Available online at www.rajournals.in

International Journal of Management and Economics Invention

ISSN: 2395-7220

DOI: 10.47191/ijmei/v11i1.08

Volume: 11 Issue: 01 January 2025

International Open Access

Impact Factor: 8.473 (SJIF)

Page no. 3854-3865

The Impact of the Balance of Payments on the Development of the Iraqi Economy (An Econometric Study for The Period 1992-2022)

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ARTICLE INFO

Published Online:
20 January 2025

ABSTRACT

The Iraqi economy has not witnessed " a clear stability since 2003 until now due to the continuous fluctuations in the prices Global oil , which affects its annual revenues " in particular because it is a unilateral rentier economy, we find that more than 80% of Iraqi exports Oil, as it is considered the general determinant of the country's economy , while the rest of the exports are commodities of industrial and agricultural products.

On the other hand , the balance of payments did not provide a remarkable perception of the economic contraction of a country of previous years, which helps To find solutions to the economy, which is affected by fluctuations and shocks in the local, Arab and global macro economy, where the Iraqi balances varied between the deficit and surplus for previous years.The research aims to see the extent of development and growth of the Iraqi economy in light of the continuous disparity of the Iraqi balance of payments being a mirror reflecting it and contribute to finding solutions and alternatives to oil exports and commodity diversity.

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KEYWORDS: balance of payments - Iraqi economy - development - econometric study

INTRODUCTION

The Iraqi economy is an economy that depends on its oil revenues in the first place, as its revenues represent 42% of the gross domestic product, so that it is affected by economic and political fluctuations in global markets and neighboring countries. The balance of trade is the most interactive aspect of the Iraqi economy and the most component, where it suffers from a clear imbalance due to dependence on oil and lack of commodity diversity, either imports that constitute a diverse basket of consumer and investment goods, where they increase and decrease depending on the economic, political and social conditions, which leads to an increase in class difference between members of society affecting the average income of the Iraqi individual and notes a disparity in the Iraqi balances after 2003, where the deficit and surplus were observed during previous years by about 34.90 million Dollars for the year 2003, but in 2005, it amounted to (-5.85) million dollars, while in 2020, it amounted to (-9.84) million dollars due to the Corona pandemic.

Research problem: The research illustrates the problem of continuous imbalances in the Iraqi balance of payments, explaining its impact on the development and economic growth of the country.

The importance of research: The balance of payments is of clear importance in clarifying the economic independence and commercial exposure of the Iraqi economy and calculating the extent of progress and development in it.

Research Objective: The research aims to see the extent of development and growth of the Iraqi economy in light of the deficit and the continuous surplus in the balance of payments.

Research hypothesis: The research assumes a positive relationship between the balance of payments and the growth of the Iraqi economy

Research Structure: The research was divided into several basic paragraphs, where the first paragraph included the reality of the Iraqi economy in terms of gross domestic product and foreign trade, as well as the "industrial and agricultural sectors.The second paragraph included the development of the Iraqi balance of payments, reviewing the values of exports and imports, while the third paragraph dealt with quantitative analysis of foreign trade and the balance of payments, then the research concluded with conclusions and recommendations.

First: The reality of the Iraqi economy

Iraq is one of the most oil-dependent countries in the world, as oil revenues accounted for more than 90% of its exports, nearly 85% of the general budget revenues, and nearly 42% of GDP, which is an excessive dependence on oil The Iraqi economy is exposed to shocks and macroeconomic fluctuations. The decline in oil revenues, as a result of the Corona pandemic, had a significant impact on GDP in 2020, which shrank by (15. 7%). The decline in oil revenues also led to a significant decrease in public expenditures, especially investment ones, which further contracted the Iraqi economy in 2020.Mohamed (Naji Mohamed.2020)

World Bank statistics indicate GDP growth of (0.9%) for the first half of 2021, and growth of the non-oil economy by more than (21%) in the first half of 2021. This is due to the strong performance of the service sectors after the easing of health restrictions to prevent the Corona virus, especially after the spread of vaccination campaigns and the decrease in infections. Iraq's oil share also increased as a result of OPEC gradually raising the production quotas of member countries, which was reflected in the increase in GDP. (Central Bank of Iraq.2022)

The inflation rate increased slightly in Iraq during the period from January to July 2021 by about (5.2%) and (6.3%) respectively, due to the increase in domestic demand and the insufficient supply of goods to meet the full growing demand. Inflation has also been affected by lower import prices in some exporting countries facing a depreciation in the value of their local currencies.

The financial statements for the first half of 2021 show important gains in financial revenues as a result of the increase in the average price of a barrel of exported Iraqi oil to approximately (64) dollars. The recovery in public revenues is also due to the devaluation of the Iraqi currency and the rise in the value of dollars sold to the central bank. In addition, the reforms of the General Authority of Customs and the General Tax Authority contained in the 2021 budget law began to bear fruit, as sovereign revenues increased from what they were previously (53%). The budget deficit is expected to shrink significantly until the end of 2021.

Iraq's unemployment rate of 40.2 million people is more than 10 per cent higher than its pre-COVID-19 level of 12.7 per cent. As of late 2021, the unemployment rate remained high among IDPs, returnees, and women seeking work, as well as pre-pandemic self-employed and informal economy workers. Economic conditions in Iraq have gradually improved in parallel with the recovery of international oil markets, but this recovery remains fraught with major risks posed by structural imbalances, including obstacles facing the management of public investments that have affected the level of public service delivery, including:

: (Mohamed Naji Mohamed.2020)

· Slow settlement of arrears, especially those related to public sector wages.

· Limits of large banking sector credit facilities for state-owned banks and central bank granted to the public sector.

· Political instability, weak health care system, and rampant corruption in state sectors.

(Oil price volatility and the COVID-19 pandemic have amplified Iraq's economic problems, reflecting two years of steady recovery. These twin shocks have deepened existing economic and social fragility (Mahdi Sahar al-Jubouri.2020))

In 2020, budget revenues fell by more than 9 percentage points to 32 percent of GDP, with oil revenues shrinking. To deal with this situation, the Iraqi government has reduced non-binding expenditures, including cutting public investment by 87 percent and rescheduling part of the domestic debt. The Iraqi dinar was devalued by 18.5 percent against the US dollar, resulting in increased oil revenues. Despite these measures, the fiscal balance still stands at 6.4 percent of the GDP deficit. Financing was primarily secured through the Central Bank of Iraq (Iraqi Ministry of Planning and Development Cooperation.2019)

1. Gross Domestic Product (GDP)

The absence of fiscal space makes the Iraqi government unable to provide incentives to the Iraqi economy, which relies heavily on oil revenues for its growth and fiscal revenues. As a result, the country suffered the largest contraction it faced since 2003, with GDP contracting by 10.4% in 2020, on the back of the OPEC+*) oil production reduction agreement. (Central Bank of Iraq.2019)

In addition to the dark shadow that the coronavirus pandemic has cast on non-oil sectors, including the decline in religious tourism services following border restrictions. Because of this, GDP per capita, a measure of individual well-being, is estimated to have shrunk by 15% in 2020. This is much higher than in countries in the region, and those that are comparable to Iraq's income levels, according to the World Bank.

(OPEC)is an intergovernmental organization of 13 countries. Founded on 14 September 1960 in Baghdad by the first five members (Iran, Iraq and Kuwait). Saudi Arabia and Venezuela have been headquartered in Vienna, Austria since 1965, although Austria is not an OPEC member.[1] According to OPEC, by the end of 2021, 80.4% of the world's proven oil reserves are in OPEC member countries..

The economic downturn has also affected the well-being of Iraqis, especially among workers in the informal sector and those who work in the self-employment sector. Unemployment continued to be above 10 percent from pre-2019. Limited fiscal space hampered the flow of remittances of financial support, including rations, with the proportion of households receiving such support falling by more than 8

percent. The loss of income and social support has increased vulnerability to food insecurity. Iraq's fiscal balance has been affected by the oil crisis, forcing the government to reduce non-binding expenditures and accumulate arrears.

2. FOREIGN TRADE

The value of Iraqi merchandise exports amounted to about 4.6 trillion Iraqi dinars in 2020, equivalent to (3.8) billion dollars. Thus, it recorded an increase of 19.9% compared to 2019, reaching 3.9 trillion dinars, equivalent to (3.3) billion dollars, a compound growth rate of (155.7%) between 2016 and 2020. (Central Bank of Iraq.2020)

According to the Iraqi Central Bureau of Statistics, February witnessed the highest percentage of merchandise exports (31.4%) for the year 2020, reaching 1,455.5 billion dinars, equivalent to (1,231.4) million dollars. June recorded the lowest percentage (0.1%), which amounted to 2.3 billion dinars, equivalent to (1.9) million dollars..

The first half accounted for the highest percentage of merchandise exports (51.9%) for the year 2020, reaching 2,400.6 billion dinars, equivalent to (2,031.0) million dollars..

Asian countries accounted for the highest percentage (60.4%) of total merchandise exports in 2020. India ranked highest (46.9%), followed by the United Arab Emirates (39.0%).%).

Exports of automotive gasoline accounted for (94.5%) of the total merchandise exports for 2020, followed by light oils and their preparations (24.9%) and basic greases (6.5).%).

The value of oil derivatives exports amounted to 2.8 trillion Iraqi dinars for the year 2020, equivalent to (2.4) billion dollars, an increase of (82.4%) compared to 2019. The value of exports of oil derivatives in 2019 amounted to 1.5 trillion Iraqi dinars, or (1.3) billion dollars, with a compound growth rate of (150.3%) between 2016 and 2020..

The total exports of crude oil, products and other commodities in 2020 amounted to (57.1) trillion Iraqi dinars, equivalent to about (47.9) billion dollars. This recorded a decrease compared to 2019, reaching (98.2) trillion dinars, equivalent to (83.1) billion dollars, with a compound growth rate of (2.5%) between 2016 and 2020.(**Hawraa Ali Hussein: 2021)**

The value of crude oil exports reached 49.7 trillion Iraqi dinars in 2020, equivalent to 41.8 billion dollars. This is with a decrease of (46.5%) compared to 2019 (92.8 trillion dinars) equivalent to (78.5) billion dollars, and a compound growth rate (-0.9%) between 2016 and 2020.

The total value of imports for 2020 of commodity materials and petroleum products amounted to 18.4 trillion Iraqi dinars, equivalent to (15.4) billion US dollars. Thus, it recorded a decrease of (25.9%) compared to 2019, reaching $ 20.9 billion, with a compound growth rate of (-35.2%) compared to 2018. .

The total imports of non-oil commodity materials amounted to 16.5 trillion Iraqi dinars, equivalent to (13.8) billion US dollars. Thus, a decrease of (23.2%) was recorded from 2019, reaching $ 18.1 billion, with a compound growth rate of (-36.1%) compared to 2018. The total imports of petroleum products amounted to 1.9 trillion Iraqi dinars, equivalent to (1.6) billion US dollars. Thus, it recorded a decrease of (43.3%) from 2019, reaching $ 2.8 billion, a compound growth rate (-25.2%) compared to 2018..

November occupied the highest percentage of total imports for 2020 (16.3%), reaching $ 2.5 billion. January accounted for the highest percentage of imports of petroleum products (19.3%), amounting to US$ 301.1 million. November recorded the highest percentage of non-oil merchandise imports (17.2%), reaching $ 2.4 billion..

Iraq is the thirty-ninth trading partner of the European Union. It represents 0.3% of the EU's total merchandise trade with the world in 2020..

The European Union is Iraq's fourth largest trading partner, accounting for 12.1% of Iraq's total trade in goods with the world in 2020. 11.3% of Iraq's imports and 12.7% of Iraq's exports came from the European Union, as the total trade in goods between the European Union and Iraq in 2020 amounted to (10.8) billion euros..

EU imports amounted to €7.3 billion, consisting mostly of fuel and mining products (€7.25 billion, 99.3%). EU exports totaled €3.5 billion, were more diversified than imports and dominated by machinery and transport equipment (€1.4 billion, 40.0%). It is followed by agriculture and raw materials (€0.7 billion, 20.0%), as well as chemicals (€0.7 billion, 20.0%). (Ali Ismail Abdel Majeed.2020).

3. INDUSTRY

The final results indicate that the number of large industrial establishments operating in Iraq in 2020 amounted to 719 establishments, distributed according to the main economic activity, to the activities of the extractive industry (except oil) and the manufacturing industry. The results showed that the manufacture of other non-metallic mineral products ranked first in the number of establishments within the manufacturing activities, which constituted 50%. It is followed by the activity of the food products industry with 30%%.

The rest of the activities accounted for 20% of the total different industries. Comparing the number of establishments operating in 2020 with 670 establishments in 2019, we notice an increase in the number of establishments by 7.3% due to the growth of the private sector, according to the Iraqi Central Bureau of Statistics .

The total number of industry workers in 2020 was about 126,790. They are distributed among the activities of various industries, including 473 unpaid workers as owners of establishments or their families in the private sector..

Coke and refined petroleum products contributed 24% to employment, followed by other non-metallic minerals at

20.1%. Despite the increase in the number of establishments, there was a decrease in the number of employees by 6.5% compared to 2019, which amounted to 135,629. This is due to the new retirement law, which reduced the number of workers in the public and government sectors, which was implemented in early 2020. As well as the negative impact of the repercussions of the Corona pandemic on the economy in general In general, and industrial activity in particular. This led to a decrease in wages and benefits in 2020, reaching 1.408 trillion Iraqi dinars, compared to 1.554 trillion dinars in 2019, a decrease of 9.4%. (Jawad Lotfi Hamid: 1988)

Despite the increase in the number of establishments in 2020, production decreased to reach 6.717 trillion Iraqi dinars, compared to 7.316 trillion dinars in 2019, a decrease of 8.2%. The reason is due to what was described as the harsh conditions caused by the (Covid-19) virus and the resulting suspension of facilities for some months. In addition, raw materials, raw materials and other inputs were affected by the decrease in production, reaching 3.476 trillion dinars, a decrease of 9.1% compared to 2019. (Mohamed Naji Mohamed.2020))

4. FARMERS

The distribution of the exploitation of the area of Iraq The total area of arable land in Iraq for the year 2020 was about 18.14 million dunums. The highest percentage of arable land out of the total arable land was 30.5% in Nineveh Governorate. The total cultivated area in Iraq reached 15.14 million dunums, and the highest percentage of cultivated area amounted to 42.7% in Nineveh Governorate of the total cultivated area in Iraq..

The total number of workers in agriculture in Iraq for 2020 reached 317.34 thousand workers. The highest percentage of workers in agriculture was 18% in Salah al-Din province of the total number of workers in agriculture in Iraq.

The total area of orchards in Iraq for 2020 amounted to 1.444 million dunums. The highest percentage of the area was 34.1% in Anbar governorate of the total area of orchards in Iraq. The total number of farmers in Iraq reached 163.1 thousand farmers, and the highest percentage of farmers was 14.1% in Babil province.

On the external level, the current account deficit turned into a surplus of (4.7%) of GDP in the first quarter of 2021, which contributed to the increase in the total official reserves of the Central Bank of Iraq by about (5) billion US dollars to reach (58.5) billion US dollars in the first quarter of 2021 compared to (54) billion US dollars at the end of 2020

However, despite the improved prospects for the Iraqi economy and the recovery of global oil markets, the repercussions of the Coronavirus variant and the challenges of climate change pose new sources of risk. The economy is expected to recover gradually on the back of higher oil prices and increased OPEC+ production quotas, which are due to be phased out in 2022. Oil GDP will be the main driver of growth in the medium term. Although non-oil GDP is expected to improve, it will remain at an average growth rate of less than 3%. During the years (2021-2023) due to the mutated generations of the Corona pandemic, in addition to the challenges facing the Iraqi economy, foremost of which is the shortage of water and electric power, which affects agriculture and industry. (**Central Bank of Iraq.2021**)

Second: The evolution of the Iraqi balance of payments

Foreign trade is important in achieving economic growth and is one of the most important conditions for attracting foreign investment, and the main task of any development process is to liberate the productive forces and develop the productive system by replacing the most effective production methods with the old ones. (**Abdul Raouf Rahban.2004**))

Since the state of the Iraqi economy, like the rest of the economies of developing countries, which are exposed to the outside world, due to its economic and geographical characteristics, as oil represents the largest part of its domestic exports as well as the first financier in its revenues and gross domestic product, as the total of what it obtains from consumer, investment and capital goods is from its oil revenues, so we cannot ignore that the Iraqi economy, like other developing oil countries, occupies great importance in foreign trade in general and oil revenues. Especially. Hence, Iraq needs an effective commercial activity that contributes to the advancement of its economic reality..

*** The development of the value of exports:** Visible exports are the main axis of economic policy-making, and one of the most important sources of foreign income that relieve pressure on the balance of payments and create job opportunities, as the government's adoption of the export growth strategy would encourage producers to produce and raise production capacity with attention to improving the quality of goods to contribute to competition in the global market.

Since the developments of the external sector play a major role in the Iraqi economy because of the dominant role of the oil sector over exports, the trade of non-oil exports recorded fluctuations in their value and growth rates, which was reflected in the performance of the Iraqi economy. During the period (2003-2022), the value of total exports for the year 2003 amounted to about (18,800) billion dinars. (Farhan Saad Abdul Karim: 2011).

As for the value of GDP, it was about (29,586) billion dinars, while the ratio of exports to GDP is (63.55%), and the reason for this is due to the entry of US forces and the overthrow of the regime at that time, which reflected negatively on production capacity and the cessation of investment projects, which led to a decrease in the amount of commodity exports and Iraqi oil exports in the world markets, while the period from (2004-2008) witnessed a rise in the volume of growth

Iraqi exports to rise with the GDP gradually towards the world The year 2004 recorded an increase in exports by (25,877,930) millidinars and an annual growth rate of (37.64%), and the amount of GDP for the same year (53,236) billion dinars and a growth rate of (79.94%) As for its ratio to GDP, it amounted to (48.61%), while in 2006 the value of the RRats (44,786) billion dinars with an annual growth rate of (28.66%) The escalation continued to 2008 and amounted to (76,025) billion dinars with a growth rate of (53.02%) to increase with the domestic product as well to reach (157,026) billion dinars and a growth rate of (40.89%) and its percentage to GDP (48.42%) The reason for this is due to the formation of the Iraqi government in 2004 and the gradual return of economic relations between Iraq and the countries of the world and the start of contracts with foreign companies to resume oil production and export through coordination with OPEC, and in conjunction with The rise in oil prices, which left an impact on the recovery of the Iraqi economy on the basis that oil is the main source of its revenues. (**Mohamed Ali Hamid.2022**)

During the period (2009-2012), the year 2009 witnessed a decrease in the volume of GDP. Compared to the previous year, it reached (131,275) billion dinars with an annual growth rate of (-16.40%) due to the decrease in the volume of exports by (46,133,100) billion dinars and an annual growth rate of (-39.32) %).As for 2021, it witnessed global economic stability, due to global openness and partial recovery fromThe Corona epidemic crisis with the rise in global oil prices, which led to a significant increase in the growth rates of global exports in addition to the increase in cash reserves held by central banks due to the high oil prices, the value of exports for the year (2021) recorded (107,048) milli-r-dinars, with an annual growth rate of (91.92%) As for the annual growth rate of GDP, it reached (51.65%) and the ratio of exports to GDP was about (35.51%), while the compound growth rate for the period from (2003-2021) for GDP at current prices reached (8.6%) while for exports it reached (1.43%)). (**Central Bank of Iraq, 2003**).

*** The evolution of the value of imports:** affect the process of economic and social development in two ways are (size and structure) on imports, in terms of volume, imports are increasing as a result of the growth process and because of the high consumer and investment demand resulting from the development agreement, the growth process leads to an increase in consumer demand as a result of increased incomes and the consequent increase in consumption, as well as changing the structure of The demand is increasing for goods with high import content, and the development process leads mainly to an increase in demand for intermediate goods and services necessary to operate these projects, and since the productive apparatus of Iraq is characterized by With its weak flexibility, lagging behind and not fully responding to increased domestic demand, this has led toResorting to imports for the purpose of meeting the market's need for goods and services that were unable to the Iraqi economyIn terms of the structure of imports, it is also affected by the development process, as the structure of imports is subject to

due to the process of economic development and industrial development of important changes coinciding with the changes that have occurred inThe structure of both demand and production, the higher the rates of development, the relative importance of imports fromConsumer goods to decline. And the benefit of imports being a means through which to obtainVarious capital goods that are not available locally, or are produced in insufficient quantities locally or obtainedat an economic cost cheaper than producing them locally, and the best solution lies in importing them from abroad, it is clear from the table that the value of imports for the period from (2003-2021)Commodity imports have faced rise and fall, depending on the economic conditions experienced by the country.And the extent of the impact of these conditions on imports, during the period (2003-2007) we note that the value of importsIraqis in 2003 recorded a value of (18,238) billion dinars, and the value of the domestic productThe total is about (29,585) billion dinars and the ratio of imports to GDP (%61.65), which is the highest percentage of imports during the study period due to the low output Gross domestic . After this year, Iraqi imports witnessed an increase in their values, as they increased from (30,951) billion dinars in 2004 with an annual growth rate of (69.70%) to (43,568) billion dinars for the year 2005 with an annual growth rate of (40.76%), increasing the value of GDPBy (53,235-73,533) billion dinars and an annual growth rate of (79.94)%

(%38.13) for the two consecutive years, the ratio of imports to GDP reached (58.14%, 59.25%) The reason for this increase is due to openness to the outside world and an increase inDemand for consumer goods, which led to an increase in the volume of imports and the government made significant efforts to increaseCommodity stock of foreign goods and merchandise to meet consumer requirements, then Iraqi imports were recordedFor the years (2006-2007) a decrease reaching (32,287-24.5420) billion dinars on respectively, with annual growth rates of (-25.89%) to (-23.99%) and annual growth rates of GDP Total (29.99%-16.60%) This decline was due to the decline in oil prices, which are considered the financierPresident of Iraq's imports, which was accompanied by a decrease in the values of Iraqi imports, even at the levelAfter that, Iraqi imports began to record a continuous increase in their value for the period (2008-2013) Imports for the year (2008) recorded an amount of (41,769) billion dinars, with a growth rateAnnual rate of (70.19%), with an annual growth rate of GDP (40.89%) Output growth in excess except in 2009, the annual growth

was (-16.40%) as for the percentage of imports to GDP reached (37.00%) for the year 2009, up to 2013 to record imports.

The growth rate is (0.58%) and the ratio of imports to GDP is (25.29%).

The reason for this increase in imports is to: First: Increase in oil exports and revenues derived from them as a result ofThe entry of hard currency into the State, Irrational government spending resulting from increased wages and salariesThis has led to an increase in the need for imports and to meet consumer needs III. Low production capacities to meetdomestic needs, IV. Intense competition faced by domestic production as a result of the opening of foreign markets

Importing products and their invasion of local markets without restrictions or controls V. Adoption of the dumping policygoods by the state, while the period (2014-2016) witnessed a decrease in the value of Iraqi imports onFor consecutive years, the value of imports decreased to approximately (62,004,382, 46,346,415)(40,707,520) billion dinars with annual growth rates of (-10.40), (-25.25%), (-12.17)%)This resulted in a decrease in the annual growth rates of GDP

- Ethnic balance of payments analysis

The ratio of imports to GDP was approximately (23.28%(20.71%)The reason for this decline was the unstable political and economic conditions withinIraq as well as the entry of terrorist organizations (ISIS) into some Iraqi areas, which led to a decrease in the value of imports, while their value began to rise for the following years (2017-2018-2019-2020) and at rates Close growth, except for 2020, it recorded an annual growth rate of (-17.070%) with a low growth rate GDP of (-28.47%) The reason for this decrease is due to the instability of condition Political, economic, social and the Corona pandemic (COVID-19). As for 2021 Imports have achieved approximately (59,881,920) billion dinars with a positive annual growth rate.About (4.37%) and the ratio of imports to the gross product was about (19.87%) and the value of the output was recordedThe total domestic (301,439) billion dinars and the reason for its escalation is due to the rise in oil prices, whichIt led to a rise in the prices of local products and an increase in demand for international products. As for the growth rate.

The compound for the period from (2003-2022) amounted to GDP at current prices (8.6%) For imports, it amounted to (1.73%) for the above period. (Mahdi Sahar Al-Jubouri.2020)

Third: Quantitative Analysis

1. Descriptive statistical analysis of study variables for the State of Iraq

Data were collected on the study variables for the period (1992-2022) and to conduct the descriptive analysis of those variables, where the sample size reached 30 views for each of the variables studied, and therefore this element was devoted to reviewing the data related to the study variables by presenting the descriptive data analysis as follows:

Y = Foreign Trade (FT)

X1=Merchandise Trade Index (CTI)

X2= Trade Balance Index (TBI)

X3= Oil Resources Revenue Index (ORRI)

X4 = (Overall Balance) Balance of Payments Index (BPI)

X5 = Export Value Index (EVI))

X6 = Import Value Index (IVI))

Foreign trade measures include the values of exports and imports, the trade balance, the balance of payments and the trade balance represents the difference between the value of exports and the value of imports, if the difference is positive, this means that there is a surplus in the trade balance, but if the difference is negative, this represents a deficit in the trade balance, while the volume of foreign trade includes the total value of exports and imports. That is, the trade balance is the account that shows the country's exports and imports and the amount of surplus or deficit in the trade balance. The balance of payments is the record that summarizes all the financial and commodity exchanges that individuals, companies, governmental and non-governmental institutions in a country carry out with individuals, companies, and various institutions in the rest of the world. The deficit and surplus in the balance of payments in economic terms represent the outcome of the net balance of transactions, which is called the surplus if the remittances entering the country are greater than those leaving it or the deficit in the reverse case..

The balance of payments is a record of all international trade and financial transactions carried out by the inhabitants of a country, and the balance of payments consists of three elements: the current account, the financial account, and the capital account. Total Balance (US$ Million) | Current Account (US$ Million) | Net Errors (US$ Million) | Current Account Balance (US$ Million) | Goods Balance, Services and Income (US$ Million) | Trade Balance Balance (Commodities) (US$ Million) | Share of Trade Balance Balance in Quarterly GDP (%) Merchandise Exports (US$ Million) | General Goods (US$ million) | Non-cash gold (US$ million).

Indicator description: The trade balance, also known as net exports, is the difference between a country's exports and imports over a given period of time, which shows whether a country has a surplus (exports are greater than imports (or deficit) imports are greater than exports (in its foreign trade).

1.1 - Analysis of the evolution of variables and their graphical representation:

Y = Foreign Trade (FT)

The following figure shows the results of the development of the foreign trade variable in Iraq.

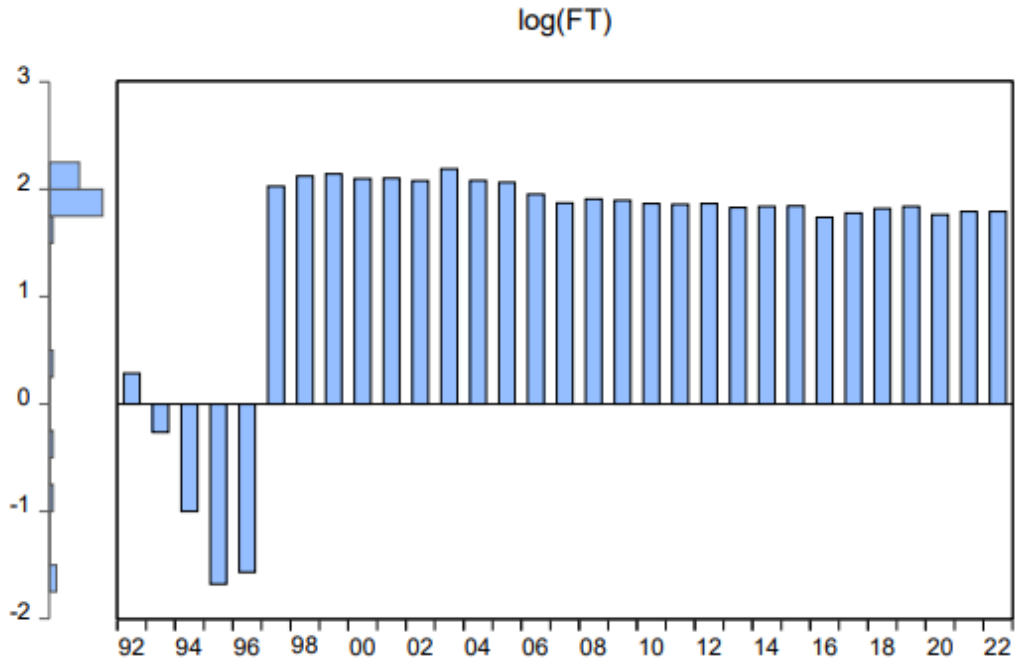
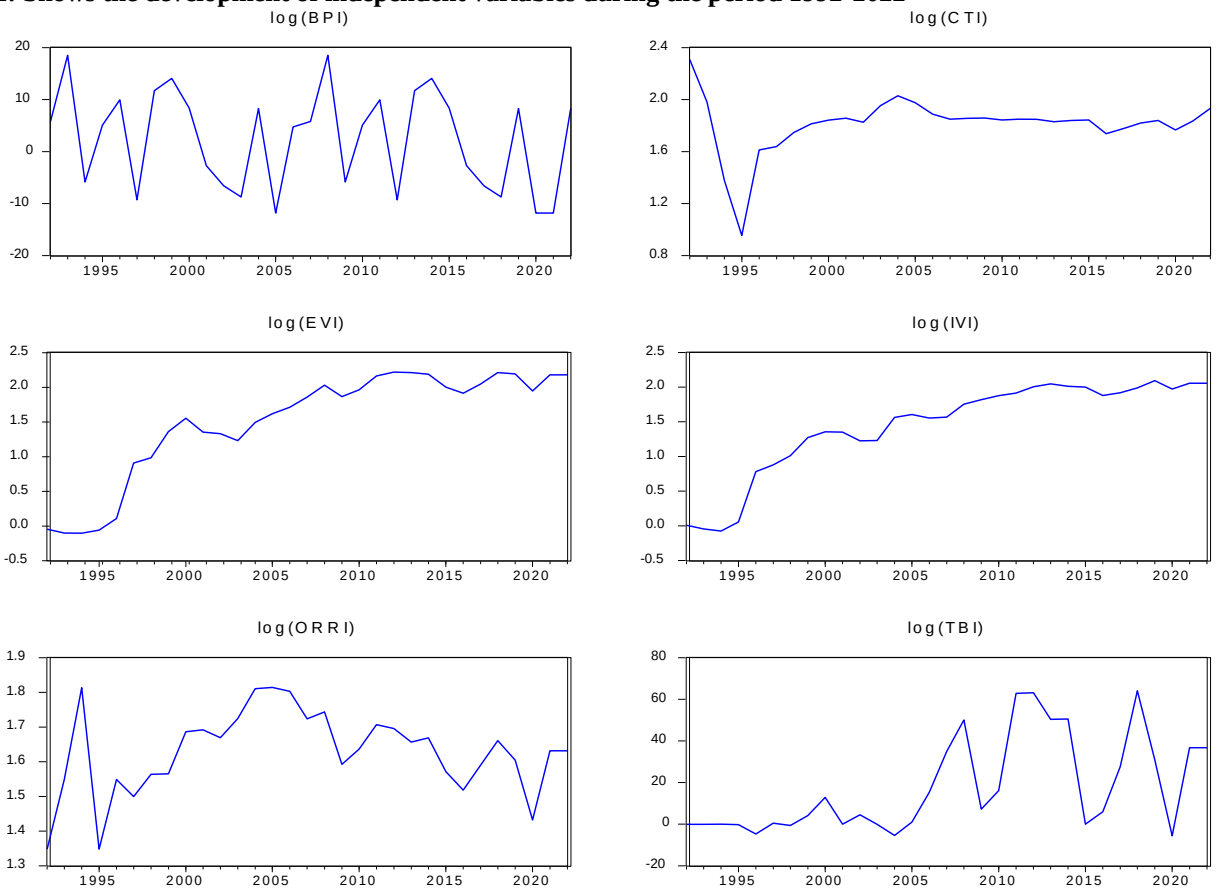


Figure 1: Results of the development of the foreign trade variable in Iraq

The above figure shows the development of Iraq's foreign trade, we notice a negative decline in the first years of the study period, where a continuous decline during the first years and then know a sharp rise in foreign trade, of course, the cause of the problems of political instability during that period, but return during the year 1998 to its highest value during the study period, then we witness continuous stability until the end of the study.

Figure 2: Shows the development of independent variables during the period 1992-2022



Source: Prepared by the researcher based on World Bank statistics

The above figure shows the fluctuating evolution of the variables, as for the variables of the trade balance and the revenues of oil resources, we notice a continuous positive development through the study phase of the variables.

2.1 - Results of descriptive analysis of variables

A number of statistical methods have been adopted for the purpose of presenting and analyzing these data, and the results are shown in the following table:

Table 1: Descriptive statistics table of dependent and independent study variables

	LOG_BPI_	LOG_CTI_	LOG_EVI	LOG_FT_	LOG_IVI_	LOG_ORRI	LOG_TBI_
Mean	2.404000	1.809985	1.496617	1.481287	1.441740	1.628888	17.98774
Median	5.066000	1.841686	1.855363	1.858363	1.604376	1.636049	5.943622
Maximum	18.49000	2.306353	2.214684	2.188183	2.091750	1.813965	64.03316
Minimum	-11.84200	0.954444	-0.108878	-1.677781	-0.074865	1.347877	-5.613896
Std. Dev.	9.612561	0.216768	0.780243	1.089230	0.677488	0.121025	23.15983
Skewness	-0.089749	-1.905113	-1.096188	-2.077084	-1.166321	-0.552988	0.811614
Kurtosis	1.670129	9.961178	2.890686	5.800195	3.223192	3.099975	2.199226
Jarque-Bera	2.326004	81.34377	6.223848	32.41851	7.092591	1.592852	4.231639
Probability	0.312546	0.000000	0.044515	0.000000	0.028831	0.450938	0.120534
Sum	74.52400	56.10952	46.39514	45.91989	44.69395	50.49552	557.6198
Sum Sq. Dev.	2772.040	1.409652	18.26335	35.59267	13.76970	0.439414	16091.33
Observations	31	31	31	31	31	31	31

Source: Prepared by the researcher based on the outputs of the eviews 12 program

LOG_FT (Foreign Trade):

· Mean : 1.481287 Mean is the average that expresses the values of the collected data.

· Median : 1.858363 The median is the central value that divides the data into two equal halves, which is a measure that is more resistant to outliers..

· Maximum: 2.188183 is the highest note value in the group.

· Minimum: -1.677781 is the lowest observed value in the group.

· Standard deviation: 1.089230 Measures the prevalence of data about the arithmetic mean. The higher the standard deviation, the greater the prevalence.

· Skewness: -2.077084 measures the deviation of the distribution from the standard deviation (0). A negative value indicating a large deviation to the left.

· Kurtosis : 5.800195 Measures the intensity of data "curvature" or deviation from the normal distribution form. A high value indicating a peak or excessive curvature.

· Jarque-Bera test: 32.41851 Tests to determine how well the data distribution matches the normal distribution. A high value indicating a possible mismatch with the normal distribution

LOG_BPI (Balance of Payments Index):

· Mean : 2.404000

· The arithmetic mean is the average of the values in the set, which represents the central position of the data.

· Median : 5.066000

· The median is the value that divides the data into two equal halves, which is useful for determining the homogeneity of the data..

The maximum (

· Maximum: 18.49000

· is the highest note value in the group.

· Minimum: -11.84200

· is the lowest note value in the group.

· Standard Deviation : 9.612561

· Measures how spread values are around the arithmetic mean. Higher standard deviation indicates greater variance in data.

· Skewness : -0.089749

· Reflects the deviation of the distribution from the standard deviation (0). A negative value indicating a relatively symmetric distribution.

· Fourth Emotion (Kurtosis) : 1.670129

· Measures the intensity of the data "curvature" or deviation from the normal distribution form. A positive value means that the data is more focused around the mean.

· Jarque-Bera test : 2.326004

· Test to determine how well the data distribution matches the normal distribution. A low value indicates a greater probability of normal distribution.

LOG_CTI (Merchandise Trade Index):

- Mean : 1.809985 Mean represents the average that expresses the values of the collected data.
- Median : 1.841686 The median is the median value that divides data into two equal halves.

- Maximum: 2.306353 is the highest note value in the group.
- Minimum: 0.954444 is the lowest note value in the group.
- Standard deviation: 0.216768 measures the prevalence of data about the arithmetic mean, where a higher value indicates a lower prevalence.
- Skewness: -1.905113 measures the deviation of the distribution from the standard deviation (0). A negative value indicates a significant deviation to the left.
- Kurtosis IV : 9.961178 Measures the intensity of data "curvature" or deviation from the normal distribution form. High value indicates excessive curvature .
- Jarque-Bera test: 81.34377 tests to determine how well the data distribution matches the normal distribution. A high value indicates a low probability of a normal distribution.

LOG_EVI (Export Value Index):

· Mean : 1.496617 The mean is the mean that represents the values of the collected data.

· Median : 1.855363 The median is the median value that divides data into two equal halves.

· Maximum: 2.214684 is the highest note value in the group.

· Minimum: -0.108878 is the lowest observed value in the group.

· Standard deviation: 0.780243 Measures the prevalence of data about the mean, where a higher value indicates a greater prevalence.

· Skewness: -1.096188 measures the deviation of the distribution from the standard deviation (0). A negative value indicates a significant deviation to the left.

· Kurtosis : 2.890686 Measures the intensity of data "curvature" or deviation from the normal distribution form. A high value indicates excessive curvature.

· Jarque-Bera test: 6.223848 Tests to determine how well the data distribution matches the normal distribution. A high value indicates a low probability of a normal distribution.

LOG_IVI_ (Import Value Index):

· Mean : 1.441740 Mean is the mean that represents the values of the combined data.

· Median : 1.604376 The median is the median value that divides data into two equal halves.

· Maximum: 2.091750 is the highest note value in the group.

· Minimum: -0.074865 is the lowest observed value in the group.

· Standard deviation: 0.677488 Measures the prevalence of data around the mean, where a higher value indicates a greater prevalence.

· Skewness: -1.166321 measures the deviation of the distribution from the standard deviation (0). A negative value indicates a significant deviation to the left.

· Kurtosis : 3.223192 Measures the intensity of data "curvature" or deviation from the normal distribution form. A high value indicates excessive curvature.

· Jarque-Bera test: 7.092591 Test to determine how well the data distribution matches the normal distribution. A high value indicates a low probability of a normal distribution.

LOG_ORRI (Oil Resources Revenue Index):

· Mean : 1.628888 The mean is the mean that represents the values of the collected data.

· Median : 1.636049 The median is the median value that divides data into two equal halves.

· Maximum: 1.813965 is the highest note value in the group.

· Minimum: 1.347877 is the lowest note value in the group.

· Standard Deviation: 0.121025 Measures the spread of data around the mean, where a higher value indicates a lower prevalence.

· Skewness: -0.552988 measures the deviation of the distribution from the standard deviation (0). A negative value indicates a significant deviation to the left.

· Kurtosis : 3.099975 Measures the intensity of data "curvature" or deviation from the normal distribution form. A high value indicates excessive curvature.

· Jarque-Bera test: 1.592852 Test to determine how well the data distribution matches the normal distribution. A lower value indicates a higher probability of a normal distribution.

LOG_TBI (Trade Balance Index):

- Mean : 17.98774 Mean is the average that represents the values of the collected data.
- Median : 5.943622 The median is the median value that divides data into two equal halves.
- Maximum: 64.03316 is the highest note value in the group.
- Minimum: -5.613896 is the lowest observed value in the group.
- Standard deviation: 23.15983 measures the prevalence of data around the mean, where a higher value indicates a greater prevalence.
- Skewness: 0.811614 Measures the deviation of the distribution from the standard deviation (0). A positive value indicates a deviation to the right.
- Kurtosis : 2.199226 Measures the intensity of the data "curvature" or deviation from the normal distribution form. A high value indicates excessive curvature.
- Jarque-Bera test: 4.231639 Test to determine how well the data distribution matches the normal

distribution. A lower value indicates a higher probability of a normal distribution

It is noted that the variables do not follow the normal distribution where the probability value is greater than 0.05 for the value of the JarqueBera test. With the exception of the two variables foreign trade and commodity trade.

3.1 Study of causality between variables

Table 2: Causality test results between study variables

Pairwise Granger Causality Tests
Date: 12/20/24 Time: 10:45
Sample: 1992- 2022
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LOG_FT_ does not Granger Cause LOG_BPI_	29	0.37365	0.0022
LOG_BPI_ does not Granger Cause LOG_FT_		0.27059	0.0652
LOG_FT_ does not Granger Cause LOG_CTI_	29	16.9723	0.0005
LOG_CTI_ does not Granger Cause LOG_FT_		135.051	0.0514
LOG_FT_ does not Granger Cause LOG_EVI_	29	0.22588	0.0095
LOG_EVI_ does not Granger Cause LOG_FT_		0.95910	0.3974
LOG_IVI_ does not Granger Cause LOG_FT_	29	19.8290	0.0006
LOG_FT_ does not Granger Cause LOG_IVI_		0.28200	0.7567
LOG_ORRI_ does not Granger Cause LOG_FT_	29	0.39655	0.6770
LOG_FT_ does not Granger Cause LOG_ORRI_		1.92034	0.1684
LOG_TBI_ does not Granger Cause LOG_FT_	29	0.01347	0.0866
LOG_FT_ does not Granger Cause LOG_TBI_		0.80553	0.0586

Source: Prepared by the researcher based on the outputs of the eviews 12 program

The results show that:

1. LOG_FT_ interpreted from LOG_BPI_:

· There is statistical evidence that LOG_FT_ explains LOG_BPI_ changes (p-value = 0.0022).

· However, there is not enough evidence to confirm the contrary (LOG_BPI _ explains LOG_FT_) statistically (p-value = 0.0652).

2. LOG_FT_ is interpreted from LOG_CTI_:

· There is statistical evidence that LOG_FT_ explains LOG_CTI_ changes (p-value = 0.0005).

· However, there is not enough evidence to confirm the contrary (LOG_CTI_ LOG_FT_) statistically (p-value = 0.0514).

3. LOG_FT_ does not explain from LOG_EVI_ and vice versa:

· There is not enough statistical evidence to confirm a causal relationship between LOG_FT_ and LOG_EVI_ (and vice versa) based on p-values.

4. LOG_IVI_ is interpreted from LOG_FT_:

· There is statistical evidence that LOG_IVI_ explains LOG_FT_ changes (p-value = 0.0006).

· However, there is not enough evidence to confirm the opposite (LOG_FT_ explain LOG_IVI_) statistically (p-value = 0.7567).

5. Other results:

· There is insufficient statistical evidence to confirm the existence of causal relationships between LOG_FT_ and LOG_ORRI_ (and vice versa) or between LOG_FT_ and LOG_TBI_ (and vice versa as well).).

Fourth: Conclusions and Recommendations

Conclusions

1. The decrease in the volume of foreign investments in Iraq by approximately (2,722,610 - 3,814,980) billion dinars for the period (2013-2022) due to the political, economic and security conditions experienced by the Iraqi state

2. Iraq's exports of other primary or industrial commodities other than oil still constitute only a small percentage, even if oil is excluded from the trade balance, it becomes clear to us the large deficit in this balance, as Iraq imports most of its needs of agricultural or industrial goods, as the highest percentage of its contribution to the commodity composition of the export is (55%) for mineral fuels and related lubricants, and the percentage of the rest of the exports decreased significantly..

3. The Iraqi and global economic environment and export growth rates did not witness economic stability during the period (2003-2021) due to oil price fluctuations, which resulted in the gradual rise of Iraqi exports, as a result of its dependence on the oil sector without other sectors.

B- RECOMMENDATIONS

1. Supporting macroeconomic stability as one of the most important determinants governing attracting foreign direct investment.

2. The need to diversify the productive base in Iraq and improve its contribution to the GDP through a development strategy with a clear vision and objectives.

3. The need to work on directing public revenues based on a fiscal policy aimed at balancing the process of financing the real sectors of the national economy, especially in the areas stimulating their economic growth, while working to increase their contribution to the structural diversification of the economy..

4. The need to work on the adoption of an economic policy through which the economic sectors, especially the oil sector, are rehabilitated, because of its importance in supplementing the financial resources of the state in order to use them, not usually building this country and achieving economic stability, as well as employing oil revenues for the purpose of investing in areas that contribute to economic diversification and the development of non-oil exports

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