

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

ECONOMIC DEVELOPMENT AND PLANNING IN IRAQ (ANALYTICAL STUDY 2018-2024)

Prepared by: Yousef Mohammed Hamad Hassan

General Directorate of Education – Salah al-Din Governorate

Department of Economics / Faculty of Administration and Economics /

Azad University / Iran

Email: ym056676@gmail.com

Abstract

This research aimed to analyze the relationship between economic planning and economic development in Iraq during the period 2018-2024, in light of the structural challenges faced by the Iraqi economy represented by the over-reliance on the oil sector, which accounts for about 55% of GDP and 93% of the general budget revenues. The research was based on a descriptive-analytical approach, and data were collected from reliable official sources including the World Bank, the International Monetary Fund, the Iraqi Ministry of Planning, and the United Nations Development Programme. Statistical analysis methods of the Pearson correlation coefficient and the simple linear regression model were used to test four main hypotheses. The results showed that there is a statistically significant negative relationship between government expenditure as a percentage of GDP and the rate of economic growth, indicating the dominance of operational expenditure over productive investment expenditure. The results also revealed that there was no statistically significant relationship between the percentage of dependence on oil and the growth of the non-oil sector, the percentage of investment and the unemployment rate, the per capita output and the human development index. This reflects deep structural distortions in the Iraqi economy and the weak effectiveness of development planning mechanisms. The research recommended restructuring government spending, diversifying the economic

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

base, improving the business environment, investing in human capital, and promoting good governance.

Keywords: Economic Development, Economic Planning, Iraq, Rentier Economy, Economic Growth.

Introduction

Economic development and planning is one of the most prominent themes that engaged the thoughts of economic planners and decision makers in the developing countries in general and in Iraq in particular. Iraq is one of the most potential countries in terms of its natural resources, human resources and in terms of the quantity of crude oil it produces, the second largest in OPEC after Saudi Arabia, and the reserves of its crude oil, a bit more than 145 billion barrels, are positioned ahead of the rest of the world. But, this oil wealth has not been converted into comprehensive and sustainable development in a manner that would significantly benefit all segments of society, given the very special circumstances Iraq has encountered over the past few years such as wars, sieges, occupation, the weakness of state institutions and the instability of economic policies, to mention but a few. All of this has contributed to the creation of an economy that is too dependent on the oil industry, as more than 55 percent of GDP is dependent on the oil industry, and the oil industry represents about 93 percent of the state's budget revenues (Arab Monetary Fund, 2023: 12). The Iraqi economy started showing significant fluctuations in the level of economic growth, from 2018 to 2024, with a contraction of the GDP in 2020 by 11.3 percent, as a result of the effects of the Corona pandemic and the drop in global oil prices, while the GDP rose by 8.6 percent in 2021 before rising by 9.6 percent in 2022 due to the rise in oil prices. This rebound was, however, fraught with fragilities and vulnerabilities, as the growth of 2023 was again a contraction (2.3 percent, World Bank, 2023: 5). The ups and downs reflect the failure of

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

economically planning policies that could diversify the economy and minimise its reliance on oil as a key source of national income, and question the effectiveness of the planning instruments applied and their contribution to the desired development. The Iraqi Ministry of Planning, in cooperation with the United Nations Development Programme (UNDP), prepared the National Development Plan 2024-2028 which concentrates on the need for a comprehensive economic restructuring in Iraq, including strengthening the business environment, promoting the private sector, increasing productive capital expenditure, investing in human capital, developing infrastructure, and good governance (Ministry of Planning, 2024:8). UNDP's Iraq National Human Development Report 2025 also indicated that Iraq's Human Development Index (HDI) made slight progress of 0.695 in 2024 compared to 0.661 in 2020, but this level remains low compared to the regional average of 0.728 (UNDP, 2025: 3). This research aims to examine the relationship between economic planning and economic development in Iraq using secondary official sources and macroeconomic indicators which can be measured statistically for the period 2018-2024. The research method used is descriptive analytical method as the major method and for hypothesis testing the statistic method used is Pearson correlation coefficient and simple linear regression. The research's objective is to develop a vision for the analysis of the realities which relies on official data to support it and can contribute to guiding economic and development policies in Iraq toward the more sustainable and more inclusive path .

Research Problem

This problem emerges from the Iraqi economy crisis as the gap between the potentials of its natural resources, human resources, and the vast geographical area, is widening but the level of economic development that is found on the ground is not commensurate with these potentials. The problem can be broken down into multiple aspects as follows:

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

First: The Iraqi economy is a one-sided rentier economy, relying excessively on the oil sector as a major source of national income, and Iraq's oil exports make up approximately 93 percent of the state's budget revenues, making it very sensitive to fluctuations in the world price of oil and external shocks, including those by the IMF (2025: 4). It has resulted in neglecting other productive areas, like agriculture, industry and tourism and has significantly minimized their contribution to the GDP during the last decades.

Second: The weakness of economic planning mechanisms and the ineffectiveness of previous development plans in achieving their desired goals. Despite the successive national development plans, the outcomes with regard to economic diversification and the decrease in unemployment and poverty have been limited. The unemployment rate stood at 16.6 per cent in 2021 and approximately 74 per cent of young people were neither in employment nor in education or training in 2022. Real GDP per capita is also low relative to other region countries, standing at approximately \$2,700 per capita of non-oil GDP in 2022, which is the lowest level in the Middle East and North African (MENA) region.

Third: the change in macroeconomic indicators from growth to contraction and vice versa, indicating the lack of a proper development strategy that is flexible and responsive to external and internal variables. Real economic activity grew and shrank considerably in the period 2018 – 2024, from a decline of 11.3 percent in 2020 to an increase of 9.6 percent in 2022. This volatility makes it difficult to plan a long-term investment and decreases investors' faith in the national economy.

Fourth is that the difference between government expenditure and the actual development outputs, as the ratio of government expenditure to GDP is around 41.7 per cent, which is a relatively high rate, but much of this spending is on salaries and operational allocations, leaving less money for productive capital investment expenditure.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

The importance of the research

The theoretical significance of this research lies in its quest to enrich academic knowledge about the relationship between economic planning and economic development in the context of rentier countries that depend on the export of natural resources, and Iraq is a prominent model for this category of countries. The research contributes to providing an integrated analytical framework that combines theoretical concepts of economic planning, development, and practical application through the analysis of real data and macroeconomic variables. The research also addresses a clear gap in the Arabic literature related to the study of the relationship between planning tools and development indicators in Iraq using advanced statistical methods and a time period that extends until 2024.

On the practical level, this research provides up-to-date and analyzed statistical data on economic performance indicators in Iraq that can be used in the formulation of economic policies and development decisions. The research also provides the results of statistical tests that reveal the nature of the relationships between planning and development variables, which helps decision-makers in Iraq to direct resources towards sectors and activities that achieve the maximum possible development impact. Moreover, research can serve as an academic reference for researchers and students in the fields of economics, planning, and sustainable development.

Research Objectives

This research seeks to achieve the following objectives:

- 1- Examine the trends of the main economic development indicators in Iraq 2018-2024, GDP and its per capita, growth rates, inflation, unemployment and poverty.
- 2- Analyzing how government spending in Iraq affects the economic growth rate as a percent of GDP and its effectiveness in promoting economic development.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

3- Quantify the degree of dependence on oil revenues and the rate of growth of the non-oil sector to test the hypothesis that oil rents and economic diversification have a negative relationship.

4- Examine the effects of the investment to GDP ratio on rates of unemployment to illustrate the importance of investment in employment.

5- Testing the relationship between GDP per capita and the Human Development Index to see how much Iraq's economic growth is reflected at the human development level.

Research Hypotheses

To achieve the research objectives, the following hypotheses were formulated statistically:

The first hypothesis: There is no statistically significant relationship at the significance level of (0.05) between government expenditure as a percentage of GDP and the rate of economic growth in Iraq.

H0: $\beta_1 = 0$ (no relationship)

H1: $\beta_1 \neq 0$ (relationship exists)

Hypothesis 2: There is no statistically significant relationship at the significance level of (0.05) between the percentage of the contribution of oil revenues to the budget revenues and the growth rate of the non-oil sector in Iraq.

H0: $\beta_1 = 0$ (no relationship)

H1: $\beta_1 \neq 0$ (relationship exists)

Hypothesis Three: There is no statistically significant relationship at the significance level of (0.05) between the ratio of investment to GDP and the unemployment rate in Iraq.

H0: $\beta_1 = 0$ (no relationship)

H1: $\beta_1 \neq 0$ (relationship exists)

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

Fourth hypothesis: There is no statistically significant relationship at the significance level of (0.05) between GDP per capita and the Human Development Index in Iraq.

H0: $\beta_1 = 0$ (no relationship)

H1: $\beta_1 \neq 0$ (relationship exists)

Research Methodology

The descriptive – analytical method was adopted as the principal method of study in this research, with the single method used in the research. This method involves the use of descriptive statistics and specialized statistical analysis of the quantitative data obtained from the phenomenon studied to come up with accurate conclusions about the relationship between the research variables. This approach was selected because of its appropriateness to the nature of the study where secondary data that is already available in the form of official publications is used instead of collecting primary data by distributing questionnaires or conducting interviews. The data were gathered from authoritative official sources such as the World Bank, the International Monetary Fund (IMF), the Iraqi Ministry of Planning, the Iraqi Central Bureau of Statistics (ICBS), the United Nations Development Programme (UNDP), and McTrends. The data covers the time period from 2018 to 2024 and includes macroeconomic variables including GDP, GDP growth rates, per capita, inflation and unemployment rates, government expenditure to GDP ratio, investment-to-output ratio, human development index, poverty rates, and oil's contribution to budget revenues. The statistical analysis methods used were Pearson's simple correlation coefficient to measure the strength and direction of the relationship between variables and simple linear regression model to test hypotheses and estimate regression coefficients and the power of interpretation through the determination coefficient. Both the t-test and F test were also computed to check the significance of the regression coefficients

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

and the model as a whole, respectively. All data were analysed and processed using particular software for statistical analysis.

Research Sample and Society

The main macro variables that represent the research community in the Iraqi economy for the period (2018-2024). This research sample includes the official annual secondary data of the macroeconomic variables in Iraq for this period. The unit of analysis was the calendar year; seven independent observations were used in the project for time series analysis.

The independent research variables included: government expenditure as a percentage of GDP, the percentage of the contribution of oil revenues to budget revenues, the ratio of investment to GDP, and GDP per capita. The subordinates were: Economic growth rate, growth rate of non-oil sector, unemployment rate and human development index. The total number of variables studied was eight major macroeconomic variables the data of which were obtained from the official sources mentioned above.

Theoretical Framework

1.1 The concept of economic development and its dimensions

The model used in this research was descriptive – analytical method and the single method was used in the research. This approach is descriptive statistics and using specialized statistical analysis of the quantitative data gathered from the phenomenon studied to draw appropriate conclusions regarding the relationship between the phenomena under study and the research variables. This method has been chosen due to its suitability for the nature of the study (secondary data which has already been gathered in official publications) and not using questionnaires or interviews to collect primary data. The data was collected from official and authoritative sources including World Bank, the International Monetary Fund (IMF), the Iraqi Ministry of Planning, the Iraqi Central Bureau of Statistics

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

(ICBS), the United Nations Development Programme (UNDP) and McTrends. The data span from 2018 to 2024 and are available for macroeconomic indicators such as GDP, GDP growth rates, per capita, inflation rates, unemployment rates, government expenditures/GDP ratio, investment/output ratio, human development index, poverty rates, and the share of oil in the government's revenues. The statistical analysis that employed were Pearson's simple correlation coefficient for measuring the strength and direction of the correlation between the variables, simple linear regression model for testing of the hypothesis and estimate of regression coefficients and for the power of interpretation by determining interpretation coefficient, r^2 . The t-test and F test were also calculated to test the significance of the regression coefficients and significant of the model in general, respectively. Every data was analysed and processed with specific software for statistical analysis.

1.2 The concept and importance of economic planning

Economic planning is a conscious and directed domination of the macro-economic variables over a specific period of time with the aim of achieving certain development goals. Economic planning is the process of tracking the resources, prioritizing them and drawing up policies that ensure the resources are directed towards the desired outcome. According to Keynes, economic planning is a conscious effort of the state to deal with economic failures, boost aggregate demand and attain full employment and economic stability (Alyaseri and Awthaefa, 2021:48). Economic planning has been given special significance in the context of Iraq because the need for the national economy is to be restructured, diversified and changed from a rentier model to a comprehensive and sustainable development one.

There are two kinds of economic planning – directive planning using incentives/recommendations, and mandatory planning – where economic sectors are required to achieve specific targets. Planning also differs in time dimension –

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

short, medium and long term – ranging from one year to three-five years and a decade or more. The Ministry of Planning has prepared several development plans, the most recent of which is the National Development Plan 2024-2028, which seeks to ensure comprehensive and diversified sustainable economic growth, including a decrease in unemployment and poverty rates, and a push for human development (Ministry of Planning, 2024: 15).

Financial planning and physical planning are two most important types of economic planning. Financial planning is all about structuring the financial resources required for development, such as public funds, capital expenditure and foreign direct investment. Physical planning is based on the real resources required for production processes, such as manpower, raw materials, machinery, equipment and infrastructure. In Iraq, financial planning is a process that is interlinked with physical planning under the umbrella of national development plans which aim to connect the financial resources that can be derived from the oil revenues to real development projects in different productive and service sectors.

1.3 The relationship between economic planning and development

The logic of a relationship between economic planning and development is that development cannot take place spontaneously or spontaneously, but must be planned and directed by the state and the institutions involved. The direction, priorities and methods for development are established in economic planning, and the success or failure of the plans is measured by economic development. The literature on the economics of planning indicates that countries with successful and systematic economic planning have been able to improve their rates of development and sustainability as compared to countries which have left their economies to market forces without direction (World Bank, 2024:22).

The link between planning and development becomes significant in the case of Iraq where the national economy is having structural problems. Relying on oil as

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

a primary source of revenue requires the need for economic planning to spread the economic base and decrease the vulnerability of the economy to external shocks. The experience of Iraq indicates that high oil prices have not always led to actual growth, as there was almost no planning and widespread corruption, as well as poor state institutions. For instance, in 2022, with oil prices increasing, GDP expanded by 9.6 percent, whereas there was no progress made in any aspect of human development indicators or in actual unemployment rates (World Bank, 2023: 18). This dichotomy between growth and development is a result of the weakness of planning mechanisms which fail to generate inclusive and sustainable development from oil revenues.

The economic development in Iraq would be possible only on the basis of an overall plan that embraces different integrated axes. The first pillar is to improve the legal and institutional framework to ensure good governance, fight corruption and more efficient public service management. The second axis is related to diversification of the economy through boosting non-oil productive sectors like agriculture, industry, tourism and information technology. The third pillar is dedicated to investing in human capital, particularly strengthening education, health care and vocational training. The fourth pillar is the development of infrastructure networks like roads, ports, airports, power stations and water systems, thereby creating an appealing environment for local and foreign investment (Sahoo et al., 2024: 8).

1.4 Characteristics of the Iraqi Economy and Structural Challenges

In terms of its economic structure, the Iraqi economy has some features which make it different from other developing economies, which directly impact the potential for economic development. The most salient of these is the excessive oil rents, which is a result of the economy's high dependence on oil for its income and public finance. Roughly 55.1 percent of GDP was generated by oil and gas in 2024, compared to 3.9 percent from agriculture and 4.8 percent from

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

manufacturing industry. The distortion of the structure also helps to make the global oil price fluctuations apparent in the macroeconomic performance and the financing power of the state (Alabdallah et al., 2023:270).

The weakness of the private sector and its failure to drive development process is one of the most prominent structural problems in the Iraqi economy. Iraq's public sector dominates the formal sector, with roughly 40 percent of the workforce employed by the public sector, putting a strain on public sector finances and limiting government investment and development expenditures. In addition, the private sector in Cambodia faces a complicated regulatory framework, challenges in accessing financial services, and a sparse infrastructure for economic activities (U.S. Department of State, 2025:3).

Iraq's economy is also facing huge demographic challenges, represented by a high population growth rate of about 2.6 percent per year. The economy must generate millions of new jobs every year to accommodate new workers coming into the labor market, as the population of Iraq has grown from 40.25 million in 2018 to 46.05 million in 2024. However, the growth rate of the non-oil sector remained weak and did not exceed 1.3 percent on average during the period 2018-2023, which is lower than the MENA average of 1.8 percent (IMF, 2025: 7). This mismatch between population growth and economic growth leads to higher rates of unemployment and poverty, and strains of basic public services like education, health and housing.

Practical Framework

2.1 Presentation of statistical data and the development of economic indicators

This section presents the statistical data of the research variables during the period 2018-2024 derived from reliable official sources. Table 1 shows the evolution of Iraq's main macroeconomic indicators, which include GDP, GDP growth rate, per capita, inflation and unemployment rates. The table clearly shows the fluctuation

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

witnessed by these indicators during the study period as a result of the impact of internal and external variables on the performance of the Iraqi economy.

Table (1): Macroeconomic Indicators of Iraq for the Period 2018-2024

Sunnah	GDP (\$1 billion)	Output growth (%)	Per capita (\$)	Inflation (%)	Unemployment (%)
2018	224.2	-2.1	5,570	0.2	13.9
2019	233.5	4.2	5,623	0.1	13.4
2020	180.9	-11.3	4,294	0.6	15.2
2021	209.7	8.6	4,868	6.0	16.6
2022	287.4	9.6	6,521	5.0	15.8
2023	268.9	-2.3	5,965	4.4	14.9
2024	279.6	1.5	6,074	4.8	14.2

Source: World Bank, International Monetary Fund, McTrends Database, 2025

Table (1) shows that Iraq's GDP peaked in 2022 at \$287.4 billion, driven by the rise in global oil prices, before falling to \$268.9 billion in 2023 and rising again to \$279.6 billion in 2024. The rate of economic growth fluctuated significantly between contraction and growth, reflecting the fragility of the economic structure and its heavy dependence on the oil sector. GDP per capita also witnessed similar fluctuations, ranging from \$4,294 in 2020 to \$6,521 in 2022. The unemployment rate reached its highest level in 2021 at 16.6 percent following the repercussions of the Corona pandemic, and then began to gradually decline to reach 14.2 percent in 2024 (World Bank, 2023: 12).

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

Table (2): Indicators of Planning and Economic Diversification in Iraq for the Period 2018-2024

Sunnah	Spend/output (%)	Oil/Revenue (%)	Investment/Output (%)	Non-Oil Growth (%)	Human Development Index	Poverty (%)
2018	39.5	89.3	18.2	1.5	0.673	20.5
2019	38.8	92.1	17.5	1.2	0.678	19.8
2020	44.2	91.5	14.8	-6.8	0.661	22.0
2021	36.1	93.4	16.3	5.4	0.667	20.2
2022	33.9	93.0	19.1	3.8	0.673	18.5
2023	41.2	92.8	20.4	1.1	0.680	18.0
2024	41.7	91.5	21.2	0.8	0.695	17.5

Source: Iraqi Ministry of Planning, World Bank, UNDP, 2025

Table 2 shows that the ratio of government spending to GDP increased from 39.5 percent in 2018 to 41.7 percent in 2024, reflecting the upward trend in the role of the state in economic activity. It is also clear that the percentage of oil's contribution to budget revenues remained relatively high and stable above 89 percent during the entire study period, confirming the continued over-dependence on oil. The investment-to-output ratio increased from 18.2 percent in 2018 to 21.2 percent in 2024, a positive development, but still below the level required to achieve the desired development. As for the Human Development Index, it has gradually improved from 0.673 in 2018 to 0.695 in 2024, although it remains below the regional average (UNDP, 2025: 4).

Table 3: Sectoral Contribution to Iraq's GDP (2018-2024)

Sunnah	Agriculture (%)	Industry (%)	Services (%)	Oil & Gas (%)
2018	4.2	59.8	30.0	55.0
2019	4.0	60.2	29.8	55.5
2020	4.5	58.5	31.0	53.8
2021	4.3	59.0	30.7	54.5
2022	4.1	61.5	29.4	57.2
2023	4.0	60.8	30.2	56.5
2024	3.9	59.5	31.6	55.1

Source: World Bank, Iraqi Ministry of Planning, 2025.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

Table 3 reveals a clear structural distortion in the structure of the Iraqi economy, with oil products dominating GDP by more than 55 percent on average. It was also found that the contribution of the agricultural sector declined from 4.2 percent in 2018 to 3.9 percent in 2024, despite the great agricultural potential that Iraq possesses. This points to the failure of previous development plans to achieve the desired economic diversification and reduce dependence on oil. The service sector has maintained a relatively stable contribution of 29 to 32 percent of GDP, but the quality and working conditions of this sector remain below the required level (Qasim et al., 2025: 668).

2-2 Correlation Analysis between Research Variables

The following is a Pearson correlation coefficient matrix between the main research variables. This matrix helps to reveal the nature and direction of the interrelationships between the studied variables before performing detailed regression tests.

Table (4): Pearson Correlation Factors Matrix between Research Variables

Variable	Output Growth	Expenditure/Output	Oil/Revenue	Investment/Output	Inflation	Unemployment	Human Development Index	Per Capita
Output Growth	1.000	-0.914	0.523	0.278	0.580	0.308	0.220	0.538
Expenditure/Output	-0.914	1.000	-0.436	-0.079	-0.448	-0.424	0.103	-0.455
Oil/Revenue	0.523	-0.436	1.000	0.007	0.696	0.650	-0.071	0.107
Investment/Output	0.278	-0.079	0.007	1.000	0.423	-0.297	0.891	0.869
Inflation	0.580	-0.448	0.696	0.423	1.000	0.695	0.271	0.354
Unemployment	0.308	-0.424	0.650	-0.297	0.695	1.000	-0.496	-0.227
Human Development Index	0.220	0.103	-0.071	0.891	0.271	-0.496	1.000	0.689
Per Capita	0.538	-0.455	0.107	0.869	0.354	-0.227	0.689	1.000

Source: The researcher's account based on official data.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

The correlation matrix shows several intrinsic results. First, there are moderate and strong correlations between several variables, suggesting that there are substantial relationships that deserve in-depth analysis through regression tests. Second, it is noted that the correlation coefficient between government expenditure and the economic growth rate reached (-0.914), which indicates a strong negative relationship. Third: The correlation coefficient between the rate of dependence on oil and the growth of the non-oil sector reached (0.369), which reveals a weak relationship. Fourth: There was a moderate negative correlation between the investment and unemployment ratio (-0.297), and fifth: the correlation coefficient between the per capita and the human development index was (0.689), which is a moderate positive correlation.

2.3 Hypothesis testing

The four research hypotheses were tested using a simple linear regression model. The results of each hypothesis are presented separately with a detailed explanation of the statistical tables and economic meanings of the obtained results.

First: The First Silver Test

The first silver indicates that there is no statistically significant relationship at the significance level of (0.05) between government expenditure as a percentage of GDP and the rate of economic growth in Iraq. To test this hypothesis, a simple linear regression model was estimated, which assumes that the rate of economic growth is a function of the ratio of government expenditure to GDP.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

Table 5: Results of regression analysis to test the relationship between government spending/output and economic growth rate

Parameter	Value	Standard deviation	T-value	Significance Level	Decision
Fixed (β_0)	75.6874	-	-	-	-
Regression coefficient (β_1)	-1.8940	3.2161	-5.034	0.0040	Reject H0
R ²	0.8352	-	-	-	-
F	25.3379	-	-	0.0040	-
R (Pearson)	-0.914	-	-	0.0040	-

Source: Researcher calculation using statistical analysis software.

Table (5) shows that the Pearson correlation coefficient was (-0.914) and the R² coefficient was (0.8352), which means that (83.5) percent of the changes in the economic growth rate can be explained by changes in the percentage of government spending. The calculated t-value was (-5.034) with a significance level of (0.0040) which is less than 0.05. Accordingly, the nihilistic hypothesis is rejected and the alternative hypothesis is accepted, i.e., there is a statistically significant relationship between government expenditure and the rate of economic growth. The relationship is negative, which means that an increase in government spending as a percentage of GDP is associated with a lower growth rate, and this can be explained by the fact that government spending in Iraq is more focused on salaries and employment than on productive investment (Qasim et al., 2025: 666).

Second: Second Silver Test

The second silver indicates that there is no statistically significant relationship at the significance level of (0.05) between the percentage of the contribution of oil revenues to budget revenues and the growth rate of the non-oil sector in Iraq. A simple linear regression model was estimated to test this hypothesis.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

Table 6: Regression Analysis Results to Test the Relationship between the Oil/Revenue Ratio and Non-Oil Sector Growth

Parameter	Value	Standard deviation	T-value	Significance Level	Decision
Fixed (β_0)	-93.6328	-	-	-	-
Regression coefficient (β_1)	1.0293	3.9071	0.889	0.4149	Accept H ₀
R ²	0.1364	-	-	-	-
F	0.7895	-	-	0.4149	-
R (Pearson)	0.369	-	-	0.4149	-

Source: Researcher calculation using statistical analysis software.

It is clear from Table (6) that the Pearson correlation coefficient was (0.369) and the R² coefficient was (0.1364), which means that only (13.6) percent of the changes in the growth of the non-oil sector can be explained by changes in the percentage of dependence on oil. The calculated t-value was (0.889) with a significance level of (0.4149) which is greater than 0.05. Accordingly, the nihilistic hypothesis is accepted, i.e., there is no statistically significant relationship between the rate of dependence on oil and the growth of the non-oil sector during the study period. This result can be explained by the fact that all observations fall within a very high oil dependency range (more than 89 percent), which reduces the variance in the independent variable and makes it difficult to detect the linear relationship between them. Other factors such as security, policy, and legislation also affect the growth of the non-oil sector (Sahoo et al., 2024:15).

Third: The Third Silver Test

The third silver indicates that there is no statistically significant relationship at the significance level of (0.05) between the ratio of investment to GDP and the unemployment rate in Iraq. A simple linear regression model was estimated to test this hypothesis.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

Table 7: Results of Regression Analysis to Test the Relationship between Investment/Output and Unemployment Rate

Parameter	Value	Standard deviation	T-value	Significance Level	Decision
Fixed (β_0)	17.5529	-	-	-	-
Regression coefficient (β_1)	-0.1480	1.1707	-0.696	0.5175	Accept H0
R ²	0.0883	-	-	-	-
F	0.4844	-	-	0.5175	-
R (Pearson)	-0.297	-	-	0.5175	-

Source: Researcher calculation using statistical analysis software.

Table (7) shows that the Pearson correlation coefficient was (-0.297), the R² coefficient was (0.0883), and the calculated t-value was (-0.696) with a significance level of (0.5175) which is greater than 0.05. Accordingly, the nihilistic hypothesis is accepted, i.e., there is no statistically significant relationship between the investment rate and the unemployment rate. This can be explained by several factors, most notably that investment in Iraq is concentrated in the capital-intensive oil sector, which does not create enough job opportunities. The public sector is also the main source of employment, making the relationship between investment and unemployment indirect. Furthermore, the duration of the study (seven years) may not be sufficient to show the impact of investment on job creation that requires longer periods of time (Alabdallahman et al., 2023: 275).

Fourth: The Fourth Silver Test

The fourth silver indicates that there is no statistically significant relationship at the significance level of (0.05) between the GDP per capita and the human development index in Iraq.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

Table 8: Results of Regression Analysis to Test the Relationship between GDP per Capita and Human Development Index

Parameter	Value	Standard deviation	T-value	Significance Level	Decision
Fixed (β_0)	0.6206	-	-	-	-
Regression coefficient (β_1)	0.0000	0.0086	2.124	0.0871	Accept H0
R ²	0.4742	-	-	-	-
F	4.5093	-	-	0.0871	-
R (Pearson)	0.689	-	-	0.0871	-

Source: Researcher calculation using statistical analysis software.

It is clear from Table (8) that the Pearson correlation coefficient was (0.689) and the R² coefficient of determination was (0.4742), which means that (47.4) percent of the changes in the Human Development Index can be explained by changes in GDP per capita. The calculated t-value was (2.124) with a significance level of (0.0871). Accordingly, although the correlation coefficient is positive and moderate, the significance level (0.087) exceeds the considered limit (0.05), so the nihilistic hypothesis is accepted. This finding reflects that the improvement in GDP per capita has not fully translated into an improvement in human development indicators such as education and health, due to the inefficient allocation of resources, the unequal distribution of wealth, and the concentration of public spending in non-productive areas (UNDP, 2025: 18).

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

2.4 Summary of hypothesis testing results

Table (9): Summary of hypothesis test results

Silver	Independent variable	Dependent variable	r	R ²	T-value	Significance Level	Decision
The first	Government Expenditure/Output	Growth Rate	-0.914	0.8352	-5.034	0.0040	Reject H ₀
The second	Oil/Revenue	Non-oil growth	0.369	0.1364	0.889	0.4149	Accept H ₀
The third	Investment/Output	Unemployment Rate	-0.297	0.0883	-0.696	0.5175	Accept H ₀
Fourth	GDP per capita	Human Development Index	0.689	0.4742	2.124	0.0871	Accept H ₀

Source: Researcher's account.

It is clear from the results summary table that only one out of four silver silver has been rejected as nihilistic silver, and it is the first silver that confirmed a statistically significant relationship between government spending and the rate of economic growth. The remaining three hypotheses were accepted as nihilistic qualities, which means that there were no statistically significant relationships at the level of 0.05 between the studied variables. This can be explained by several factors, most notably the limited sample size (seven annual observations) and the impact of external factors not included in the model, such as security and political conditions, and fluctuations in global oil prices. The rentier nature of the Iraqi economy also makes the relationships between economic variables more complex and cannot be captured by simple linear models (World Bank, 2023: 25).

Conclusions and recommendations

In the light of the above theoretical and practical analysis, a number of conclusions and recommendations can be reached that can be summarized as follows:

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

First: Conclusions: The results of the research proved that there is a statistically significant negative relationship between government expenditure as a percentage of GDP and the rate of economic growth, which means that the increase in government expenditure did not stimulate growth, but on the contrary, it was associated with its slowdown. This confirms that Iraq's problem is not the size of government spending, but its quality and direction. Operating expenditure accounts for the largest share of the budget at the expense of productive capital investment expenditure. The results also showed that the Iraqi economy suffers from a deep structural distortion represented by the dominance of the oil sector and the weak contribution of other productive sectors. It was also found that the improvement in GDP per capita did not translate into a similar improvement in human development indicators, reflecting the inefficiency of the distribution of growth returns among the different groups of society.

Second: Recommendations: In light of the results of the research, the researcher recommends the following: restructuring government expenditure in favor of productive capital investment and reducing the percentage of operational expenditure. Encourage foreign direct investment in non-oil sectors by improving the business environment, facilitating licensing procedures, and providing tax incentives. Developing the agriculture and manufacturing sector to diversify the economic base and reduce dependence on oil. Investing in human capital by improving the quality of education, health, and vocational training. Promote good governance and fight corruption to ensure that development returns reach all segments of society. Adopt long-term development plans that are adaptable to internal and external changes and are not affected by short-term political changes (Ministry of Planning, 2024: 35).

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

References

1. Incorporate the following into your speech, beginning with Qasim Mohamed Abdullah, followed by Mustafa Najm Al-Bishari, and then Zuhair Ahmed Ali (2025). Fiscal Policy in Iraq: The Need to Implement Economic Development (17-22). Journal of Humanities and Natural Sciences, 6(11), 662-671.
2. Kazem Abis, Fatima Nader Al-Sarifi 2021. The components and how to improve the economic development in Iraq. Al-Ghari Journal of Economic and Administrative Sciences. 17(4): 1-26.
3. Kazem Abis, Fatima Nader Al-Sarifi (2021). The role of diversification of some economic sectors in the Iraqi economy growth during 2004-2020. The Journal of Economics and Administrative Sciences of Al-Kut, 15(49), 364-378.
4. Nawzad Abdulrahman Al-Hiti (2021). Evaluating investment and business climate in Iraq in terms of international standards. Academic Journal of Economics, Finance, and Business,
5. Shafan Jamal Hama Saeed, 2024. Measuring and analyzing the effects of Foreign Direct Investment on economic growth in the Kurdistan Region of Iraq in the period 2007-2021. Journal of Business Economics for Applied Research 6(2): 99-119.
6. Ali Taleb Hussain, Alia Hussein Khalaf Al-Zarkoushi, Ali Waheeb Abdullah (2023). Facilitating digital financial inclusion in Iraq for the development of the economy and reduce the impact of Corona pandemic. Journal of Economics and Business Administration, 286-305, Vol. 28.
7. The goal scored by Ali Taleb Hussain, Riam Ali Taleb, Ali Waheeb Abdullah (2023). Assessing the Effect of Human Capital Investment on Economic Growth in Iraq. Journal of Business Economics for Applied Research.
8. Ali Jabbar Arimish (2023). Measuring the effect of inflation on the economy's stability in Iraq during the period 2011-2021 and analyzing it. Warith Scientific Journal (WSJ)

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

9. Sami Hashem Faleh (2025). A Comparative Study of Economic Development Indicators in Selected Countries: Iraq, Saudi Arabia and the United Arab Emirates (2010-2023). Calitatia, 208 (26).
10. National Plan for Energy Systems and Smart Grid (2024), Ministry of Planning - Department of Economic and Financial Policies. National Development Plan 2024-2028. Baghdad: Minister of Planning.
11. Arab Monetary Fund (2023). To make FDI inflows despite the COVID-19 hardships. Abu Dhabi: Arab Monetary Fund. .
12. The United Nations Development Programme (UNDP) (2025). SD in Iraq: Indicators, Opportunities and Challenges. Baghdad: UNDP.
13. United Nations Development Programme (2025). National Human Development Report 2025 for Iraq. The UNDP is the “Baghdad: United Nations Development Programme.”
14. The data presented here was collected from the Iraqi Ministry of Planning (2022). National Development Plan 2018-2022. Baghdad: Ministry of Planning.
15. Samer Abdul Razzaq, Raghad Kazim, Al-Hashemi (2023). The role of foreign direct investment in the economic development of Iraq during the years (2004-2020). The Journal of Science and Peace.
16. Alabdalrahman, G.A., Ahamat, H., & Althabhwawi, N. (2023). A Comparative Study of Foreign Direct Investment in Iraq and UAE. Sriwijaya Law Review, 7(2), 262-286.
17. Alyaseri, I.J.J. & Awthaefa, S.S. (2021). Between Economic Shocks and IMF Conditions, Economic Development in Iraq. Journal of Legal, Ethical and Regulatory Issues, 24(6S).
18. Dhriefi, S.A. (2021). Economic growth, education and health: causal links, evidence from developed and developing countries. The Knowledge Economy Journal, 12, 1477-
19. International Monetary Fund (2024). Iraq: Selected Issues. IMF Country Report No. 24/129 is the title of this report. Washington, DC: IMF.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

20. International Monetary Fund (2025). Iraq: Selected Issues. The 1997 International Monetary Fund Country Report No.25/184. Washington, DC: IMF.
21. International Monetary Fund (2025). Structural reforms to unlock Iraq's economic potential. IMF Working Paper WP/25/115
22. Sahoo, S. et al. (2024). Economic Diversification in Iraq: A comprehensive review. The Journal of Community Counseling is known as bhinneka.
23. Todaro, M.P. & Smith, S.C. (2020). Economic Development (12th Edition). Harlow: Pearson Education.
24. U.S. Department of State (2025). Investment Climate Statements: Iraq 2025. U.S. Department of State, Washington, DC.
25. The United Nations Development Programme (UNDP) (2021). Second National Voluntary Review Report on the achievement of the Sustainable Development Goals. Iraq.
26. The United Nations Development Programme (UNDP). Iraq Human Development moves to a new level: 2025 National Report. Baghdad: UNDP.
27. The National Planning Commission of the United Nations Development Programme (UNP-DP). National Development Plan 2024-2028 Summary. Baghdad: UNDP/World Bank.
28. The United Nations Development Programme (2024). Sustainable Development Cooperation Framework 2020-2024 Iraq. Baghdad: UNDP.
29. World Bank (2021). Iraq Economic Monitor. World Bank, Washington, DC.
30. World Bank (2023). Iraq Economic Monitor: Reemerging Pressures. World Bank, Washington, DC. <https://openknowledge.worldbank.org>
31. World Bank (2024). The National Education Strategy for Iraq 2022-2031. World Bank, Washington, DC.
32. World Bank (2024). Iraq Country Overview. World Bank Group, Washington, DC.
33. World Bank (2025). Growth of GDP (Annual %) - Iraq. World Bank Open Data.

Eureka Journal of Business, Economics & Innovation Studies (EJBEIS)

ISSN 2760-4950 (Online) Volume 2, Issue 7, July 2026



This article/work is licensed under CC by 4.0 Attribution

<https://eurekaoa.com/index.php/6>

34. Bertelsmann Stiftung (2026). BTI 2026 Country Report - Iraq. Gütersloh: Bertelsmann Stiftung.
35. Abdullah, Q.M., Al-Bashari, M.N., & Ali, Z.A. (2025). The role of fiscal policy in achieving economic development in Iraq (Analytical Study for the period (2017-2022)). Humanities & Natural Sciences Journal, 6(11): 662-671.