	36.08	30.97	8527131	167093204	60289168	51743489
2011	1.15	5.08	32.22	27.93	11356308	223677005	72067309	62474000
2012	1.19	5.98	30.81	25.99	14650102	245186419	75536128	63736000
2013	1.19	6.34	32.79	27.61	16947533	267400000	87679000	73831000
2014	1.25	6.85	35.04	28.08	17745141	258900000	90728000	72692000
2015	1.25	9.18	43.28	34.51	18070058	196800000	85180000	67911000

Source: - Column (1, 2, 3 and 4) Central Bank of Iraq, General Directorate of Statistics and Research, Bulletin for different years. Columns (5, 6, 7 and 8) are from the researcher's work.

Indicator of the Ratio of Loans to the Private Sector to GDP: CP/GDP

It expresses the credit directed to the private sector. This indicator measures the extent to which local banks contribute to granting loans and facilities to the private sector. As the percentage of this indicator increases, it indicates that there is a large role for banks in the process of economic growth and its decline serves as an indicator of financial restraint. From the observation of Table (5), we find that the credit ratio of the output for 2003 amounted to about 1.8%. It decreased in 2005 to about 1.7% due to the security situation. The ratio rose in 2009 to 2.9%. This means that banking activity increased in lending operations to the private and public sector and investment projects due to stability. Security and economic credit to rise in 2011 to about 5.08%, to rise in 2015 to about 9.1%, and this means a significant development in banking

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

and financial activity and an increase in the volume of loans provided to the public and private sectors and state investment projects, which will reflect positively on the recovery of the Iraqi economic situation and the achievement of growth economic in line with the financial liberalization policies adopted in the country (Meguid & Muttalib, 2006).

Table 5
THE RATIO OF LOANS AND CREDIT TO THE PRIVATE SECTOR AND TOTAL DEPOSITS TO GDP, CP/GDP (MILLION DINARS)

The years	**Gross domestic product**	**Credit to the private sector**	**The ratio of credit to GDP** 1 /2	**Total deposits**	**The ratio of total deposits to output**%
2003	20562256.4	396418	1.88	4318672	21
2004	38058543	622476	1.63	8619809	22.6
2005	53386428.6	950287	1.78	10769995	20.1
2006	95587954.8	1881014	1.97	16928259	17.7
2007	111455813	2387433	2.39	26188926	23.4
2008	157026062	3978301	2.53	34524959	21.9
2009	130642187	4646167	2.96	38582477	29.5
2010	167093204	5642801	5.1	42461140	25.4
2011	223677005	11356308	5.08	34187000	15.2
2012	245186419	14650102	5.98	33142000	13.5
2013	267400000	16947533	6.34	38836000	14.5
2014	258900000	17745141	6.85	36620000	14.1
2015	196800000	18070058	9.18	36739851	18.6

Source: Annual bulletins of the Central Bank of Iraq: various issues.

Index of Total Bank Deposits to Gross Domestic Product:

This indicator combines demand deposits, long and medium term deposits, and it measures the ability of the banking system to mobilize savings regardless of its term. However, there is a large role for banks in mobilizing savings and financing investments, which will have a significant impact on economic growth.

The monetary policy aims at reforming the financial and banking sector by liberalizing interest rates on deposits and credit and defining the credit ceilings of banks, in order to achieve the factors of economic and monetary stability in the country, and trying to formulate a policy for external financing of the state, as well as monitoring the performance of the work of financial and banking institutions (Sami, 2002). From the observation of Table (6), we find that the ratio of total deposits to GDP amounted to about 21% in 2003 and rose to 22.6% in 2004, and this indicates the development of banking work in mobilizing savings and investment, but then the ratios took a decreasing trend for the years (2005, 2006) as It reached about (20.1%, 17.7%), due to the bad security conditions and the terrorist operations that affected the country. It rose in 2009 to about 29.5%, and this indicates the development of this indicator in the service of the economic development process and achieving growth rates consistent with the size of the country's financial liberalization policies, while the percentage rose to its maximum in 2015 amounting to about 18.6%, which reflects that banks have a major role in increasing the volume of credit and financing. Investing and benefiting from financial liberalization policies that have important repercussions on economic growth.

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

Index of Liberalization of the Exchange Rate and Interest:

The goal of stability in exchange rates is one of the priorities of the tasks of the monetary authority, due to the significant role of this indicator in formulating macroeconomic policies, through its contribution to achieving macroeconomic goals represented by internal and external balance. On the balance of payments balance through the compatibility between exports and imports, as well as the extent to which external payments are adapted to the volume of international trade and the movement of capital.

The monetary authorities in Iraq have sought to focus on controlling changes in the local dinar exchange rate, so they took the currency auction as a way to achieve this, which has proven its effectiveness in controlling the fluctuations of the local currency as well as the Central Bank monitoring the movement of the balance of payments and surpluses achieved in it, and reducing The divergence between the nominal and real exchange rate, which resulted in the absorption of 25% of the inflationary pressures (Pasha Abdul Karim & Abdul Nabi, 2009). The independence of the Central Bank in decision-making has led to relative stability in the general level of prices, which automatically reflected on the stability of the currency exchange and the stability of its purchasing power, and this in turn encourages investment and growth Economic, and when noticing Table (7), we find that the exchange rate decreased from 1936 dinars against the dollar to 1453 for the years 2003, 2004, and it returned to rise in the years 2005, 2006 due to the turbulent political and security conditions, as it reached 1472 and 1475 dinars against the dollar, respectively. For the year 2015, it amounted to about 1247 dinars against the dollar, and by following up on Table (6), the Central Bank can employ monetary policy tools through changes in the rate of growth of money supply, which is reflected in the prices of interest, which is known) which is the price that prevails in the money market and appears when commercial banks carry out their credit business. In return for borrowing capital for a period of time as monetary expansion lowers interest rates and thus increases the volume of investment and consumer spending, thus increasing aggregate demand and raising the level of income, which in turn is reflected in increased economic growth, especially that the school Classical view of the interest rate supports its role in achieving equality between saving and investment. Especially since the interest rate is a tool for the state in achieving economic growth. In the case of the need for investment projects, it reduces the interest rate in order to enable investors and tempt them to borrow and vice versa. Interest rates have witnessed a major shift after in 2003, through the Central Bank's measures to strengthen the mechanisms of economic transformation in the country, with the aim of reforming macroeconomic variables and developing financial and banking institutions (Abbas, 2019). In order to achieve economic stability and increase economic growth rates by reducing inflation, as the liberalization of interest rates in Iraq played a major role in increasing credit to the private sector from 396,418 million dinars in 2003 to 622,476 million dinars in 2004, and inflation levels decreased to 33.6% in 2003 and reached the lowest Its percentage in 2015 was about 1.4% (Al-Rikabi & Ghaleb, 2012).

On 3/1/2004 the Central Bank announced its abandonment of setting interest rates and thus liberalizing interest rates, which was considered one of the main pillars in the strategy of financial liberalization and banking reform, as it had important repercussions in supporting the financial reform strategy as it allows borrowers more freedom to take Their decisions, instead of adhering to the orders of the Central Bank, also stimulates this liberalization to turn to profitable

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

business and economic projects, and then advance the economy through competition to obtain the available financing, which reflects more efficiency in allocating capital and achieving economic growth (Saleh, 2011). It is indicated that inflation, which is known as (a large and rapid rise in the general level of prices) (Khalil, Sami, 1982, p. 538), which amounted in 2003 to about 33.6%. Decreased to 37% due to the independence of the Central Bank and the recent trends of monetary policy at the time in targeting inflation by reducing the money supply and reducing public spending in 2008 to about 2.7% due to the security and economic stability in the country (Al-Ghalbi et al., 2012). Inflation rates continued to decline until 2015 reached about 1.4%, Because of the stability of the Iraqi dinar exchange rate, raising the purchasing power of the Iraqi currency, increasing the cash reserve and raising liquidity rates, as well as the development of Currency auctions market and coordination between fiscal and monetary policy (Fatima Salam, 2017).

Table 6
INTEREST RATE, EXCHANGE RATE AND INFLATION DEVELOPMENTS IN IRAQ FOR THE PERIOD (1990-2015)

The years	Interest rate%	The exchange rate of the dinar against the dollar	Inflation rate
2003	6.35	1936	33.6
2004	6.00	1453	27
2005	7.00	1472	37
2006	16.0	1475	53.2
2007	20.0	1267	30.8
2008	16.8	1203	2.7
2009	8.80	1182	-2.8
2010	6.20	1186	2.4
2011	6.00	1196	5.6
2012	6.00	1233	6.1
2013	6.00	1232	1.9
2014	6.00	1214	2.2
2015	6.00	1247	1.4

Source: Central Bank of Iraq, General Directorate of Statistics and Research, Bulletin for different years.

Measuring the causal relationship between financial liberalization and economic growth in Iraq. For the purpose of verifying the hypothesis of the research and achieving the goal, the relationship between financial liberalization and economic growth was described, as it was assumed that there is a positive reciprocal relationship, while, and that the in-depth time series between them require knowledge of stability using a number of tests and then determining the direction of the causal relationship between them and knowing the co-integration between the studied variables The following variables were used to represent the relationship for the period (2003-2015). The model variables are the indicators of financial liberalization (average per capita share, financial intermediation, bank deposits, foreign investment flows, the ratio of exports to GDP, the ratio of loans to GDP) and growth the economic program (Eviews) will be used to produce the results, which are as follows:

1 Testing the stability of time series The first step in analyzing time series, includes testing the stability of time series and this is done through the application of the graph and the autocorrelation function and the Augmented Fuller-Dickey ADF test, which is one of the most important and most common and accurate tests.

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

Augmented Dickey-Fuller Test (ADF:

Table (7) shows the results of the stability results of the unit root of the expanded Dickey-Fuller method using the program (Eviews) for the variables (average per capita, financial intermediation, bank deposits, foreign investment flows, the ratio of exports to GDP, the ratio of loans to GDP) and growth The results showed that the indicators are unstable at the level with the fixed limit at all levels. The calculated value of (t) was less than its tabular value at a significant level (1%, 5%, 10%). According to these results, it means that the null hypothesis that states is not rejected On the absence of a unit root and the instability of time series, but these variables became stable at the first difference with a fixed term and a fixed limit with a time trend, at all levels (1%, 5%, 10%) and this means that the calculated (t) value is greater than Its tabular value, and thus the existence hypothesis is accepted, which states that the two series are stable and have a unit root, and this means that the indicators are integrated at the first degree and can be expressed as follows:

$$X3 \sim I(1),\ X2 \sim I(1),\ X1 \sim I(1),\ Y \sim I(1)$$
$$,X4 \sim I(1)\ \ ,X5 \sim I(1),\ X6 \sim I(1)$$

Table 7
RESULTS OF THE UNIT ROOT TEST FOR THE STABILITY OF THE EXTENDED DICKEY-FULLER TEST

Variables	value (t) at level	The value of (t) at the first difference
X1	-3.50312	-10.8615
1%	-4.12199	-4.20006
5%	-3.14492	-3.17535
10%	-2.71375	-2.72899
X2	-1.32546	-4.50668
1%	-4.12199	-4.4206
5%	-3.14492	-3.25981
10%	-2.71375	-2.77113
X3	-1.71074	-4.39146
1%	-4.12199	-4.29707
5%	-3.14492	-3.2127
10%	-2.71375	-2.74768
X4	2.085534	-4.8553
1%	-4.29707	-4.4206
5%	-3.2127	-3.25981
10%	-2.74768	-2.77113
X5	-1.74171	-4.72117
1%	-4.12199	-4.4206
5%	-3.14492	-3.25981
10%	-2.71375	-2.77113
X6	-1.71074	-4.39146
1%	-4.12199	-4.29707
5%	-3.14492	-3.2127

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

10%	-2.71375	-2.74768
Y	-1.73105	-4.9865
1%	-4.29707	-4.58265
5%	-3.2127	-3.32097
10%	-2.74768	-2.80138

CO-INTEGRATION TEST RESULTS

The results of the Dickey-Fuller test showed the stability of the time series at the first difference, and this means that they are integrated to the same degree, which indicates the possibility of a co-integration between (average per capita share, financial intermediation, bank deposits, foreign investment flows, the ratio of exports to GDP, the ratio of exports to GDP, Loans to GDP (and economic growth) and Cranger-Engle will be used for cointegration to find out the existence of a long relationship between the indicators, as follows:

After the models were estimated, the first stage showed that the models suffer from the problem of positive autocorrelation after the calculated Doreen-Watson comparison and its tabular value, and after the first transformation of the data in the repetition method, the results were as follows:

1. The first model: estimation of the model for the regression equation between (average per capita (X1) and economic growth (Y) :

$$Y= -0.004+ 1.105X1$$
$$R^2= 0.70$$
$$F=36.23$$
$$D\text{-}W=1.57$$

2. The second model: estimating the model for the regression equation between (financial intermediation (X2) and economic growth (Y)):Y= -0.017+ 0.99X2

$$R^2= 0.67$$
$$F=27.4$$
$$D\text{-}W=2.16$$

3. The third model: estimating the model for the regression equation between (bank deposits (X3) and economic growth (Y)):Y= -0.009+ 0.68X3

$$R^2= 0.45$$
$$F=12.71$$
$$D\text{-}W=2.08$$

4. The fourth model: estimating the model for the regression equation between (foreign investment flows (X4) and economic growth (Y)):Y= -0.084+ 0.76X4

$$R^2= 0.67$$
$$F=18.13$$
$$D\text{-}W=1.83$$

5. The fifth model: the estimation of the model for the regression equation between (the ratio of exports to GDP (X5) and economic growth (Y)):

$$Y= -0.015+ 0.65X5$$
$$R^2= 0.43$$
$$F=9.08$$
$$D\text{-}W=2.00$$

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

6. The sixth model: estimating the model for the regression equation between (the ratio of loans to GDP (X6) and economic growth (Y)):

$$Y= -0.012+ 0.84X6$$
$$R^2= 0.62$$
$$F=14.54$$
$$D\text{-}W=2.12$$

According to the above results, it was found that the first model that tests the relationship is the effect of the average per capita share on economic growth in the long run has an effect that has reached (1.105), which means that the more the average per capita share increases by one unit, the economic growth will increase, which is a special moral relationship according to the moral (f) The calculated value is greater than its tabular value and it explains the amount (70%), and according to these results, the null hypothesis is not accepted and the alternative hypothesis is accepted, that is, there is an influence relationship of the average per capita ratio on economic growth in the long run.

As for the second model, which tests the relationship, the effect of financial intermediation on long-term economic growth has an effect of (0.99), which means that the more financial intermediation increases by one unit, it will increase the economic growth, which is a special moral relationship according to the calculated significance (f), which is greater than its tabular value And it explains the amount (67%), and according to these results, the null hypothesis is not accepted and the alternative hypothesis is not accepted, that is, there is an influence relationship of financial intermediation on long-term economic growth.

The third model, which tests the relationship, the effect of bank deposits on long-term economic growth has an effect of 0.68, which means that the more bank deposits one unit will increase the economic growth, which is a special moral relationship according to the calculated morale (f), which is greater than its value tabular and that it explains the amount (45%), and according to these results, the null hypothesis is not accepted and the alternative hypothesis is accepted, that is, there is a relationship of the effect of bank deposits on economic growth in the long run.

As for the fourth model, which tests the relationship, the effect of foreign investment flows on long-term economic growth has an effect of (0.76), which means that the more foreign investment flows increase by one unit, the economic growth will increase, which is a special moral relationship according to the calculated morale (f), which is greater than Its tabular value and it explains the amount (67%), and according to these results, the null hypothesis is not accepted and the alternative hypothesis is accepted, that is, there is a relationship with the impact of foreign investment flows on economic growth in the long run.

The fifth model tests the relationship of the effect of the ratio of exports to GDP on economic growth in the long run. It has an effect of (0.65), which means that the higher the percentage of exports, the GDP, one unit, it will increase the economic growth, which is a special moral relationship according to the calculated significance (f). And it is greater than its tabular value and it explains the amount (43%), and according to these results, the null hypothesis is not accepted and the alternative hypothesis is accepted, that is, there is a relationship with the impact of the percentage of exports of GDP on economic growth in the long run.

The sixth model also tests the relationship of the effect of the ratio of loans to GDP on long-term economic growth, which has an effect of (0.84), which means that the higher the ratio of loans to GDP by one unit, the greater the economic growth, which is a special moral relationship according to the moral (f).) calculated and it is greater than its tabular value and it

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

explains the amount (62%), and according to these results, the null hypothesis is not accepted and the alternative hypothesis is accepted, that is, there is a relationship of the impact of the ratio of loans to GDP on economic growth in the long run.

As for the (DW) test, the models were able to exceed it after the first transformation of the data by repetition, as the calculated value for this test reached (1.57) for the first model, while for the second model, the value reached (2.16), and the third model reached (2.08), and the fourth model reached (1.83) and the fifth model reached (2.00) and the sixth model (2.12) and all of them are significant at the level of significance (5%) and these values are higher than the minimum (dl=1.257) and the highest (du=1.437) and at the same time (d-du=2.563) with a sample size (n=13) and (k=1), which indicates that the three models are devoid of the problem of autocorrelation between indicators, meaning accepting the null hypothesis and rejecting the alternative hypothesis.

Third, the Causality Test

The objective of conducting the (Lagrangian self-test) which is to test two hypotheses, namely that the series does not contain a unit root and the series contains a unit root and the reason for the (Lagrangian) multiplier. unit root. Where it is possible to decide on the existence of a causal relationship between two variables if it is ($p > 0.05$) and rejects if it is less than (0.05). economics are as follows:

1. The researcher assumes that there is a causal relationship between the average per capita share and economic growth, and through Table (8) it is noted that the first difference (DX1) does not cause the first difference (DY), because the probabilistic value p-0.889<0.05 and also the first difference (DY) does The first difference (DX1) is caused by the p-value of -0.573>0.05.
2. The researcher assumes that there is a causal relationship between financial intermediation and economic growth, and through Table (4) it is noted that the first difference (DX2) does not cause the first difference (DY), because the probabilistic value p-0.009 < 0.05 and also the first difference (DY1) does not cause The first difference is (DX2) because the p-value p-0.450>0.05.
3. The researcher assumes that there is a causal relationship between bank deposits and economic growth, and through Table (9) it is noted that the first difference (DX3) causes the first difference (DY), because the probabilistic value p-0.0367>0.05 and also the first difference (DY) does not cause the difference The first (DX3) because the p-value p-0.813>0.05.
4. The researcher assumes that there is a causal relationship between foreign investment flows and economic growth, and through Table (4) it is noted that the first difference (DX4) causes the first difference (DY), because the probabilistic value p-0.049>0.05 and also the first difference (DY) does not cause The first difference (DX4) because the p-value p-0.436 > 0.05.
5. The researcher assumes that there is a causal relationship between the ratio of exports to GDP and economic growth, and through Table (8) it is noted that the first difference (DX5) does not cause the first difference (DY), because the probabilistic value p-0.428>0.05 and also the first difference (DY) does not cause the first difference (DX5) because the p-value p-0.255>0.05.
6. The researcher assumes that there is a causal relationship between the ratio of loans to GDP and economic growth, and through Table (8) it is noted that the first difference (DX6) causes the first difference (DY), because the probabilistic value p-0.0367>0.05 and also the first difference (DY).) does not cause the first difference (DX6) because the p-value p-0.813>0.05

Table 8
THE CAUSAL RELATIONSHIP BETWEEN THE INDICATORS OF FINANCIAL LIBERALIZATION AND ECONOMIC GROWTH

Null Hypothesis:	F-Statistic	p- value
Y does not Granger Cause X1	0.61035	0.5737

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

X1 does not Granger Cause Y	0.11991	0.8891
Y does not Granger Cause X2	0.91457	0.4501
X2 does not Granger Cause Y	7.11754	0.009
Y does not Granger Cause X3	0.21358	0.8136
X3 does not Granger Cause Y	6.02452	0.0367
Y does not Granger Cause X4	0.95621	0.436
X4 does not Granger Cause Y	4.71077	0.0493
Y does not Granger Cause X5	1.72826	0.2554
X5 does not Granger Cause Y	0.97811	0.4289
Y does not Granger Cause X6	0.21358	0.8136
X6 does not Granger Cause Y	6.02452	0.0367

CONCLUSIONS

1. The ideas of financial liberalization came in the seventies of the last century in response to regional and international transformations and the increasing trend towards economic blocs and merger into entities to face great competition in light of financial globalization.
2. The policies of financial restraint had negative effects on the march of global economies in light of the desire to transition to a market economy, which gave rise to demands to free capital and interest rates and facilitate the entry of investments, which would have a positive impact on the stages of economic growth.
3. The success of financial liberalization policies requires more macroeconomic stability policies with the availability of legal frameworks that guarantee the process of capital liberalization.
4. To ensure the continuity of the mechanisms of financial liberalization, there must be a logical gradation in the liberalization process in line with the country's economic capabilities and qualifications in terms of resources, laws and an effective economic environment that reflects the extent to which these policies are absorbed, which is reflected in economic growth.
5. Financial liberalization includes the abolition or easing of restrictions on the movement of capital coupled with the independence of banking and financial institutions in making decisions, which reflects more transparency in achieving economic growth in the country.
6. The independence of the Central Bank of Iraq after 2003 in accordance with the provisions of Law 64 of 2004 had a great impact on the application of economic liberalization programs, especially in the printing of a new Iraqi currency that enjoys international support coupled with a large balance and purchasing power and integration with the international financial system, international organizations, the International Monetary Fund and the World Bank.
7. By studying the indicators of financial liberalization, which include the level of per capita GDP, we find that there is a significant improvement in this average resulting from the large increase in the gross domestic product, which reflects that there is a positive relationship between this average and the economic liberalization programs pursued by the state. The percentage of this average reached a maximum in 2004, amounting to about 49.62%.
8. By following the foreign investment index to the output in Iraq, we find that there is a decrease in attracting foreign investment, which amounted to about 2.17% in 2004, rising to 8.1% in 2013. This is a result of the improvement in the security and political situation and the development of special legislation in investment.
9. There is a significant development in the volume of financial intermediation ratios, which amounted to about 33.82% in 2003, rising to 36.08% in 2010 to reach a maximum in 2015 of about 43.28%, which reflects that banks have taken a major role in lending operations and the increase in the volume of credit activity, which is reflected To increase the volume of investment and economic growth in the country
10. The financial and banking system in Iraq played a major role in mobilizing savings through the total bank deposits-to-output index, as the ratio reached 29.5% in 2010.

RECOMMENDATIONS

1. Developing the performance of the financial and banking system and surrounding it with many laws that guarantee its sustainability and continuity as an intermediary between savers and investors.

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.

2. Gradualization in financial liberalization procedures in line with the capabilities and qualifications of the Iraqi financial and banking system, because haste in these procedures may have negative effects on the inability to protect the national economy from international shocks and crises.
3. Develop the Iraqi financial markets, increase the volume of contributing capital, and take measures regarding the liberation of capital and freedom of entry and exit from the country.
4. Creating an attractive environment for foreign direct investment by providing many laws that guarantee the right of the investor, which will be reflected in the increase in the volume of investment and economic growth.
5. Getting rid of many of the policies and laws of financial restraint that contributed to the isolation of the Iraqi economy from the global economy.
6. Developing foreign trade, increasing the volume of exports and reducing imports through a policy of self-sufficiency and creating a positive trade balance that will be reflected in the economic growth in the country.
7. Striving to achieve a fixed and fair exchange rate in a manner that ensures a smooth flow of external and internal capital movement and without losses.
8. Targeting inflation in the country by controlling the money supply to ensure the maintenance of the purchasing power of the Iraqi dinar through a targeted monetary policy by the Central Bank of Iraq.

REFERENCES

Al-Shammari, M.S., & Hamza, H.K. (2015). International finance: Theoretical foundations and analytical methods, baghdad, first edition.

Al-Shammari, & Mayh Shabib, A. (2015). The financial sector between the problems of reality and the prospects for reform (a study in selected Arab countries). *Al-Ghari Journal of Economic and Administrative Sciences*.

Al-Ghalbi, N., & Abdul-Hussein Jalil. (2012). Financial and banking reform in Iraq, Past attempts and future visions. *Journal of Economic Studies, 27*, House of Wisdom, Baghdad.

Abbas, R.J. (2019). Monetary reform in Iraq in the light of some international experiences, Master's thesis, College of Administration and Economics, University of Kufa.

Al-Basri, K.A., Hassan, B., & Abdel-Hadi, K. (2009). The policy of economic reform in Iraq (2003-2008), a series of books by the Iraqi Institute for Economic Reform.

Al-Rikabi, & Ghaleb S.B. (2012). Monetary policy in the light of reform trends in the Iraqi Economy, PhD thesis, College of Administration and Economics, University of Kufa.

Al-Ghalbi, S., Abdul-Hussein Jalil, A., Al-Araji, S., & Kazem, Saad Al-Araji. (2016). Fundamentals of money and banks, 135.

Ben Mazzou, S., Zakaria, A., & Kamal, N. (2013). Measuring the relationship between financial liberalization and economic growth in Algeria, Standard Study for the Period (1970-2010), *Al-Bahith Journal*, (13).

Fatima Salam, A. (2017). The effect of the financial sector variables on private and local banking investments, Master's thesis, College of Administration and Economics, University of Kufa.

Hassan, K. (2009). Financial globalization and its implications for economic growth in the gulf cooperation council countries, PhD Thesis, College of Administration and Economics, University of Kufa.

Midiani, M., & Talhawi, A.F. (2015). The impact of financial liberalization policies on economic growth in the countries of the organization of Islamic cooperation, Research available on the Internet.

Meguid, A., & Muttalib, A. (2006). Economic globalization. University House, Alexandria, 2006.

Nabila, A., Belghnamy, N., & Jamal El-Din, S., & Sahnoun, A. (2017). Financial liberalization and its reflection on foreign trade financing techniques in Algeria. *Journal of North African Economics, 17*, 2017.

Pasha Abdul Karim & Abdul Nabi, K. (2009). The financial and banking institution and its role in providing resources and directing investment in Iraq, Al-Mansour Magazine, (12).

Saleh, M. (2009). The appearance of Muhammad, the monetary policy strategy in Iraq for the years 2009-2013, Hammurabi Center for Research and Strategic Studies, No. 1, 2009.

Sami, A. (2002). Developing the financial sector structure and monetary and banking policy tools to activate the Iraqi economy, The Third Scientific Conference, House of Wisdom, Baghdad.

Citation Information: Abbood Al- Rubaye, R.K. (2021). The effect of implementing the financial liberalization policy on economic growth in Iraq: analytical study for the period (2003-2015). *Academy of Entrepreneurship Journal, 27*(6), 1-16.