# The Impact of some economic variables on the output of the industrial sector in Iraq for the period 2004-2020

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### ABSTRACT

The importance of the research comes by highlighting the Iraqi economy, especially the output of the industrial sector, and showing the impact of some economic variables that affect it. The industrial reality in Iraq is deteriorating and dilapidated because of the failed strategies that caused the decline in productivity and the obsolescence of industrial equipment, as well as the lack of a clear strategy for the advancement of the industrial reality The research aims to analyze the indicators of the industrial sector in Iraq and analyze the relationship between

economic variables and industrial output.

# Introduction

The Iraqi economy faces the difficulty of getting out of the dependency of the oil sector and activating other sectors. The industrial sector is an important and essential pillar in the development of the gross domestic product. The growth of the output of the industrial sector is considered one of the main pillars in the transformations and structural changes of any economy, because the industrial sector is the leading sector for the economic development process in many countries. Increasing the output of the industrial sector leads to positive results for the gross domestic product, absorbing the unemployed labor force, and giving greater flexibility to the economy in facing crises and shocks, whether internal or external.

## **Research Importance**

The importance of the research comes by highlighting the Iraqi economy, especially the output of the industrial sector, and showing the impact of some economic variables that affect it. Through a theoretical study with analysis and measurement of its impact on the rates of output of the industrial sector in Iraq.

## **Research problem**

The industrial reality in Iraq is deteriorating and dilapidated due to failed strategies that caused low productivity and obsolete industrial equipment, as well as the impact of some economic variables on the output of the industrial sector, as well as the lack of a clear strategy for the advancement of the industrial reality. All these challenges contributed to the deterioration of the industrial sector in Iraq. The research problem revolves around the impact of Some economic variables on the output of the industrial sector despite the structural reforms and economic policies pursued by the Iraqi government in order to improve the level of the industrial

sector in Iraq.

### **Research Hypothesis**

The research stems from the hypothesis that these economic variables (exchange rate - inflation - trade exposure - investment spending) are related to the output of the industrial sector, whether positive or negative, affecting its growth and performance.

### **Research Objective**

The research aims to analyze some of the variables affecting the output of the industrial sector in Iraq and to determine the impact of each of these variables.

## **Research Methodology**

The researcher relied on the analytical deductive approach to show the impact of some economic variables on the output of the industrial sector in Iraq.

# The First axis - The relationship between some economic variables and the output of the industrial sector.

We will discuss the theoretical relationship between some economic variables and the output of the industrial sector according to economic theory The relationship for each variable is as follows:

# 1- The relationship between the exchange rate and the output of the industrial sector

The degree of influence of the exchange rate gives important indicators that help control the expenditures resulting from these effects. Simple fluctuations in the exchange rate lead to a low effect of the exchange rate reflection, which allows international commercial transactions to continue and maintains high demand elasticity. But if the changes in exchange rates are large, it will lead to This led to major imbalances in the national economy (**Faraj and Naif, 2015: 215**).

The stability of the exchange rate gives an incentive to increase and raise the level of industrial output, and its stability reflects stability country's economy.

### 2- The relationship between inflation and the output of the industrial sector

Inflation is one of the most important determinants of industrial growth, and the rise in the inflation rate reflects an uncertain environment and a state of economic weakness and instability, as there is an inverse and negative relationship between the rate of economic inflation and industrial growth. The price level, and this in turn causes a reduction in industrial activity and its contraction, and thus a decline in economic activity, a contraction of industries, and industrial producers selling industrial products at low prices, and this leads to a reduction in industrial output rates (Naguib, 2011: 106).

# 3- The relationship between commercial exposure and the output of the industrial sector

The commercial exposure index is one of the most important indicators that give a clear picture of the economic situation, which represents a measurement of the ratio of exports and imports to the gross domestic product, and the rise of these ratios means an increase in the degree of dependence on the outside and thus affecting the course of the developing country and the disappearance of its economic independence in the long run (Farhan, 2013: 98).

If trade openness allows access to capital goods, then this leads to growth in the long term, and that the shift from the protection system to trade liberalization can lead to high growth rates and thus a positive relationship between openness and economic growth, which is positively reflected on the growth of industrial output, The relationship of commercial exposure with the output of the industrial sector takes two directions, as increasing openness increases growth, and vice versa is also true according to the nature of the productive structure (Morad, 2011: 109)

## 4 - The relationship between investment spending and the output of the

### industrial sector

Investment spending in its general sense is a stream of spending on fixed capital goods such as factories, machinery, roads and bridges, as well as additions to inventory such as raw materials, intermediate or final goods, and new residential buildings during a certain period of time. In other words, it refers to spending on capital equipment for periods of more than a year, or spending in order to build new projects or expand their production capacities. Investment spending also

represents the implementation of long-term plans and strategies set by the state in order to achieve growth and industrial development, as every increase in this spending represents either Adding new production capacity or repairing and expanding broken capacity (**Muhammad, 2019: 35**), and that the main conclusion of the Harrod-Domar model emphasized the role of investment in achieving economic growth and thus industrial growth through their famous model of growth that confirms that there is a direct relationship between the growth rate The national income and the investment rate, meaning that the higher the investment spending, the higher the investment rate, and this led to an increase in the national income growth rate, and whenever the investment spending rate decreased, this led to a decrease in the national income growth rate (**Siyam and Mansour, 2018: 54**).

The second axis: the impact of some economic variables on the output of the industrial sector in Iraq.

There are some economic variables that affect the output of the industrial sector, positively or negatively, and we will address them as follows:

#### 1 – The rate of exchange

The exchange rate means that it is the ratio on the basis of which a number of local monetary units are exchanged for foreign monetary units, or it is the price at which the currency can be sold or bought in the free market and is determined by the forces of demand and supply. The exchange rate plays an active and influential role in economic stability and structural adjustment programs. Whether the tired exchange rate policy is a consistent part with the macroeconomic policy strategy represented in achieving the desired economic goals such as achieving internal balance through price stability and achieving external balance through a balanced balance of payments (**Issa, 2016: 248-247**).

The literature on exchange rate regimes indicates that there is an impact of exchange rates on industrial output, and that impact is either direct through the impact of exchange rate shocks, or indirectly through the impact of the exchange rate on investment, trade, and the development of the financial sector.

Countries to deal with trade shocks depends primarily on the exchange system adopted in those countries, which is reflected in the industrial growth of the country (Al-Hayali and Al-Mashhadani, 2012: 185).

In the event that the prices of a country's exports decline, this will affect industrial growth, whether the exchange rate system is fixed or floating, and in Iraq, the decrease in the price of exports will lead to a decrease in the revenue from these exports, which will lead to a decline in economic activity, including economic activity. Industrial, as well as the decline in employment used in economic activity, because Iraq's foreign currency revenues will decrease as a result of the decline in export prices, and thus the foreign currency will be little, which leads to a decrease in the value of the local currency, and in the event that Iraq relies on a fixed

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exchange rate system, it requires It is necessary for the state to intervene to maintain the exchange rate of the national currency by starting to buy the national currency, which reduces the availability of this currency for granting industrial facilities and investments, which will negatively affect industrial growth, and in the event that Iraq adopts a flexible exchange rate system, the state is not committed to Therefore, the lack of foreign currency will lead to a decrease in the value of the national currency. Which will lead to a decrease in the value of the national currency It leads to an increase in Iraq's exports and thus an increase in Iraqi industrial growth. The fixed exchange rate also has an indirect effect on industrial growth such as investment, the degree of openness to foreign trade, capital flows, and the development of the financial sector (**Muhammad, 2019: 62**).

years	(1) official exchange rate	(2) The growth rate of the official price	(3) market exchange rate	(4) The growth rate of the market price %	(5) industrial output	(6) Growth rate of industrial output %
2004	1453		1453		31793674.4	
2005	1469	1.10	1472	0.01	43500183.3	36.82
2006	1467	(0.14)	1475	0.20	75293857.7	73.09
2007	1255	(14.4)	1267	(14.10)	61092250.9	(18.86)
2008	1193	(4.9)	1203	(5.05)	90165374	47.59
2009	1170	(1.93)	1182	(1.75)	59975063.5	(33.48)
2010	1170	0.00	1186	0.00	77248634	0.29
2011	1170	0.00	1196	0.84	122132173.9	58.10
2012	1166	(0.34)	1233	3.09	134145123.5	9.84
2013	1166	0.00	1232	(0.08)	132731236.8	(1.05)
2014	1186	1.72	1214	(1.46)	122357215.9	(7.82)
2015	1190	0.34	1247	2.72	69825679.9	(42.93)
2016	1190	0.00	1275	2.25	72233333.5	3.45
2017	1190	0.00	1258	(1.33)	94331999.3	30.59
2018	1190	0.08	1208	(3.97)	125549647.6	33.09
2019	1190	0.00	1196	(0.99)	120734599.9	(3.84)
2020	1190	0.00	1351	12.96	66784176.7	(44.69)

 Table 1: Average exchange rate of the Iraqi dinar for the period (2004-2020)

Source: From the researcher's work, based on:

-Central Bank of Iraq, Department of Statistics and Research, annual statistical bulletin for the period (2004-2020)

-The numbers in brackets ( ) mean a negative sign

Through Figure 1, the impact of the Iraqi dinar exchange rate on industrial output in Iraq will be clarified

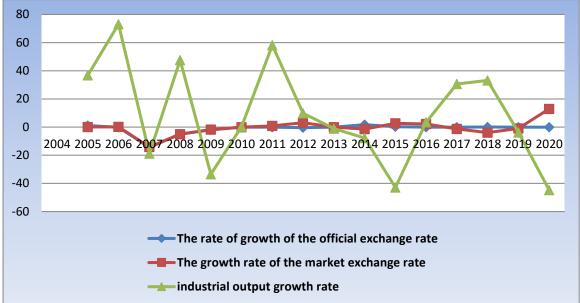


Figure (1) The impact of exchange rates on industrial output in Iraq (2004-2020)

### Source: From the researcher's work, based on the data of Table (1)

The official exchange rate at the beginning of the study period was (1453) dinars to one dollar, which is the same rate in the parallel market exchange rate, where it reached (1453) dinars to one dollar in the year (2004), while in the year (2005) the official exchange rate was (1469) dinars to one dollar With a positive annual growth rate of (1.10%), the market exchange rate in the same year amounted to (1472) dinars per dollar, and also a positive growth rate of (0.01%), while the growth rate of industrial output amounted to (36.82%) in the year (2005) and in the year (2006) The official exchange rate reached (1467) dinars to one dollar, and a negative growth rate amounted to (0.14%), while the market exchange rate in the same year amounted to (1475) dinars to one dollar, and an annual growth rate of (0.20%), which is positive. As for the annual growth rate of output In the same year, the industrial sector amounted to about (73.09%), and this is consistent with the economic theory that assumes that whenever the exchange rate of the local currency decreases, this will lead to a decrease in the prices of goods and services at home, which leads to an increase in exports and a decrease in imports, and then an increase in industrial output. 2014-2015) The official exchange rate fluctuated, reaching (1190-1186) dinars to the dollar, and annual growth rates Positive (0.32%-1.72%). Also, the market exchange rate witnessed a clear fluctuation in the same two years, reaching (1247-1214) dinars per dollar, and an annual growth rate of (2.72%-1.46%). As for the growth rate of industrial output, it fluctuated and then decreased by (42.93%-7.82%) This decrease is a result of the events that Iraq

went through, represented by the deterioration of the security and economic conditions of the country and the control of terrorism over a third of the area of Iraq, speculation in the parallel market, as well as currency smuggling to some neighboring countries. In the years (2019-2020), the exchange rate has stabilized The official rate is (1190) dinars per dollar for both years, and the annual growth rate has reached (0.00%-0.00%). As for the market exchange rate, we notice a clear fluctuation in its rates, as it reached (1351-1196) dinars per dollar, and the annual growth rate reached (12.96%). -0.99%) We note that the growth rate of the parallel price decreased by (-0.99%) compared to what it was in the previous year. As for the annual growth rate of the industrial sector, it reached during these two years (44.96-%-3.84%), which are negative percentages and the reason behind this decline It came due to the double crisis represented by the Corona pandemic and what it caused with great effects on the overall economy D as well as the drop in oil prices.

### 2- The rate of inflation

Inflation is the most important economic dilemma facing the decision-makers of any country in the world, and despite the difference between the different economic schools about defining the definition of inflation, the common denominator among them is that inflation necessarily refers to a state of continuous rise in the general level of prices for a long period, and for a long period of time. All types of goods and services. Inflation also has negative effects on industrial growth by influencing the distortion and distortion of investment decisions, which causes misallocation of resources and is likely to be inefficient, as well as the shift of capital from investment in productive sectors that serve growth to lowproductivity economic sectors. High inflation also causes structural imbalances in the national economy in general and negatively affects the output of the industrial sector, leading to distortions in the value of the local currency (**Al-Hayali and Al-**

#### Mashhadani, 2012: 183).

years	(1) Inflation rate	(2) growth rate of industrial output	years	Inflation rate	growth rate of industrial output
2004	27.0		2013	1.9	(1.05)
2005	37.0	36.82	2014	2.2	(7.82)
2006	53.2	73.09	2015	1.4	(42.93)
2007	30.8	(18.86)	2016	0.5	3.45

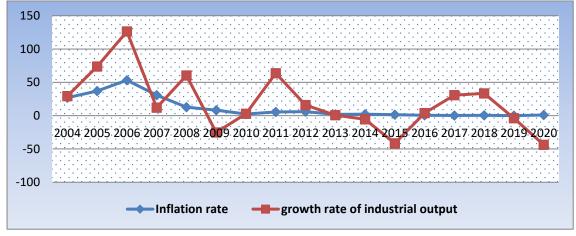
## Table (2) Annual inflation rate in Iraq for the period (2004-2020)

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2008	12.7	47.59	2017	0.2	30.59		
2009	8.3	(33.48)	2018	0.4	33.09		
2010	2.5	0.29	2019	(0.2)	(3.84)		
2011	5.6	58.10	2020	1.0	(44.69)		
2012	6.1	9.84	average	11.2			

Source: From the researcher's work, based on:

-Central Bank of Iraq, Department of Statistics and Research, annual statistical releases for the period (2004-2020)

-The numbers in brackets () mean a negative sign



# Figure (2) The annual inflation rate and the growth rate of industrial output in Iraq for the period (2004-2020)

#### Source: from the researcher's work based on the data of Table (2)

We notice from Table (2) and Figure (2) that there is a clear fluctuation in inflation rates and in the annual growth rates of industrial output. The inflation rate at the beginning of the study period reached (27.0) in the year (2004) and then rose to (37.0) in In (2005) the annual growth rate of industrial output reached (36.82%), then the inflation rate decreased in the year (2011) to reach (5.6), so that the growth rate of industrial output increased in the same year to reach (58.10%), then the years (2014-2015) witnessed inflation rates Low, it amounted to (1.4-2.2), then the growth rate of industrial output reached negative percentages, amounting to (42.93%-7.82%) as a result of the fall of some Iraqi governorates in the hands of terrorist groups and the suspension of industrial projects in them, which negatively affected industrial output in those years. Then the years witnessed (2018-2017) Inflation rates were also low, amounting to (0.4-0.2), then the growth of industrial output increased in those years to reach (33.09%-30.59%), respectively, as a result of the improvement in the security and economic situation and the return of life to the liberated areas, then after that the inflation rates reached (-1.0%) 0.2% in the years (2019-2020), which are very low rates of inflation. The industrial growth rate amounted to (44.69%-3.84%), which are negative growth rates due to The Corona pandemic and its bad effects on all economic sectors, including the industrial sector.

### 3-The degree of commercial openness

The Iraqi economy depends largely on foreign trade, as Iraq exports food, beverages, raw materials, chemicals, transport machinery and equipment, manufactures, and unclassified commodities, but the lion's share in export is (crude oil), which is of great importance at the level of the global economy, and at the same time Iraq imports Food, beverages, raw materials, chemicals, transport machinery and equipment, manufactures, and unclassified commodities. If the Iraqi economy is commercially exposed to the global economy, is it an economy with a developed and diversified production base that made the global economy return to the Iraqi economy to meet its needs, and this is what made the Iraqi economy an economy that suffers from severe backwardness in its production base, making it unable to meet what the country needs locally, in addition to external demand, so it imports everything it needs from abroad to meet its local needs, and this is what makes it commercially exposed to the global economy (AI-

#### Zubaidi, 2016: 216).

The question posed here is whether the degree of economic exposure affects positively or negatively?

According to the nature of the productive structure prepared for foreign trade, there are many positive aspects of trade openness that countries benefit from, the most important of which is the benefit from reducing customs tariffs and removing nontariff restrictions, which leads to an increase in the competitive efficiency of products, including increasing the size of global markets by bringing about many changes in developed countries And the diminishing power of central banks in controlling the value of currencies in developing countries and reducing the monetary and fiscal policies of the government. As for the negative aspects of trade openness, it entails limiting commodity trade, increasing import competition for local products, which leads to a reduction in the size of the activity of the industrial establishment, and then a rise in the unemployment rate and what follows From social and economic constraints, under the pretext of respecting quality and health standards Developed countries are likely to resort to imposing protection for their markets from the imports of developing countries. The application of trade openness and the replacement of imports may have a negative impact on development and growth, because the increase in imports leads to a trade balance deficit that is financed by external debt Therefore, trade openness is a

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cause of Reasons for external indebtedness, fluctuations in crude oil prices, high interest rates, and changes in raw material prices (**Banaouf and Al-Dawy, 2016: 56**). The degree of commercial exposure to the Iraqi economy can be clarified through

the following table:

# Table (3) The degree of commercial exposure to the Iraqi economy for the<br/>period (2004-2020)(million dinars)

Years	Export value	Import value	Volume of trade exchange	Gross domestic product at current prices	growth rate of industrial output	Commerc ial Exposure %
2004	29956020	30952241	60908261	53235358		114
2005	39963945	34568508	74532453	73533598	36.82	101
2006	48780391	30648564	79428955	95587954	73.09	83
2007	51158039	24542780	75700819	111455813	(18.86)	68
2008	79028559	42346728	121375287	157026061	47.59	77
2009	51473565	45086601	96560166	130643200	(33.48)	74
2010	63880713	51380550	115261263	162064566	0.29	71
2011	96531318	55929510	152460828	217327107	58.10	70
2012	113151788	68800996	181952784	254225491	9.84	72
2013	108514489	69200934	177715423	273587529	(1.05)	65
2014	103714534	62004382	165718916	266332655	(7.82)	62
2015	67192476	56485730	123678206	194680972	(42.93)	64
2016	55352469	40707520	96059989	196924142	3.45	49
2017	75180283	45060540	120240823	221665709	30.59	54
2018	109726006	54425840	164151846	254870184	33.09	64
2019	105083228	69184220	174267448	262917150	(3.84)	66
2020	60229946	57298500	117528446	198774325	(44.69)	59

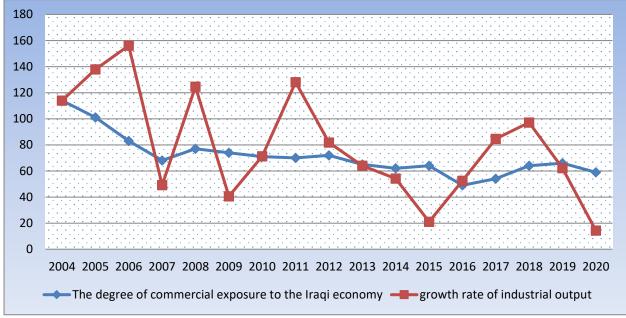
Source: From the researcher's work, based on:

-Ministry of Planning, Central Agency for Statistics and Research,

Department of National Accounts, reports of exports and imports, for the period (2004-2020)

-Column (5) was calculated by the researcher

-The numbers in brackets () mean a negative sign



# Figure (3) The degree of commercial exposure and the growth rate of the industrial output of the Iraqi economy.

Source: From the researcher's work, based on the data of Table (3)

We note from table (3) and figure (3) that the Iraqi economy is largely exposed to the outside world, and we note that the degree of commercial exposure has reached more than (100) degrees, and that these rates indicate that the Iraqi economy depends on the global economy to meet most of its needs, whether Through exporting or importing, on the other hand, there are countries that are also exposed to the global economy, but this exposure indicates the dependence of the global economy on them to meet its needs because these countries have a large production and technological base, unlike Iraq, where most sectors are idle and unproductive, such as the industrial and agricultural sectors, and the greatest dependence falls on the sector Oil, Figure (3) shows the fluctuation in the degrees of exposure, as we see an increase in the degree of exposure to (114) in the year (2004), then it began to decline after that to (70) degrees in the year (2011) and then it began to decline until it reached (59), degrees in the year (2020), despite this decrease, the degree of commercial exposure is still high because the degree of exposure should not exceed (45%), nor should it fall below (20%), noting that the average degree of commercial exposure was more than (71%) during the study period (2020-2004) 4-Investment spending on the industrial sector

Investment spending is one of the parts of government spending, according to the government's economic division. These expenditures are allocated in order to increase productive industrial activities such as the manufacturing industry and the

mining extractive industry. Investment spending in its general sense is a stream of spending on fixed capital goods such as factories, machinery, roads and bridges, as well as additions to inventory such as materials. Primary goods, intermediate or final goods, and new residential buildings during a certain period of time. Despite the importance of the level of investment spending, investment spending in Iraq is still low because of the conditions that Iraq went through after the year (2003), that is, after the occupation of Iraq, which led to the deterioration of the security situation in Iraq. This led to the flight of capital outside the country, and the poor situation also led to an increase in military expenditures due to terrorism in the year (2014) and an increase in operational expenses due to corruption that has spread in all aspects of the state and others on investment in general and on industrial investment in particular in Iraq. The most important of which can be stated as follows (Khudair and Muhammad, 2019: 121).

**A**-Most of the expenditures in the country are military security that were spent in order to maintain security in Iraq, which in return led to a decrease in investment expenditures in all sectors, especially the industrial sector, which

led to the decline of the local industry.

- **B-** The flight of Iraqi capital to neighboring countries and industrialized countries because of corruption and security, economic and political instability in Iraq.
- C- The multiplicity and lack of clarity of laws and legislations that pertain to economic matters in general and investment.
- **D** Weak infrastructure of the Iraqi economy and weak financial markets.
- **E** Poor political and security conditions, such as unrest, political chaos and terrorist operations.
- **F**-The spread of the phenomenon of financial and administrative corruption in all aspects of the state.

We will show through table (4) government investment spending and investment spending on the industrial sector

Table (4) Investment spending on the industrial sector in Ir	aq for the period
(2004-2020)	(million dinars)

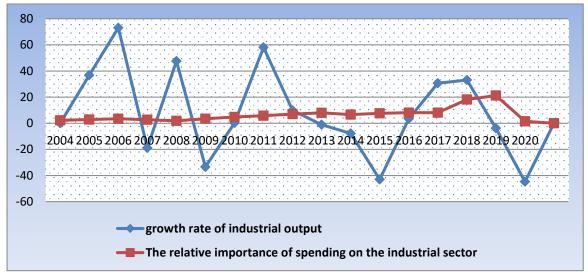
Years	(1) Gross Domestic Product (GDP)	(2) investment spending on sectors Economic	(3) Relative importance %	(4) growth rate of industrial output	(5) investment spending on the sector Industrial	(6) Relative importance from GDP %
2004	53235358	4023750	7.6		53235358	2.2
2005	73533598	8417540	11.4	36.82	73533598	2.8

				Volume 20 Issue 2: 913–929			
2006	95587954	6838910	7.2	73.09	95587954	3.5	
2007	111455813	5400200	4.8	(18.86)	111455813	2.7	
2008	157026061	9703380	6.2	47.59	157026061	1.9	
2009	130643200	5516600	4.2	(33.48)	130643200	3.4	
2010	162064566	10840860	6.7	0.29	162064566	4.8	
2011	217327107	91697500	42.2	58.10	217327107	5.8	
2012	254225491	95629800	37.6	9.84	254225491	7.0	
2013	273587529	98359000	36.0	(1.05)	273587529	8.0	
2014	266332655	54874000	20.6	(7.82)	266332655	6.6	
2015	194680972	35647000	18.3	(42.93)	194680972	7.6	
2016	196924142	19919616	10.1	3.45	196924142	8.1	
2017	221665709	23797831	10.7	30.59	221665709	8.1	
2018	254870184	58719035	23.0	33.09	254870184	18.1	
2019	262917150	71903115	27.3	(3.84)	262917150	21.2	
2020	198774325	10640155	5.4	(44.69)	198774325	1.5	

-Source: From the researcher's work, based on:

-Statistical reports and bulletins issued by the Central Bank of Iraq and the Ministry of Planning for the period (2004-2020)

-Column (3-5) was calculated by the researcher



# Figure (4) the relative importance of investment spending on the industrial and economic sectors of the GDP for the period (2004-2020).

## Source: The researcher's work based on the data of Table (4).

Table (4) shows that the relative importance of spending on the industrial sector of the Gross Domestic Product (GDP) in 2004 amounted to (2.2%), then the relative importance of spending on the industrial sector increased in 2005 to reach (2.8%) As for the growth rate of industrial output in the same year, it reached (36.82%). As for the relative importance of investment spending on sectors during the following years (2006-2007-2008-2009-2010), it settled between (7.2%-4.2%) of the GDP, which is Small percentages due to the security situation And the

deteriorating economy in those years, as well as the global crisis and its effects on oil prices, and thus the impact on oil imports because the Iraqi economy is a onesided economy and depends only on oil imports. As for the relative importance of investment spending on the industrial sector in the years (2006-2007-2008-2009-2010) It reached (4.8% -3.4% -1.9% -2.7% -3.5%) of the GDP. As for the growth rates of industrial output in those years, they respectively amounted to (0.29%) -(33.48%) -% 47.59 -% 73.09 -( 18.86%)) In the years (2011-2012-2013), the relative importance of investment spending on sectors reached (36.0%-37.6%-42.2%) of the GDP, which is the highest level during the study period. The reason for this rise is due to the rise in oil prices. Crude oil, which led to an increase in the revenues of the Iraqi government because its economy is unilaterally dependent on crude oil prices. As for the relative importance of investment spending on the industrial sector during the following years (2011-2012-2013), it increased slightly, reaching (8.0% -7.0% -5.8%). percent of the GDP, respectively, due to the Arab government's approach protective gear In supporting the industrial sector and offering new investment projects. As for the relative importance of investment spending on sectors, it decreased in the years (2014-2015) to reach (18.3%-20.6%) of the gross domestic product. This led to an increase in military spending to cover military operations to liberate cities that had been controlled by terrorism during these two years.

As for the relative importance of investment spending on the industrial sector during the two years (2014-2015), it decreased to (6.6%-7.6%) of the GDP for both years. This is reflected in the growth rates of industrial output for both years, reaching negative rates (42.93%-7.82%). Because of the security conditions, the military operations and the stopping of many factories in the areas where the military operations took place. As for the relative importance of investment spending on sectors during the years (2016-2017), the relative importance reached (10.1%-10.7%), respectively, of the GDP, and the reason for that is As for the relative importance of investment spending on the industrial sector in the years (2016-2017), it rose to (8.1%), and the industrial sector output growth rates in the same period reached (30.59%-3.45%), which are high rates compared to the previous two years due to The government repaired some projects damaged during the military operations. During the years (2018-2019-2020), the relative importance of spending on sectors increased during the two years (2018-2019) to reach (27.3%-23.0%). As for the relative importance of investment spending Regarding the industrial sector, it increased to (21.2%-18.1%). As for the growth rates of industrial output, it amounted to (3.84% - (23.0%)), The reason for this increase is the liberation of regions, the establishment of security in them, the repair of factories and their return to service. As for the year (2020), it has The relative importance of spending on sectors decreased to reach (5.4%). As for the relative importance of spending on the industrial sector, it also decreased, reaching (1.5%), which in turn was reflected in the output of the industrial sector, reaching a negative rate of (44.69%). This decrease is attributed to the spread of the Corona epidemic and its cessation Most of the projects, in addition to the decline in public revenues, which led to a reduction in public expenditures, especially investment and for all sectors Figure (4) indicates that the relationship is positive and very strong between the relative importance of the GDP of investment spending on sectors and investment spending on the industrial sector, i.e. the higher it increases The value of spending on the sectors and the industrial sector in the formation of the GDP.

### **Conclusions:**

1- The public industrial sector faced many problems and challenges during the study period that directly affected its performance in a negative way, including internal factors such as the problem of technological obsolescence, and administrative corruption that most projects suffer from, including external factors resulting from the interdependence between sectors such as the problem of sabotage and destruction, and political instability And economic, and the lack of electrical energy required.

2- The results of the study showed that the Iraqi economy is fully exposed to the outside world, as the average rate of exposure during the study period (2004-2020) was (71%), which is a high percentage and indicates that the Iraqi economy is fragile and unproductive and is affected by external shocks, and this is reflected in the output of the industrial sector Negatively.

3- Most of the expenditures of the public budget are operational expenses, and therefore the lack of interest in the investment expenditures of the industrial sector, and thus the investments directed to the industrial sector were not as required. Also, the lack of an industrial production base contributed to the reluctance of investors to invest in industrial projects, as well as the existence of financial and administrative corruption that has the largest share in the loss of funds And not directing it in areas that serve this sector and the Iraqi economy in general.

## **Recommendations:**

1- Developing a clear and well-defined strategy for the advancement of the public industrial sector and adopting policies that direct the manufacturing industry in a manner commensurate with the national development plan, and the resources and capabilities that Iraq enjoys that qualify the industrial sector to keep pace with economic changes and competition.

2- Reducing economic dependence on the outside world and working to protect local production from foreign competition by providing material and moral support and imposing high customs fees on foreign goods entering the country, diversifying sources of national income and reducing dependence on the oil sector.

3- Increasing investment spending in the industrial sector, especially the manufacturing sector, as it has a major role in increasing the flexibility of the Iraqi production system in order to raise its ability to face crises and economic fluctuations, especially fluctuations in crude oil prices, and in order to increase the value of its contribution to the gross domestic product and for the sake of

diversifying the country's exports.

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