Iraq in Light of Economic Development Indicators from 2013-2021

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ABSTRACT

This research addressed a crucial economic topic, which is Iraq in light of economic development indicators, which is one of the essential tools used in analyzing the economic climate, which countries use to direct their strategies that aim to achieve economic growth and development, and is one of the measures of economic stability and is used to predict and confront future risks, and gives a quick view of the economy and its trends during future periods, as the research dealt with studying and analyzing the leading indicators of economic development in the Iraqi economy, and addressing its various aspects from (2013-2021). This research found that economic indicators reflect the country's economic situation by studying the relationships between different variables, enabling it to develop appropriate economic policies to solve crises and structural imbalances. The Iraqi economy suffers from an apparent deficiency in economic development indicators, whether economic, social, or environmental, and a set of recommendations, the most important of which is that it is necessary to address the deficiency in economic development indicators by providing political and societal management that works to create successful conditions to raise the levels of economic development indicators, and work to raise the levels of economic development indicators to contribute positively to the gross domestic product (GDP).

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Introduction

Economic development has captured the attention of researchers in the field of economics. When discussing economic development, we talk about its general concept, the determinants of economic development in developing and developed countries, and its elements and relationship to social, political, and economic axes. The reason for economists' interest in economic development is because it is the most critical indicator in indicating economic performance and what it leads to in terms of an increase in the standard of living and well-being [1]. and economic development appears when there is an increase in the per capita share of the GDP. It may come in the form of an increase in the amount of goods and services produced by the individual in a field 2022) [2]. It cannot be said that economic development is directly related to the resources and financial capabilities that the state possesses alone, as the economic success of any country is measured by the general economic management and state institutions of all kinds. The matter requires management and interest in quality standards at all levels and facilities, regardless of their political, economic, administrative, educational, and even judicial nature. All of this is sufficient to raise the level of economic performance of any country, and all of this comes as an affirmation of the relationship between state institutions and economic development [3]. The beginning of the twenty-first century witnessed an increasing interest in studying indicators of economic development and mechanisms for achieving the Millennium Development Goals, which were approved by the United Nations and countries of the world, including the countries of the Arab region, pledged to work to achieve their goals [4]. Economic indicators are essential tools that economic and monetary policymakers, such as governments

and central banks, use in making their decisions. In addition, indicators embody the values that should be included in those policies. The truth is that there are indicators that mediate between values and policy implementation.

Indicators are essential for designing and evaluating policies that aim to advance society and for evaluating and influencing the performance of economic markets. What we measure affects what we do, and decisions may be distorted if our measurements are flawed. We often conclude good policies by looking at policies promoting economic growth [5]. but if our performance measures are inaccurate, the conclusions we draw may be. Thus, indicators that measure the economy's resources honestly can complement what economics uses. Economic development indicators include a set of variables that are used to measure the health and growth of the economy, including GDP (general economic growth), unemployment rates, inflation rates, public and private investment, poverty and social marginalization rates, foreign trade indicators, and others [6]. Economic indicators are diverse, covering various economic sectors and fields, as they constitute the raw materials for economic and financial analyses and significantly impact economic and financial market decisions. Economic indicators are an element of economic data, usually specific to the macroeconomy, used by analysts to interpret current or future investment opportunities [7]. These indicators help judge the strength of the economy in general. They can be data chosen by the investor, but there are data Minute published by the government and non-profit organizations that are now widely followed by investors, and the economic indicator is a part of economic data, used by analysts to interpret the current or future investment potential, and helps in judging the public health and understanding the current economic activity of the economy, it is a measure of the macroeconomy [8]. and these indicators allow policymakers to benefit from real-time data without delay to make

future decisions, and are helpful only to those who can correctly interpret how today's economic conditions (i.e., a decline in GDP) will affect future periods, and economic indicators of development are divided into categories or groups, most of which have a specific schedule for release, which allows economic decision-makers to prepare and plan to see information at certain times of the month and year, to predict future movements of the economy and it is essential to take these indicators into account, investors are often interested in leading indicators, as an adequately developed leading indicator can accurately predict future trends, leading indicators may make broad economic assumptions [9].

Literary Survey and Hypotheses Development

The study aims to identify the importance of economic indicators as tools for understanding market trends, predicting future performance, and guiding the strategic decision-making process for companies, investors, and governments alike. These economic indicators are represented by (GDP growth, unemployment rates, consumer spending, and inflation figures). The study concluded that understanding economic indicators gives stakeholders insight into navigating dynamic market scenes effectively. These indicators act as economic stability measures, help assess risks, and formulate proactive strategies. The study [10]. aims to identify the performance indicators system represented in both an effective tool for strategic management and quality management that enables the company to ensure its competitiveness and meet modern trends in economic development. The study concluded that the presence of a reward system in the company based on performance indicators contributes to motivating employees to achieve the best results in their work and, at the same time, helps implement the company's strategic goals. While the study of [11]. It aims to analyze the relationship between economic growth and some indicators of sustainable development, as well as to know the extent of the impact of sustainable development indicators on the economic growth indicator represented by the GDP in Iraq. The researcher used the ARDL model to analyze the relationship between the study variables. The study concluded that there is a long-term equilibrium relationship between economic growth and some indicators of sustainable development in Iraq. In addition, sustainable development indicators impact economic growth in Iraq. The study [12]. aims to analyze the relationship between production volatility and greenhouse gas emissions in 155 countries between 1971 and 2017. The study concluded that global production volatility is positively amplified by emissions of methane (CH_4), carbon dioxide (CO_2), nitrogen oxide (NOX), and total greenhouse gases (HGs). Carbon emissions have a more significant impact on increasing production volatility. The study [13]. indicated the principles and indicators of transparency in investment in the organization Development and economic cooperation; the study concluded that transparency in investment helps reduce the misuse of financial resources and corruption, reduces the likelihood of financial violations and corruption, and enables countries to direct the financial resources of countries towards optimal exploitation and achieving sustainable development. The study [14]. aims to compare the social and economic development of the regions of the Republic of Kazakhstan for ten years from 2011 to 2020. The analysis was conducted based on statistical data on the leading macroeconomic indicators. The study found that donor regions make the most significant contribution to the structure of the country's GDP, and recipient regions make the most minor contribution to the country's economy. In addition, the main feature of the region's macroeconomics is the GDP per capita indicator, which reflects the level of well-being of the region's population. At the same time, the study [15]. aims to shed light on the role of good governance in achieving economic development. Cross-sectional and time-series data were used to achieve the study's goal, based on economic variables represented by GDP per capita as a dependent variable and good governance indicators as independent variables. The study concluded that the random effects model is appropriate for understanding the phenomenon studied. Thus, the model allows for the difference in the random component between Arab countries when estimating the relationship between the effects of good governance indicators and economic development. The study [16]. aims to identify the most critical developments in fiscal policy in the Iraqi economy and its impact on economic development, clarify the role of fiscal policy in Iraq from 2004 to 2020 through its tools in achieving economic development and how to use it to achieve these indicators represented by public expenditures, revenues and net budget to raise economic growth rates, achieve economic welfare and satisfy the desires of society, and one of the most critical results reached by the study is the absence of a long-term relationship between public expenditures and the GDP indicator due to the decline in investment spending, and at the same time an increase in operating spending due to significant employment in government departments and the government sector. Based on the literary contributions, we developed the following hypothesis to deal appropriately with the research variables and provide answers to the following questions:

Iraq needs to improve its economic development indicators and thus faces challenges in achieving the required economic development.

The research problem was represented by the fact that despite the importance of studying and analyzing economic development indicators, Iraq needs to improve in these indicators and then identify the obstacles that contribute to the decline in these indicators. In order to achieve the research objectives, the inductive approach was relied upon, which depends on analyzing partial variables and arriving at specific results that are generalized to all. This was done by collecting available data and information to study the indicators of economic development in the Iraqi economy, describing and analyzing these indicators, and evaluating their results based on data, books, research, and studies published in magazines and on the Internet.

The research was divided into three axes—the first focused on studying economic development indicators in terms of concept and importance. Then, the second addressed the reality of economic development indicators in Iraq from (2013 to 2021), their obstacles, and ways to address them. It concluded with several conclusions and recommendations in the third axis.

Research Methodology
- **Research objective:** The research aims to study and determine the reality of economic development indicators in the Iraqi economy, its challenges, and how to address them.
- **Importance of the research:** The importance of the research comes from the importance of the topic itself by addressing one of the essential economic topics, namely economic development indicators, which are necessary to bring about structural economic changes in achieving economic development, to advance the reality of the Iraqi economy and address these imbalances, as they are used to evaluate economic activity, and work on designing and evaluating policies that aim to advance the economy, and evaluating economic activity, which is vital to be linked to comprehensive economic data to provide a comprehensive view of the economy.

The first axis: The Conceptual Framework of Economic Development and Economic Indicators

First: The Concept of Economic Development

The first to use the term development was Boujin Stelli when he proposed the world development plan in 1989, while the most prominent advocate of economic development was the British Adam Smith, who launched this concept on the process of establishing economic and political systems called in its entirety the development process. The approach to development during the fifties and sixties of the last century was purely economic due to the belief of those in charge of development issues and that this approach can develop the public life of people [17]. Development was also defined as the development of human energies to the maximum possible extent or the satisfaction of human social needs to bring people to a certain standard of living. According to the United Nations, development is defined as those processes by which the efforts of citizens and the government can be unified to improve the economic, social, and cultural conditions in local communities and help them integrate into the life of the nation and contribute to its progress to the maximum extent possible [18]. Development is a dynamic process consisting of societal structural and functional changes. It occurs as a result of intervention in directing the size and quality of resources available to society in order to raise the level of well-being of the majority of society members by increasing the effectiveness of its members in investing the energies of society to the maximum [19]. Economists emphasized in the aftermath of World War II the need to adopt an economic development strategy that expresses the process of increasing real national income and the continuity of this increase over a long period so that this increase is more significant than the increase in population. Thus, it aims to use natural resources to achieve the economic well-being of society members and exploit these resources in the best ways, focusing on the material aspect only. Economic development is also defined as progress for society by devising new and better production methods and raising production levels through developing human skills and energies and creating better organizations. Alternatively, it is the process through which we try to increase the average per capita share of the gross national product during a specific period by raising the average per capita productivity and using the available resources to increase production during that period [20]. Economic development is defined as the process by which the transition from a state of backwardness to a state of progress takes place, which requires a change in economic structures. Thus, it is directed toward increasing the productive capacity of economic resources [21]. Economic development is also defined as a process of raising the level of national income so that this results in an increase in the average per capita income, and its implications include raising the productivity of existing production branches, especially in third-world countries, such as the agricultural sector and the primary resources sector, or it is the process in which a comprehensive and continuous change occurs, accompanied by an increase in real income, an improvement in the distribution of income in favor of the poor classes, the quality of life, and a structural change in production [22].

The concept of economic development has emerged mainly since World War II and has witnessed multiple transformations among economists, as it has gradually evolved from being a synonym for economic growth to becoming broader and more extensive, according to the definition provided by Mayer, who explains that development means an increase in individual income for an extended period, accompanied by a decrease in the level of poverty and inequality [23]. As for Perroux, he indicates that development is a combination of mental and social changes in a population group that enables it to increase its real GDP cumulatively and permanently. As for the economist Kindle Berger, he confirms that economic development is the increase in the national product in a certain period, with the necessity of providing technological, technical, and organizational changes in existing or awaiting establishment production institutions. Alternatively, it is a process in which national income and per capita income increase on average in addition to achieving high growth rates in specific sectors that express progress [24]. Development is also defined as the process through which a comprehensive and continuous change occurs, accompanied by an increase in the average real income, an improvement in the distribution of income in favor of the poor class, and an improvement in the quality of life. Economic development is a process of structural and institutional change that is purposeful and comprehensive in all aspects of economic and social life in a given society to enhance the economic level within the country and improve the standard of living, health, and education through investment in diverse scientific and cognitive capabilities and energies, which in turn is positively reflected on society as a whole [25]. Development is a multidimensional process that includes radical and fundamental changes in all aspects, according to what was indicated by the International Development Report issued by the World Bank in 1991, which considered the main challenge of development to be improving the quality of life, especially people with low incomes Among them, it does not only include the income level but rather goes beyond it to include improving the educational, health and nutritional levels, in addition to maintaining a clean environment and achieving equality among individuals in providing all opportunities, including expanding options and enhancing opportunities [26].

The researcher believes that development is a comprehensive process that aims to bring about structural economic and social transformations, with economic growth as the main focus, including many changes in both supply and demand.

Second: The Indicator

It is one of the data that has been selected from among a group of data, or important statistical information for its specificity and the importance of what its value represents, or it is a tool that describes a specific situation or condition in a brief quantitative manner. It is a measure that summarizes information that expresses a specific phenomenon or problem and answers specific questions that the decision-maker inquires about [27].

Third: Economic Indicators of Development

They are statistics, reports, and economic data that are studied and scheduled in advance, through which the performance of all economic sectors of the country or region is measured and used to predict the future economic status of the country and identify its strength in global financial markets. There are many types of these indicators, including the economic growth rate, foreign direct investment, unemployment rate, inflation, health and education services indicators, and other vital indicators. These indicators are summarized in the economic structure through which the economic growth rate is measured and how wealth is distributed among members of society by knowing the country's GDP and distributing it according to all economic sectors and its spending items. Indicators play an important role in many economic studies, whether they are used in technical analysis or macroeconomics, as they are used to interpret and analyze data and are used to diagnose and determine the size of the problem, and measure it to determine the economic reality in the country first, and follow up on the plan

in place and then evaluate performance to determine progress towards achieving goals, whether short-term, medium-term or long-term [28]. Then, they help with planning and forecasting to solve economic problems.

Second axis: Iraq in light of economic development indicators from (2013 to 2021)
First: Economic Indicators
GDP: GDP means the market value of all final goods and services recognized that are produced in a country during a specific period. The GDP per capita is often considered an indicator of the country's living standard. The total GDP per capita is not a measure of individual income. According to Economic theory, The GDP per capita is equal to the gross domestic income per capita. The GDP is related to national accounts [29]. Table (1) shows the growth rate of the GDP in the Iraqi economy from (2013 to 2021) as follows:

Table 1: GDP in the Iraqi economy from (2013 to 2021)

Annual growth rate%	GDP (million dinars)	Year
-	273587529.2	2013
-2.62	266420384.5	2014
-26.93	194680971.8	2015
5.65	205679503.5	2016
9.37	224949725.5	2017
14.71	258035199.6	2018
3.16	266190571.3	2019
0.00	266190571.3	2020
13.13	301152818.8	2021

Source: Prepared by the researcher based on: 1 - Ministry of Planning, Central Bureau of Statistics and Information Technology, Annual Statistical collection for multiple years, separate pages. The researcher calculated 2-the annual growth rate based on the data of the same Table and the application of the equation: r=(P2-P1)/P1*100. The year of comparison represents p2: represents the base year, p1,

We notice from Table (1) a decrease in the GDP from 273,587,529.2 in 2013 to 205,679,503.5 in 2016 with a growth rate of 5.65%, then an increase to 258,035,199.6 with a growth rate of 14.71% in 2018, then to 301,152,818.8 with a growth rate of 13.3% in 2021. The reason for the increase and decrease is due to changes in oil prices, rising and falling, as a result of Iraq's dependence on oil revenues to a large extent, as oil contributes a large percentage to the GDP compared to the rest of the economic sectors, which makes Iraq suffer from structural imbalances.

Average Per Capita Share of GDP: The average per capita share of GDP means the GDP divided by the total population [30]. as this indicator is an important measure of the level of economic development and the overall performance of the economy, and Table (2) shows this as follows:

Table 2: Average per capita share of GDP in the Iraqi economy from 2013 to 2021

Annual growth rate%	GDP per capita (dinar)	Year
-	7795455.5	2013
-1.88	7648994.9	2014
-27.72	5528730.4	2015
-1.52	5444537.4	2016
9.62	5968459.4	2017
18.18	7053761.2	2018
0.06	7057826.9	2019
-23.89	5371371.9	2020
36.11	7311192.2	2021

Source: Prepared by the researcher based on: 1 - The Ministry of Planning, the Central Bureau of Statistics and Information Technology, the annual statistical collection for multiple years, and scattered pages.2-the annual growth rate was calculated by the researcher based on the data of the same Table and the application of the equation: r=(P2-P1)/P1*100

We notice from Table (2) a decrease in the per capita GDP index from 7795455.5 in 2013 to 5444537.4 with a growth rate of -1.52% in 2016, resulting from the wars and conditions that the Iraqi economy went through, then it rose to 7053761.2 with a growth rate of 18.18 in 2018, then to 7311192.2 with a growth rate of 36.11% in 2021 after it decreased to 5371371.9 with a growth rate of -23.89% in 2020, and it had recorded a high rate in 2013, reaching 7795455.5, resulting from the success of the economic policy and the increase in the economic growth rate.

Trade Balance Index: The trade balance of goods and services shows the degree of openness of the Iraqi economy to the outside world and the level of its trade relations with different countries. From Table (2), we note that as follows:

Table 3: Total exports and imports in the Iraqi economy from 2013 - 2021 / million dinars

Total Foreign Trade to GDP%	Total Foreign Trade	Annual Growth Rate%	Total Imports	Annual Growth Rate%	Total Exports	Year
63.55	173869522	-	69200034	-	104669488	2013
60.47	161096122	-8.71	63174276	-6.45	97921846	2014
55.26	107581435	-26.64	46346415	-37.47	61235020	2015
43.69	89852140	-12.17	40707520	-19.74	49144620	2016
50.48	113555750	10.69	45060540	39.37	68495210	2017
60.92	157193050	20.78	54425840	50.04	102767210	2018
51.26	136454741	5.76	57559000	-23.23	78895741	2019
366.09	974498887	0.20	57676576	1062.07	916822311	2020
52.09	156872288	-12.35	50552168	-88.40	106320120	2021

Source: 1-General Directorate of Statistics and Research, annual economic report of the Central Bank of Iraq, different years, scattered pages. 2-The annual growth rate was calculated by the researcher based on the data from the same table and the application of the equation: r=(P2-P1)/P1*100. 3-The total foreign trade was calculated by adding the total and total imports, and the researcher calculated the percentage of total foreign trade by dividing the total foreign trade by the GDP based on Table (1).

We note from Table (3) a decrease in the value of Iraq's exports from 104,669,488 in 2013 to 49,144,620 with a growth rate of -19.74% in 2016, then an increase to 102,767,210 with a growth rate of 50.04% in 2018, then to 916,822,311 with a growth rate of 1062.07% in 2019, then a decrease to 106,320,120 with a growth rate of -88.40% in 2020, as a result of the rise and fall in global crude oil prices. As for imports, they witnessed a noticeable increase from 69,200,034 in 2013 to 54,425,840 with a growth rate of 20.78% in 2018, then decreased to 50,552,168 with a growth rate of -12.35%. In 2021, the increase was due to the demand for equipment goods to complete investment projects within the framework of economic reform programs and the occasional increases witnessed by imported goods markets. As a result of the increase in investment, which has a positive impact on imports directly through the production inputs and capital goods it requires that may not be available in Iraq, and indirectly through its impact on growth, which leads to an increase in the average per capita income, which leads to an increase in demand for local and imported goods. Foreign direct investment may also negatively impact imports if it works to produce local goods that replace imported goods. Total foreign trade decreased from 173,869,522 in 2013 to 89,852,140 in 2016, then rose to 157,193,050 in 2018, then to 156,872,288 in 2021. As for the percentage of total foreign trade to the GDP, it decreased from 63.55% in 2013 to 43.69% in 2016, then rose to 366.09% in 2020 as a result of the increase in oil exports, then it decreased to 52.09% in 2021.

This shows a decline in the general trend of the contribution of total foreign trade to the formation of the GDP due to the decline in the general trend of exports and imports separately. The reason for this is the structural imbalance suffered by the Iraqi economy, which depends mainly on oil exports compared to the manufacturing, agricultural, and services sectors.

Investment: It means the change in the capital balance and the state's ability to attract more investments is an indicator of the success of economic development, as economic development is a positive function of economic growth, and the latter is a positive function of capital accumulation, i.e. the change in capital, so it is crucial to work on reducing the challenges and obstacles to investment and achieving overall stability to encourage the flow of investments, in addition to working on coordination between the public and private sectors so that competition does not occur [31]. and Table (4) shows the amount of investment flow in the Iraqi economy from 2013-2021. We note from Table (4) a decrease in the flow of foreign direct investment from $10,176.40 million in 2014 to $5,032.40 million with an annual growth rate of -19.56% in 2017, then a decrease to $3,076.4 million with an annual growth rate of -37.03% in 2019, then to $2,896.3 million with an annual growth rate of -5.85% in 2020, then an increase to $3,006.3 million with an annual growth rate of 3.80% in 2021. The reason for the decrease is due to the conditions and challenges facing the Iraqi economy, in addition to the economic, legal, and administrative obstacles facing investors in Iraq, as the transfer of foreign direct investment and its continued flow depends on the host economy and the ability to confront changing economic conditions, and the policies adopted by the economic administration to confront these conditions, in line with the goals of the external competitiveness of the national economy.

Table 4: Foreign direct investment in the Iraqi economy from (2013 to 2021) / million dinars

Annual growth rate%	Foreign Direct Investment (Million US$)	Year
-	2335.30	2013
335.76	10176.40	2014
-25.57	7574.20	2015
-17.41	6255.90	2016
-19.56	5032.40	2017
-2.92	4885.5	2018
-37.03	3076.4	2019
-5.85	2896.3	2020
3.80	3006.3	2021

Source: prepared by the researcher based on: 1 – the Central Bank of Iraq, the General Directorate of Statistics and Research, the Annual Statistical Bulletin, various numbers. 2-the annual growth rate was calculated by the researcher based on the data of the same Table and the application of the equation: r=(P2-P1)/P1*100

Total Fixed Capital Formation (TFCF)
FCF is one of the most prominent economic variables that has played a vital and influential role in the economies of developed and developing countries. Therefore, the FCF indicator is of great importance as it constitutes an influential factor in the process of economic development, economic development because it determines the level and rate of growth in national income, and the characteristics of this indicator vary compared to other production factors, as it is characterized by a high capacity for expansion through the initiation and continuation of investment and savings operations, in addition to the fact that the capital increase will be reflected in the increase in the productivity of other production elements such as land and labor. Therefore, it motivates the increase in productivity as a reward for savers due to their sacrifice and their postponement of present consumption (Iraqi Economic Report, 2022, 57). The total FCF in the Iraqi economy and the percentage of the public and private sector's contribution to its formation can be explained in the following Table:

Table 5: Total FCF at current prices in Iraq and the relative contribution of the public and private sectors to its formation from (2013-2021) (million dinars)

Percentage of private sector contribution to the formation of gross FCF (6)	Gross FCF of the private sector (5)	Percentage of public sector contribution to the formation of gross FCF (4)	Gross FCF of the public sector (3)	Annual growth rate% (2)	Gross FCF (1)	Year
18.07	9950129.9	81.92	45086546.2	-	55036676.1	2013
24.97	13947787.4	75.02	41889615.5	1.45	55837402.9	2014
33.19	16812008.8	66.8	33838563.9	-9.29	50650572.7	2015
51.03	20268936.8	48.96	19446700.4	-21.59	39715637.2	2016
45.86	14826734.4	54.13	17503541.3	-18.6	32330275.7	2017
40.78	13029633.0	59.21	18914938.6	-1.19	31944571.6	2018
20.98	11455400.6	79.01	43124609.2	70.86	54580009.8	2019
55.44	9289962.8	44.55	7464943.4	-69.3	16754906.2	2020
45.74	11357228.6	54.25	13468090.4	48.17	24825319.0	2021
Compound growth rate of gross FCF from (2013-2021)%						-8.46

Source: prepared by the researcher based on: 1-Ministry of Planning, Central Bureau of Statistics, statistical group, different years, separate pages. 2- The researcher calculated the proportions by dividing the third and fifth columns by the first column*100. 3-The annual growth rate was calculated by the researcher based on the total FCF data and the application of the equation: $r=(P2-P1)/P1*100$. 4-the compound growth rate was calculated by the researcher and based on the total FCF and the application of the equation: $r= (P2/p1)^{(1/n)} -1*100 * p1$: represents the year of comparison, p2: represents the base year

We note from Table (5) a decrease in the total FCF from 55,036,676.1 million dinars in 2013 to 32,330,275.7 million dinars with an annual growth rate of -18.60% in 2017, then an increase to 54,580,009.8 million dinars with an annual growth rate of 70.86% in 2019, then a decrease to 24,825,319.0 million dinars with an annual growth rate of 48.17% in 2021, and a compound growth rate of -8.46% from 2013-2021. We note from the Table that the public sector's contribution to the formation of total fixed capital increased to 81.92% in 2013, then decreased to 59.21% in 2018, then to 54.25% in 2021, compared to the private sector's contribution, which was 18.07% in 2013, then increased to 40.78%, then to 45.74% in 2021. These percentages were lower compared to the public sector, indicating the weakness of the public sector's contribution to the formation of total fixed capital, even after the implementation of economic reform programs, which contributed to deepening the imbalance in the production structure due to the state's dominance of resources and its reliance on centralization in managing economic activities and marginalizing the role of the private sector, with the presence of many obstacles facing it in investment, and despite the efforts of the National Development Plan (2018-2022) to emphasize the role of the private sector in local economic activity by opening up investment areas for it in various economic, social and service activities, its contribution In capital formation it remained modest.

Second: Social Indicators

Investing in people is one of the essential components of economic development, and it is one of the goals that all international charters and treaties related to economic development seek to achieve. The most prominent indicators are poverty, unemployment, health, and education. These indicators will be addressed in the Iraqi economy as follows:

Poverty: It is one of the important indicators because it is one of the main goals for achieving economic development. Poverty in the economic sense means the material condition through which the individual cannot achieve the minimum of his basic requirements, either due to insufficient income or the absence of income at all [32].

While poverty is defined according to the international standard by determining a specific sample of per capita income, the World Bank considers extreme poverty as an individual receiving less than $ 1.90 per day. Poverty is usually measured based on the family supporting him, not the Individual. This threshold is adjusted for each country according to its purchasing power using purchasing power parities to compare data fairly according to each country's standard of living [33]. To know the number of poor people in the Iraqi economy, we note Table (6) as follows:

Table 6: Total population and number of poor people in the Iraqi economy from (2013 to 2021) (million dinars)

Year	Population (1)	Annual growth rate% (2)	Number of poor people (3)	Annual growth rate% (4)	Percentage of poor people% (5)
2013	35096	-	6699	-	19.09
2014	36005	2.59	6940	3.60	19.28
2015	35213	-2.20	6855	-1.22	19.47
2016	36169	2.71	7110	3.72	19.66
2017	37140	2.68	7447	4.74	20.05
2018	38124	2.65	7644	2.65	20.05

2019	39128	2.63	7536	-1.41	19.26
2020	40255	2.88	12760	69.32	31.7
2021	41190	2.32	12192	-4.45	29.6
Compound growth rate of the total population from (2013-2021)%					1.79
Compound growth rate of the total number of poor from (2013-2021)%					6.87

Source: prepared by the researcher based on: 1-Ministry of planning, annual statistical collection, different years, separate pages. 2-The proportions were calculated based on the Table itself. 3- The researcher calculated the annual growth rate based on the data of the same Table and the application of the equation: $r= (P2/p1) ^ (1/n)-1*100$, 4 – the compound growth rate was calculated by the researcher based on the data of the same Table and the application of the equation: $r=(P2-P1)/P1*100$, *p1: represents the year of comparison. P2 represents the base year.

We note from Table (6) an increase in the population from 35.096 million people in 2013 to 37.140 million people with a growth rate of 2.68% in 2017, then to 39.128 million people with a growth rate of 2.65%, then to 41.190 million people with a growth rate of 2.32% in 2021. As for the number of poor people, it increased from 6699 million in 2013 to 7447 million dinars with a growth rate of 4.74% in 2017, then to 12760 million with a growth rate of 69.32% in 2020, then to 12192 million with a rate of -4.45% in 2021 with a negative growth rate but it remained high, which led to an increase in the percentage of poor people in Iraq from 19.09% in 2013 to 20.05% in 2017, then to 31.7% in 2020, then achieved a negative growth rate in 2021 by 29.6%.

Unemployment
According to the World Bank, the unemployment index is one of the critical social indicators. Unemployment is defined economically as the state of people who are able and willing to work but do not work even though they are looking for work, or it is the state of the unavailability of work for a person who wants a profession that matches his readiness and abilities due to the state of the labor market [34]. To learn about the unemployment rate in Iraq, we note Table (7) as follows:

Table 7: Unemployment rate in the Iraqi economy from (2013-2021)

Year	2013	2014	2015	2016	2017	2018	2019	2020	2021
Unemployment rate %	11	10.6	16.4	10.8	13	13.4	14	15.7	16.2

Source: Ministry of Planning, Central Bureau of Statistics and Information Technology, Annual Statistical collection, different years, scattered pages.

We have noticed from countries (7) that the unemployment rate rose from 11% in 2013 to 16.4% in 2015, decreased to 13.4% in 2018, and then increased to 16.2% in 2021. This increase is due to the circumstances and challenges that the Iraqi economy faced during this period, in addition to its heavy reliance on the oil economy to finance economic sectors and public expenditures. Therefore, it suffers from structural imbalances in these sectors, their inability to renew and continue, and thus absorb these increasing numbers of the population, the heavy reliance on the public sector to employ many individuals, and the unwillingness to be appointed in the private sector. This is in addition to the inability of the private sector to employ these increasing numbers of unemployed people and the heavy reliance on foreign labor due to the low costs of employing them compared to the Iraqi individual. This demonstrates the lack of an actual long-term development policy that includes all economic sectors and the public and private sectors, in addition to the spread of corruption, negatively impacting the implementation of economic development plans.

Health: It is considered one of the critical indicators because of its connection to the lives of individuals who are the basis of societies, and that providing health is a basic necessity in the life of a human being who is the goal of development [35]. and some important population data indicators will be addressed as indicators for measuring economic development, as shown in the following Table:

Table 8: Trends of vital population statistics in the Iraqi economy from (2015-2020)

Year	Life expectancy at birth	Crude birth rate in thousands per thousand population %	Natural population increase rate %
2015	73.0	30.8	2.68
2016	73.2	30.4	2.64
2017	73.4	30.1	2.61
2018	73.6	30.2	2.58
2019	73.8	30.1	2.57
2020	74.1	30	2.55

Source: Ministry of Planning, Central Bureau of Statistics and information technology, demographic and population indicators, statistics and geographic information systems authority, Baghdad,2024.

It is clear from Table (8) that the trends in life expectancy are increasing, as it rose from 73.0 in 2015 to 73.8 in 2019 and then to 74.1 in 2020. The crude birth rate decreased from 30.8 in 2015 per thousand people to 30.2 in 2018, then gradually decreased to 30 in 2020. The natural population increase rate decreased from 2.68% in 2015 to 2.58% in 2018, then to 2.55% in 2020. However, Iraq remains among the countries in the world with high annual population growth rates of no more than 2.5 or more per year, as we noted in Table (6), as the population increases annually by

about one million people, confirming that the rate is constantly increasing.

Education: There has become a clear interest in the necessity of accumulating human capital, such as physical capital, and focusing on factors that increase the efficiency of human capital, such as education and skills that raise their scientific and practical level. In the event of a diminishing role of natural resources and the role of knowledge as a source of strength in society, human development that produces this knowledge and employs it becomes a decisive factor in determining functional skills and capabilities. Thus, education and development are intertwined to the extent that education is similar to a synonym for development [36]. Some education indicators in Iraq will be addressed, including the rate of students in kindergartens, primary schools, secondary schools, and universities, which is the number of students in these schools to the total population, and this reflects the extent of the dissemination of education and knowledge in the Iraqi economy, as in Table (9) and as follows:

Table 9: Number of students in education from (2014 - 2020)

Year	Kindergarten	Primary	High school	Vocational	University
2014-2015	149312	4283044	2032880	44696	574997
2015-2016	179635	4997052	2442935	51138	608554
2016-2017	186816	5473997	2624140	53003	647770
2017-2018	202937	6197876	293359	50039	743825
2018-2019	209380	6501053	3140110	50603	792553
2019-2020	209380	6637127	3258718	52131	846132
Compound growth rate from (2014-2020)%	5.79	7.57	8.18	2.59	6.65

Source: Ministry of Planning, Central Bureau of Statistics and information technology, demographic and population indicators, statistics and geographic information systems authority, Baghdad,2024.

The researcher calculated the compound growth rate based on the data of the Table itself and the application of the equation: $r = (P2/p1)^{(1/n)} - 1 \times 100$.

Table (9) indicates an increase in the number of students in kindergartens from 149,312 in 2014-2015 to 202,937 in 2017-2018, then to 209,380 in 2019-2020, with a compound growth rate of 5.79%, in addition to an increase in the number of students in primary schools from 4,283,044 to 6,197,876, then to 6,637,127, with a compound growth rate of 7.57% during the same period. As for students in secondary schools, it witnessed an increase from 2,032,880 to 3,140,110 in 2018-2019, then to 3,258,718 in 2019-2020, with a compound growth rate of 8.18% for the same period. As for university education, it increased from 44,696 to 50,039, then to 52131 with a compound growth rate of 2.59%. At the same time, university education increased from 574997 to 792553 to 846132 with a compound growth rate of 6.65% during the same period. In light of this large number of students and the increased demand for education, the number of schools and universities was not able to accommodate them, which prompted them to resort to private schools and universities by granting them a license and recognition to accommodate these numbers and expanding university education admission plans and opening evening studies. However, in the Iraqi economy, it is difficult to measure the efficiency of the education system due to the absence of the role of the private sector and the reliance of the most significant percentage of graduates on the public sector, which suffers from flabbiness, structural imbalance and the inability to expand to accommodate these numbers. In addition, Iraq suffers from an increase in illiteracy rates among its society members despite the programs that the state has sought to implement to reduce this dangerous phenomenon. Illiteracy rates have increased significantly in recent years and have become a phenomenon that threatens Iraqi society and will then affect economic development indicators, as the overall rate rose from 25.85% in 2004 to 40.60% in 2019 (Ministry of Planning, Central Bureau of Statistics and information, 2024), which represents a significant barrier facing the educational system in Iraq.

Third: Environmental Indicators: These indicators include measuring the rate of desertification, the per capita rate of agricultural land, the exploitation of water resources, the percentage of waste, the percentage of carbon in energy, the use of renewable reserve water, the atmosphere, the per capita share of agricultural land, and the percentage of land affected by desertification. The main goal of sustainable development is to create a green environment free of pollution and protect the environment from all adverse effects of industrial waste. The environmental dimension of sustainable development means achieving economic well-being for present and future generations while preserving the environment, protecting it from pollution, and enabling it to provide an appropriate standard of living on an ongoing basis over time [37]. The average per capita share of carbon dioxide emissions will be indicated, which is one of the environmental indicators that should be taken into consideration, as it is considered one of the greenhouse gases whose primary sources of emission are abundant in the country, especially from various economic activities [38]. as shown in Table (10), as follows:

Table 10: Carbon dioxide emissions and the average per capita share of it in the Iraqi economy from (2013-2021)

Year	Population (1)	(Carbon dioxide emissions (kilotons) (2)	Average per capita carbon dioxide emissions (3)
2013	35096	127104	3.62
2014	36005	134046	3.72
2015	35213	123170	3.49
2016	36169	124281	3.43
2017	37140	156456	4.21
2018	38124	160154	4.20
2019	39128	163688	4.18
2020	40255	173512	4.32
2021	41190	181043	4.15

Source: 1-Ministry of Planning, Central Bureau of Statistics and Information Technology, Annual Statistical collection, different years, scattered pages. 2- [39]. 3-Calculate the third column by dividing the second column by the first column.

We note from the data in Table (10) that the volume of gas emissions in Iraq is constantly increasing during the research period from (2013 to 2021), as it rose from 127104 kilo/ton in 2013 to 156456 kilo/ton in 2017, then to 173512 kilo/ton in 2020 and to 181043 kilo/ton in 2021, which means an increase in the average per capita share of gas from 3.62 then to 4.21, 4.32, 4.15 during the same years. This is a dangerous indicator, as the global target agreed upon in the seventh goal of the Millennium Environment Goals is (1.5) metric tons, meaning that there is a significant difference indicating that Iraq is classified among the countries with high pollution in the world, which requires working on building clean technology to ensure the sustainability of a clean environment. Third axis: Conclusions and recommendations

Conclusions
- Economic indicators reflect the economic situation of the country by studying the relationships between the various variables, such as output, income, consumption, investment, growth rate, and unemployment, as they are practical tools in the hands of administrative and economic authorities, so that they provide an in-depth view of the level of economic performance, enabling them to develop appropriate economic policies to solve crises and structural imbalances.
- Capital additions and annual renewals in the economy confirm the dominance of the public sector over it. It had a distinguished role in forming fixed capital due to the total reliance on the oil sector as the developmental and primary source of foreign currencies in financing investments, which indicates its essential role. In contrast, the investment policy of the private sector was limited to traditional service activities and is linked to the conditions witnessed by the Iraqi economy.
- Eliminating poverty is one of the critical social indicators that express the achievement of economic development goals in the Iraqi economy, as this rate became apparent during the research period.
- The Iraqi economy needs an apparent deficiency in economic development indicators, whether economic, social, or environmental.
- Iraq has not been able to achieve the goals of economic development. Thus, it has yet to achieve the goals and aspirations of its people in a manner consistent with the global development movement in economic development through the development of plans, programs, and policies.
- The volume of carbon dioxide emissions has increased continuously, as the average per capita share increased from 3.62 in 2013 to 4.15 in 2021
- The continuous population growth witnessed by the Iraqi economy is met by a historical accumulation resulting from the stumbling and deterioration of housing development and its infrastructure as a result of the state being exposed to a set of challenges, which led to an almost complete halt in the housing policy and the construction of urban cities suitable for individuals, and this will constitute an obstacle to achieving acceptable rates of economic development indicators in the future.
- Economic indicators provide an objective, unbiased picture of the economy for the economic, social, and environmental situation, and these indicators include statistics used to measure the performance of various sectors to evaluate the state's economic situation to know the extent of its strength or weakness. 9- The education sector in Iraq has yet to witness any tangible development, as the educational methodology in Iraq and how it is conducted focus on producing government employees, which is inconsistent with the new visions that the Iraqi economy should have to improve economic development indicators.

Recommendations
- It is necessary to address the shortcomings in economic development indicators by providing political and societal management that works to create successful conditions to raise the levels of economic development indicators.
- Raising economic development indicators to contribute positively to the GDP is necessary.
- It is essential to issue economic indicators regularly and periodically and to monitor the weak points in economic development indicators to address them adequately.
- It is necessary to increase the percentage of allocations for ministries related to economic development, such as the Ministry of Education, Health, and Environment, so that these ministries can develop plans to raise economic development indicators.
- Work on building clean technology to ensure environmental sustainability and reduce pollution rates, in addition to focusing on developing green tourism, which depends on the natural environment of forests or water bodies in which low-energy consumption facilities are established, in addition to expanding the cultivation of green spaces and reducing carbon dioxide emissions in industrial facilities.
- It is essential to work on preparing and providing incentives to build new cities and address the deterioration in infrastructure that has accompanied the increasing population growth to eliminate the spread of the phenomenon of the division of a single city and the spread of slums, to provide a healthy environment and clean, safe cities for individuals, to reach high development indicators.
- It is important to work on building an advanced educational system based on technology and professionalism that is consistent with international standards for industry and education and thus contributes to developing the scientific, practical, and technological capabilities of individuals and facing the challenges they face when moving to the labor market in light of competition, as knowledge and skill are the basis for the economic and social development of societies.

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