



SPECIAL OIL SHOCKS AND THEIR ECONOMIC EFFECTS (IRAQI OIL SHOCKS AS A MODEL)

Assistant Teacher: Adnan Hadi Jaaz Al-Shamri

Instructor at Basra University of Oil and Gas, College of Industrial Management, Department of Oil and Gas, Basra – Iraq

adnan.hadi@buog.edu.iq

Prof. Dr. Rajaa Abdullah Issa Al-Salem

Professor Doctor at Basra University, Faculty of Management and Economics, Department of Economics, Basra – Iraq

<mailto:rajaa.esa@uobasrah.edu.iq>

Article history:	Abstract:
<p>Received: 6th December 2021 Accepted: 8^h January 2022 Published: 18^h February 2022</p>	<p>The study aims to identify the special oil shocks, which the Iraqi economy has been exposed to, after the oil shocks are defined and identified historically with research into their causes, and the special oil shocks are distinguished, which are oil shocks, that occurred for political reasons more than economic ones, and their impact is limited to the country or geographical region, They occur due to fluctuations in the movement of international oil prices, which often occur to imbalances either on the supply side or on the demand side.</p> <p>In its history, Iraq has been subjected to two special oil shocks, the first was at the beginning of the Iraq-Iran war in 1981, as Iraqi oil exports decreased significantly due to the war operations in the Arab Gulf, which is the most important export port for Iraqi oil, and the second occurred after, in 1991, after the issuance of a Security Council resolution: The international community imposed economic sanctions on Iraq, the most important of which was preventing the export of Iraqi oil, and because of the importance of oil revenues in the formation of the gross domestic product and the revenues of the large public budget, these two shocks had a severe impact on the Iraqi economy</p>

Keywords: oil shocks, private, oil revenues, government spending.

CHAPTER ONE: OIL SHOCKS, CONCEPT AND TYPES.

Oil is the most important source of energy in the world, and therefore its prices have a significant impact on the global economy, whether for industrialized oil-consuming countries, or the main oil-producing countries. Therefore, the big and sudden change causes effects on the economies of various countries, called oil shocks.

First: the concept of oil shocks

The oil shock is one of the most economic shocks affecting the global economy. In general, the economic shock occurs periodically, and they usually have negative effects on the overall economy, keeping it away from the equilibrium path. This effect differs from one economy to another. If the shock does not affect the economy, it is said to be a (resistive economy), and if the economy is able to recover from the shock and return to the original equilibrium path in a relatively short time, it is said to be a (resilient) economy, but if the economy is unable to resist And recovery is said to be an "inelastic economy" (Hill, 2011, P2).

Bernanke defined economic shock as (primitive external forces that are not related to each other and must have an economic impact) (Rameym, 2016, P5), as defined by (James D. Hamilton) (an unexpected event that affects the balance in the macroeconomic or On the market (Edward Hill, 2011, P4)

And shocks, some of them have features (Valerie A. Rameym, 2016, P5,)

- 1- A strong primitive external variable that affects the macroeconomic variables.
- 2- Not related to other shocks.
- 3- They represent unexpected movements in the external variables.

As for oil shocks, which are one of the types of shocks, and have the same characteristics as economic shocks, it is known that oil prices are the same as the price of any commodity, from which the price and quantity are determined at the intersection of the supply and demand curve with slight fluctuations, and the path of future oil prices can be expected through demand growth rates, which is usually related to global economic growth rates, and supply growth rates, which are linked to several factors, including oil investments, but sometimes unexpected events occur,



either geopolitical, or the outbreak of war somewhere, sudden environmental changes, or even the spread of a specific disease As a pandemic (Corona), and therefore the equilibrium moves away from its original place and the extent of its distance is determined by the extent of the change in the price, or the deviation of the achieved price from the expected price and therefore defined by (Hamilton) (the extent of the change in the achieved oil price, from the expected price) (Hamilto, 2000, P3).

So we note that the economic shock, including oil, is linked to future expectations of prices, and that the shock occurs due to the unexpected change of an internal macroeconomic variable due to a sudden change in an external variable that has an economic impact. Therefore, the oil shock can be defined as (the deviation of the achieved oil prices from the expected oil prices due to a sudden and unexpected primitive external variable, such as geopolitical events, disasters, diseases, environmental changes, or any sudden external variable that distances supply or demand levels from its expected path).

Second: Types of oil shocks and their history

The researcher divides oil shocks into two main types, namely international oil shocks and private oil shocks.

1 - International oil shocks

A- The first oil shock (1973-1974)

In 1973, the Arab oil-producing countries, in reaction to the support of the United States, the Netherlands and Portugal for the Zionist entity in its war against the Arabs, announced that they cut oil supplies to those countries and reduced oil production by 10%. This decision raised oil prices from 3 dollars on 10/15/73 to 5.119 on 10-16-1973, i.e. less than 24 hours (Hamza, 2012, p. 11).

But in fact, this rise was not due to the Arabs using oil as a pressure card in their aforementioned war. There were factors that preceded this incident and served as basic preludes that enabled them to make this great impact, the most important of which are

At the beginning of the seventies of the twentieth century, the efforts of the Organization of Petroleum Exporting Countries, which was founded in 1960, began to bear fruit, especially after the disappearance of excess production capacities, which served as a safety valve for the stability of oil prices. In December 1970, specifically in Caracas, Venezuela, OPEC announced that it was in the process of controlling the global oil supply. And on prices, as the price of a barrel of oil was \$1.8/b, and this announcement was a declaration of the emergence of a new force in the structure of the oil industry, then followed by the

Tehran Conference in February 1970, which resulted in the conclusion of the Tehran Agreement, which included price increases, including an immediate increase of 35 cents A barrel annually by 2.5 dollars due to inflation and the depreciation of the dollar, as well as an increase of 5 cents for a period of five years (Sami, Adnan, 2015, p. 93), and the depreciation of the dollar was also present. After the United States abandoned the Bretton Woods system in 1970, the price of the dollar fell significantly, which prompted the Organization of Petroleum Exporting Countries to hold two meetings in Geneva, in the years (January 1972 and June 1973) it was agreed to increase oil prices whenever the price of the dollar deteriorated against a basket of major currencies as well as calls from Some producing countries accepted the necessity of amending contract formulas and transforming them into partnership contracts instead of concessions, such as (Kuwait, Qatar, and the UAE), while some countries went further, such as Iraq, which preferred nationalization, not to mention the heavy dependence of industrialized countries on cheap oil, which encouraged them On the increase in oil consumption after it replaced coal, all these and other factors combined together, and enabled the producing countries to influence oil prices clearly, as oil prices jumped in less than two months from about 3 dollars to 5.119 after only one day, then they jumped by 388% After only a month and a half, the price of a barrel reached 11.65 on 1-1 1974, in which the supply gap reached 165 million tons. This sudden and rapid rise in prices constituted a global economic shock called the first oil shock (Petrini, 2016, p. 89).

The aforementioned factors had a significant impact on the increase in demand and the decrease in the oil supply, and whether that was driven by political or economic factors, created an oil shock that had important economic, social and political effects on the world, with the change of equations in the oil market, as it became for the first time a market For the producers, not the buyers, after the end of the oil companies' control over the oil of the Middle East, North Africa and Venezuela, the major industrialized countries must face this situation, as the first oil shock caused a decline in the growth rates of the global economy and confused it.

In the first half of 1973, the GDP of the (G7) group increased by 8% until it led to the occurrence of inflationary waves. The inflation rate rose to 7% after it was 4% in 1972, which prompted those countries to follow strict monetary and fiscal policies, to curb Curb inflation. These measures raised the interest rate from



4% to 8% in the middle of 1973. The matter differed greatly at the end of 1973 and the beginning of 1974, that is, after the oil shock, as shown in Table (1), which shows the rates of GDP growth for the most important industrialized countries before and after The shock, whose direct impact was the loss of world trade by an estimated 2% of the gross domestic product of the Organization for Cooperation and Development (OCED) (<https://www.imf.org/>), as we note the significant decline in the growth rate of the Japanese

economy, which achieved in 1972 the rate of Growth amounted to (8.4) decreased to (2.2) in 1974, and this affected the volume of imports of primary commodities imported from non-oil developing countries, and since the economies of these countries are dependent on the economies of the major industrialized countries, their growth rates decreased from 6.1 in 1972 to 4 % 1973 (Govanni Giovanni, 2014)

Table (1) GDP growth rate for some industrialized countries (1971/83)

Source: (<https://stats.oecd.org>)

Country	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
United States	3.8	2.4	2.4	-0.9	2.7	2.4	1.1	0.8	0.4	0	2.3	-0.3	2.7
Japan	4.2	8.4	6.9	2.2	4.6	2.4	3.1	4.5	4.3	2.4	4.2	2.6	2.4
Britain	6.5	5.9	1.8	-0.7	-0.8	4.4	3.4	4.8	3.2	0.9	6	3	5.3
German	4.4	5	5.1	4	3.8	4.7	4.1	3.1	2.9	0.8	1.7	1	3.3
France	5	6.7	5.8	5.1	1.2	2.1	4.7	5.1	3.1	1.6	2.3	6.5	2.4
Italy	4.5	5	6.5	5.5	-1.4	6.2	4.2	3.5	5.2	1.9	0.6	-0.4	0.9
Norway	6.1	6	4.6	3.8	4.3	5.7	3.6	4.4	4.3	2.1		0.9	0.9

In fact, there is a note that the researcher believes that it deserves to be considered, which is that the timing of the Arab countries' actions is responsible for confusing the global economy and not the procedure itself, especially if we know that this measure was not the first of its kind, as it was preceded by the boycott of 1956 and 1967, but they had no effect on prices Oil (Michael Ross, 2013, p. 99) and the importance of timing came from the fact that the production cuts took place coincided with the adoption of strict financial and monetary policies by the major industrial countries in an effort to reduce inflation rates, which caused a multiplier effect that increased the rate of slowdown in global economic growth more than it should, until Enter it in a phase of accelerated deflation, and this is a clear example of what was discussed in the second topic on the issue of problems and determinants of fiscal and monetary policies, and it is consistent with the criticism of the followers of the Austrian school of the aforementioned policies.

This incident showed the importance of controlling energy resources for major industrialized countries and non-oil developing countries, and the importance is not limited to the economic aspect only, but also goes beyond it to politics and social, and from this standpoint the reaction of the industrialized countries was the formation of the International Energy Agency

to reorganize the energy market, Develop strategies to counter the growing influence of OPEC, and restore control over the oil market. To achieve this goal, the organization focused on finding mechanisms to reduce oil consumption and import, through energy rationalization programs, and reduce the rate of energy demand in relation to the rate of economic growth, so it imposed a carbon tax, and encouraged programs to develop and support inexhaustible energy sources, liberalize local energy prices, and allow them Increasing that to encourage reducing its consumption and finding alternative sources, especially in the field of transportation, paying attention to the safety of the environment and protecting it from the harmful effects of energy use and transmission (Nabil Abdel Reda, 2018, pp. 285-286). As well as the establishment of strategic storage to be used in cases of high oil prices or interruption of supplies.

B - The Second Oil Shock (1979-1980)

The world witnessed a second oil crisis, the features of which began with the announcement of the oil refinery workers in Iran to go on strike in August 1978, as a result of their support for the Islamic Revolution, which announced its success after it toppled the Shah's rule at the beginning of 1979. From the table we note the gradual decline in Iranian oil production,



from 5.6 million barrels per day in 1977 to 3.17 barrels per day in 1979, which is equivalent to 7% of world oil production. These events created a state of panic in the oil markets, with the confluence of factors of low oil supply and an increase in precautionary demand, and an increase in demand by the countries of the International Energy Organization to increase its strategic stock, as well as speculation on oil, driven by the prosperity of the global economy (Laurel Greve,

federalreservehistory.org). All of these factors were behind pushing oil prices to double, reaching \$37.42 a barrel. Such a huge rise shocked the oil markets, especially for industrialized countries. After the stability of the country, Iran was able to produce almost half of its production before the revolution, but the outbreak of the Iran-Iraq war lost Global production is about 6%, which prolongs the shock range (Hamilton, Games, 2012, P17).

Table (2) Crude oil production for the year (1970-1980)

Year	Iraq Production	Saudia Production	Iran Production	World Production			Price
				OPEC	Outside Opec	Total	
1970	1.55	3.80	3.83	23.30	22.59	45.89	3.39
1971	1.69	4.77	4.54	25.21	23.31	48.52	3.60
1972	1.47	6.02	5.02	26.89	24.25	51.14	3.60
1973	2.02	7.60	5.86	29.28	26.40	55.68	4.75
1974	1.97	8.48	6.02	29.07	26.65	55.72	9.35
1975	2.26	7.08	5.35	25.61	27.22	52.83	12.21
1976	2.42	8.58	5.88	28.88	28.46	57.34	13.10
1977	2.35	9.25	5.66	29.39	30.31	59.71	14.40
1978	2.56	8.30	5.24	27.92	32.24	60.16	14.65
1979	3.48	9.53	3.17	29.10	33.57	62.67	25.10
1980	2.51	9.90	1.66	25.15	34.41	59.56	37.42

Source: The table is the work of the researcher based on (<http://don.geddis.org/>) and (<https://inflationdata.com>).

C- The Third Oil Shock (1985-1986):

When Henry Kissinger, United States Secretary of State, announced in 1974 the idea of establishing an energy cooperation organization (the International Energy Agency) by major consuming countries, to counter the influence of OPEC, no one expected the success it had achieved after several years. Many Western countries questioned the feasibility of establishing such an organization, the European reaction was discouraging, some of which were explicitly* opposed, and in fact it was strongly criticized, especially in the year 1980 when it contributed to increasing the demand for oil to fill strategic oil stores¹ and thus was one of the causes of the second oil shock. The matter differed greatly after the procedures of the International Energy Organization began to come Its fruits, these measures were represented by technological packages that contributed to reducing oil consumption, especially in the field of transportation and electricity production, as engines with greater efficiency in fuel consumption were developed, and alternative energy sources were developed in relation to the production of electricity,

thus increasing the interest in plants that operate on nuclear, solar and wind energy and water and others, as well as encouraging the use of coal instead of oil, and these results have prompted a set of laws and taxes, achieving the goal for which the International Energy Agency was founded, which is to reduce local consumption, thus reducing the global demand for oil, after the process of increasing demand, in which it reached 2701 million tons / year in 1975 to 3140 million tons / year in 1979, the matter turned in the eighties, it decreased in 1981 to 2905 and then to 2803 million tons / year 1983 (<https://www.iea.org>), and the plans and mechanisms developed by the agency were among the most important reasons for this decline. For example, as a result of encouraging alternative energy sources in the production of electricity, the contribution of oil to electricity production in the world decreased significantly As follows (21.182 - 18.749 - 17,542 - 12,903 - 9.163%) for the consecutive years (1973 - 1975 - 1979 - 1982 - 1985) (<https://data.worldbank.org>). The rate of gasoline consumption in the United States also decreased, from 20 miles per gallon in 1978 to 28 miles per gallon in 1985 (<https://www.cfr.org/>), this is due to technology that has reduced fuel consumption



and the fact that this was evident through the great difference in the designs of American cars, which have been greatly reduced in size. In the eighties, the efficiency of its engines was increased through the use of an economical fuel injection system.

On the other hand, OPEC was suffering from its inability to control the oil supply, especially after the increase in oil prices in the first and second shocks caused the costs of oil production in some countries outside OPEC, such as (Mexico, the Soviet Union and the North Sea) to become economically feasible costs. Thus, it is noticeable that production from outside OPEC began to increase annually, as shown in Table (3), and the transformation of OPEC countries from regulation to competition among themselves increased to the confusion of their decisions, as they were suffering from poor coordination and commitment to the quotas prescribed for each country, and this is what came in the words of Saudi Oil Minister Ahmed Zaki Yamani in 1985 when he announced from Britain that Saudi Arabia had abandoned the alternative product system, abandoned responsibility for balance

and stability in the oil market and abandoned the official price system (Al-Kubaisi, Al-Lami, p. 264), knowing that Saudi Arabia worked to reduce its production from the beginning. From the year 1980, which was 9.90 million barrels per day to 3.39 million barrels per day in 1985 as shown in Table (2), but this matter did not succeed in maintaining oil prices, which were constantly declining year after year starting from 1980 to 1985, and respectively (37 - 35.7 - 31.83 - 29.08 - 28.7 - 26.92 dollars / barrel / day) (<https://inflationdata.com>) and as soon as it announced an increase in its production at the beginning of 1986, which increased by 51%, reaching 4.78 million/barrels/day. This gradual increase turned into a collapse in prices, as the price of a barrel of oil decreased by 100%, as it became \$14.44/barrel (<https://inflationdata.com>) and even decreased in some days of the year to below \$10 a barrel. This was a failure of the oil booms in the seventies, which caused a major oil shock, but this time for producers was called the opposite oil shock or the third oil shock.

Table (3) Crude Oil Production (1981-1990)

<https://inflationdata.com> So (<http://don.geddis.org/>)

Year	Iraq production	Saudia production	Ira production	World production			Price
				OPEC	Outside OPEC	Total	
1981	1.00	9.82	1.38	21.05	35.00	56.05	35.75
1982	1.01	6.48	2.21	17.69	35.77	53.45	31.83
1983	1.01	5.09	2.44	16.51	36.74	53.25	29.08
1984	1.21	4.66	2.17	16.38	38.12	54.50	28.75
1985	1.43	3.39	2.25	15.36	38.61	53.97	26.92
1986	1.69	4.87	2.04	17.56	38.76	56.33	14.44
1987	2.08	4.27	2.30	17.72	38.93	56.65	17.75
1988	2.69	5.09	2.24	19.70	39.00	58.70	14.87
1989	2.90	5.06	2.81	21.40	38.40	59.80	18.33
1990	2.04	6.41	3.09	22.53	37.97	60.50	23.19

D- Fourth Oil Shock (1997-1998):

The Organization of the Petroleum Exporting Countries entered the nineties of the twentieth century, and it suffers from more lack of organization, as well as a lack of sufficient information to take the appropriate decision. On the other hand, the IEA has all the information. In terms of demand, it is the largest consuming country, and the agency can know or visualize what the isources

ndustrialized countries need of oil. It has a complete vision of the results of technological development and

its impact on reducing demand rates, and in terms of supply, it has become a tool that affects any OPEC efforts to regulate supply. Strategic stores are filled with cheap oil, and they are present by affecting supply by pumping 4.4 million barrels per day for a period of approximately 150 days, and therefore The process of anticipating the future of oil prices has become more complicated for analysts and economists because there is an important part of the market that cannot be predicted on the one hand, and one country, the United States, can control it with very



high flexibility on the other hand. We cannot fail here to mention an important event at the beginning of the 1990s, which is the collapse of the socialist empire headed by the Soviet Union and the uniqueness of the capitalist empire represented by the United States in ruling the world, as well as the control of the United States and its allies to the Arabian Peninsula after the Kuwait war, which is the world's greatest oil reservoir. OPEC oil has practically become under the control and protection of the major industrialized countries. abilities enabled it to fill this shortage in record time, which did not give the opportunity for prices to rise.

At the beginning of the nineties of the twentieth century, we notice a rise in oil prices, as they reached in 1990 about 23 dollars, but the prices began to decline and as noted from Table (4), especially after Saudi Arabia took charge of filling the shortfall in the oil supply, after depriving Iraq of oil exports, That is, the market lost more than two million barrels per day, but Saudi Arabia's large production cap

Table (4): World oil production for the period (1991-2000)

Year	Iraq production	Saudia production	Iraq production	World production			Price
				OPEC	Outside OPEC	Total	
1991	.31	8.12	3.31	22.48	37.65	60.13	20.20
1992	.43	8.33	3.43	23.78	36.32	60.10	19.25
1993	.51	8.20	3.54	24.55	35.62	60.17	16.75
1994	.55	8.12	3.62	24.97	36.20	61.17	15.66
1995	.56	8.23	3.64	25.62	36.82	62.43	16.75
1996	.58	8.22	3.69	26.08	37.74	63.82	20.46
1997	1.16	8.36	3.66	27.40	38.41	65.81	18.64
1998	2.15	8.39	3.63	28.35	38.68	67.03	11.91
1999	2.51	7.83	3.56	27.24	38.73	65.97	16.59
2000	2.57	8.40	3.70	28.96	39.56	68.53	27.39

Source: The table is the work of the researcher based on (<http://don.geddis.org/>) and (<https://inflationdata.com>).

In the 1990s, oil prices did not live up to the ambition of the producing countries, and after 1990 they remained under the ceiling of 20 dollars, although the

global economy was enjoying positive growth rates, driven by the growth rates of East Asian countries, as shown in Table (5)

Table (5) shows the growth rates of Asian tigers and the world 1990/2000

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Country											
Indonesia	7.2	6.9	6.5	6.5	7.5	8.2	7.8	4.7	-13.1	0.7	4.9
Thailand	11.1	8.5	8.0	8.2	8.0	8.1	5.6	-2.7	-7.6	4.5	4.4
Filipino	3.0	-0.5	0.3	2.1	4.3	4.6	5.8	5.1	-0.5	3.0	4.4
Korea	9.8	10.3	6.1	6.8	9.2	9.5	7.5	5.9	-5.4	11.1	8.9
Malaysia	9.0	9.5	8.8	9.8	9.2	9.8	10.	7.3	-7.3	6.4	8.8
Global	2.9	1.4	1.7	1.5	3.0	3.0	3.3	3.7	2.5	3.2	4.3

Source: The table is from the researcher's work based on (<https://data.worldbank.org>)

We note the high rates of GDP growth for a segment of East Asian countries and the world, which was a continuous rise that gave optimistic indicators for the oil-producing countries. We note from Table (7) the increase in oil production from approximately 60.5 million barrels / day in 1990 to 63.7 million barrels / day in In 1996, with the re-pumping of Iraqi oil in

1997, global production increased to 65.69 million barrels / day, and in 1998 it reached 66.92 million barrels / day. In contrast to this increase in oil production, East Asian countries entered into a financial crisis that exposed the economies of the Asian tigers to collapse and this is clear From Table (3), this crisis did not stop at the borders of East Asia,



but rather turned into a global financial crisis, which reduced the global production growth rate from 3.7% to 2.5%, and this exposed the oil market to the fourth oil shock or the second counter-shock, as the price of a barrel fell Oil to \$12 a barrel.

Fifth Oil Shock (2007-2008)

With the beginning of 1999, oil prices began to recover significantly, reaching 17 dollars per barrel, and the increase in prices came after OPEC announced a reduction in its production by 1.11 million barrels per day, and this affected global production, as it decreased from 67.03 to 65.97 million barrels per day,

in contrast and In the years between 2000 and 2008, the demand for oil in the world increased significantly, after the growth in demand from China, India and the rest of the emerging countries as it was called at the time, but the growth in demand was surprising and OPEC was not ready for it, which caused prices to rise due to the limited growth of oil supply in front of the growth of demand, and as shown in Table (5), the global demand for oil increased, driven by the increase in economic activity in China and India, as the two countries achieved high growth rates for the level of GDP, as shown in Table (6)

Table (6) GDP growth rate of China and India

Year		2000	2001	2002	2003	2004	2005	2006	2007	2008
Country										
China	GDP growth rate	8.4	8.3	9.1	10.0	11.3	12.7	14.2	9.6	9.4
	oil consumption	1595	1732	1902	2232	2295	2434	2551	2662	2832
	growth rate									
India	GDP growth rate	3.8	4.8	3.8	7.8	7.9	8	8	7.6	3.0
	oil consumption	749	779	792	844	837	843	930	1005	1039
	growth rate									

Source: The table is from the researcher's work based on (<https://data.worldbank.org>) and (bp statistical review of world energy 2010)

Table (7): Crude oil production and consumption for the period (2000-2008)

Year	World production			production growth rate	consumption	consumption growth rate	Price
	OPEC	Outside OPEC	Total				
2000	30.85	44.05	74.90	0	77.15	0	27.39
2001	30.19	44.63	74.83	-0.09	77.92	0.0099	23.00
2002	28.65	45.45	74.10	-0.9	78.65	0.009	22.81
2003	30.14	46.38	76.52	3.25	80.27	0.02	27.69
2004	33.04	47.09	80.12	4.7	83.41	0.03	37.66
2005	34.79	46.94	81.73	2.0	84.65	0.01	50.04
2006	34.53	47.11	81.64	-0.1	85.85	0.01	58.30
2007	34.34	47.21	81.55	-0.1	87.26	0.01	64.20
2008	35.73	46.79	82.52	1.1	86.82	-0.005	91.48

The table is from the researcher's work based on (<https://tedb.ornl.gov/>)

In addition to a combination of several factors that supported the continuous increase in prices, we mention the military move of NATO to invade Iraq. There is no doubt that this move has two effects. The first is the fear of interruption of Iraqi oil supplies and the Gulf region, which increased speculation on oil in the futures market, and the second is transfers The giant (sea, air and land) that accompanied this military

move, as US demand increased from 19 million barrels per day to 20.8 million barrels per day (bp statistical review of world energy), oil prices increased more than expected until they exceeded in mid-2008 (130 dollars per barrel) (<https://www.indexmundi.com/>), which constituted a real shock to the oil markets, but this rise did not continue, as prices began to decline significantly with the increase in financial tremors in



the American real estate market, and some international banks operating in it, which It increased fears that the American economy and its global successor would enter into a serious financial crisis, and with the announcement of the American bank Limlin Brothers bankruptcy in the last quarter of 2008, the world entered into a financial crisis called the

mortgage crisis, a crisis parallel to the crisis of the Great Depression, as The global (GDP) contracted significantly, and as shown in Table (8), this contraction led to a decline in oil prices, as it reached in December of 2008 to 41.3 dollars / barrel.

Table (8) Growth rate of global GDP and oil prices (2006-2010)

Year	2006	2007	2008	2009	2010
GDP growth rate	4.3	4.2	1.8	1.6-	4.2
Oil price	59.30	64.20	91.48	53.4	71.2

Source: The table is from the researcher's work based on (<https://data.worldbank.org>) and (<https://tedb.ornl.gov/>)

Opinions differed on the type of oil shock in 2008. Is it a rise shock (positive shock) or a decline shock (negative shock). The researcher tends to think that it is a rise shock, i.e. a positive shock, because this shock differs from the shock of decline. In the 1986 and 1998 shocks, the time dimension of the decline was relatively long. But in the case of 2008, prices quickly returned to rise, and they can be fair prices for producers, especially if we compare them with the situation that the global economy is going through, and the reason for this is due to several factors, including the speculative factor, in light of the low price of the dollar, and the high risks in investing in the currency market And the banking sector has become the oil futures market more attractive, especially with the emergence of signs of improvement in the global economy, after the United States announced large rescue packages, in addition to the confused political situation in some areas of oil production.

Sixth Oil Shock (2014-2015):

Oil prices continued to rise until they returned and exceeded the ceiling of 100 dollars, and continued in

this recovery until the end of 2014, this rise did not stimulate increased investment in projects alternatives to oil, and in the short term there is no alternative to oil except oil, the world production has increased of shale oil, which gave a delusion to the oil market and turned a positive outlook into a pessimism on the future of traditional oil prices, and everyone was waiting for OPEC's reaction to these developments, as it was expected that OPEC would reduce its production to maintain prices, but OPEC's decision came in a different way Expectations, as the organization refused to reduce, and preferred to maintain its market share after the increase in production from outside it, as a result of the large oil investments that had accumulated throughout the period of rise in prices and which enabled many countries to cover the fixed costs of oil production, which is the most important element in the production process Which if available, the production process of oil will continue even with the sharp decline in prices, and it is one of the most important reasons for the continuation of production with the decline in prices.

Table (9) of world oil production for the period (2012-2016)

Year	OPEC production	OPEC's contribution %	US production	US production of shale oil	United States contribution	Total outside OPEC	total global production
2012	32.82	43.0%	6.50	2.2	8.5%	43.56	76.38
2013	31.75	41.5%	7.47	3.2	9.8%	44.69	76.45
2014	31.80	40.6%	8.76	4.2	11.2%	46.56	78.36
2015	33.07	41.0%	9.43	4.8	11.7%	47.68	80.76
2016	34.12	42.2%	8.83	4.9	10.9%	46.72	80.84

Source: The table is from the researcher's work based on ((<https://tedb.ornl.gov/>))



These factors affected oil prices, which fell significantly at the end of 2014, as they fell below \$60 a barrel, and in January 2015 it reached below \$50 a barrel, with the continuation of the decline until it reached 29.6 in January 2016, and the price continued below \$50 a barrel. 50 dollars throughout 2016 and most of 2017, which caused a real shock to the economies of the oil-producing countries, especially the rentier ones. In fact, the 2014 oil shock seems more complicated than its predecessors, as several things overlapped in its occurrence, including the technological aspect, which reduced the costs of shale oil on the one hand, and the rise in oil prices in a way that made the costs of producing unconventional oils economically feasible, as the political factor was strongly present, so the conflict in the Middle East, which has entered a direct military phase between Russia and Iran on the one hand, which depends on oil revenues to finance its budgets, and America and its allies on the other, which sought to reduce oil prices to affect the ability of those two countries to finance their military operations in Syria and elsewhere. Also, the rise in the price of the dollar was an important factor influencing the price of oil, and thus the decrease in demand for futures contracts, which is one of the modern factors affecting oil prices. All these and other factors had a direct impact on the price of oil and its collapse in this way.

1- Special oil shocks

Special oil shocks are related to the country itself and the events it is exposed to that prevent the country from producing, exporting or importing oil, for geopolitical reasons, war, environmental disaster, or geographical location, which prevent it from producing, exporting or importing oil, whatever the price, and often it has nothing to do with supply and demand, for oil-producing countries that may be deprived of oil production or export, the intensity and strength of the country's dependence on oil exports or annual oil revenues, the greater the country's dependence on oil revenues, the greater the shock and its severe impact on the economic variables in the country such as unemployment, inflation, and gross domestic product.

But if the country is an oil importer, depriving it of oil will cause the prices of oil products such as (gasoline, diesel, and white oil) to rise, which will impede the movement of transportation and energy production, which will cause production to stop, prices will rise, and thus the real per capita income will decrease, and the level of economic welfare will stop. Its severity

depends on the country's dependence on imports of oil and its products, and the stores it has.

A - The first Iraqi oil shock.

In the mid-1980s, the Iran-Iraq war broke out. The outbreak of the war led to a decline in Iraqi oil exports due to a decrease in its export rate, as a result of military operations in the Gulf and the bombing of oil sites, as Iraqi oil exports decreased from (3.4 m / b / day) in 1987 to (1 m) /b/day (year), which caused an oil shock to Iraq, which was represented in the decline in its annual oil revenues from (26 billion dollars) in 1980 to (10 billion dollars) in 1981 until it reached (7.5 billion dollars) in 1983. The shock has a great impact on the Iraqi economy in two directions: the first is that oil revenues contribute the largest part of Iraq's budget, and the second is the increase in demand for foreign exchange due to military spending.

B - The second Iraqi oil shock.

The Security Council issued Resolution 688, which brought Iraq under Chapter VII with imposing an economic embargo, preventing its oil exports and freezing its funds deposited abroad, which means stopping Iraqi oil exports and depriving it of its main economic artery completely until 1995, the year in which the Council issued Security Resolution 986, which was implemented in 1996, which allowed Iraq to export its value (14 billion dollars annually) under the direct supervision of the United Nations, which launched the program (oil for food and medicine). This shock was very severe on the Iraqi economy for several reasons, and this is what will be discussed in the second chapter.

C - The Iranian oil shock.

Successive administrations of the United States, with the support of its allies, used economic sanctions to discourage Iran from its nuclear program and its pursuit of strategic weapons. The oil sector was one of the sectors that was subjected to various sanctions, starting from preventing foreign companies from investing in the Iranian energy sector to tightening the screws on exports and ending with the zeroing of Iranian exports. After 2012, the United States began unilaterally with the support of the European Union from Canada, Australia and Japan, and what was called the mini-alliance, but this matter did not have an important impact on Iranian oil exports, until the United States announced economic sanctions on companies that buy Iranian oil. Or working to develop the oil and gas industry in Iran, this measure would



have cut Iranian oil exports in half (A. Kitous, Saveyn, Gervais, 2013, p3), but once the nuclear agreement (5+1) was concluded, the volume of exports returned Iranian oil to before 2012 and this can be seen from the drawing, but the actual shock shift was the surprise of the American president when he canceled the nuclear agreement in 2018, after which President Trump announced the sale A basket of sanctions aimed at gradually zeroing Iran's oil exports, using economic sanctions on companies and countries that buy Iranian oil. At first, he gave exemptions to some countries, the most important of which are China,

Turkey and India, for a period of 180 days, which would have reduced oil exports to (1.5 m/b/day) in 2018, but the actual shock was in 2019 after the United States announced The exemptions and efforts to completely zero Iranian oil exports have stopped, and after these sanctions succeeded in almost completely zeroing Iranian oil exports, which formed a shock to the Iranian economy that affected the Iranian economy significantly, as Iranian oil exports decreased to (480 thousand b/day) in 2019 () Kenneth Katzman,2021, p3). This can be seen from Figure (14).

Figure (14) shows the (Iranian) oil shock 2019



Source: fred.stlouisfed.org

2- Dual oil shocks:

The double oil shock occurs, when the international oil shock coincides with the private oil shock, when the country's oil exports drop to abnormal levels, and the decrease in the price of oil in global markets coincides with it, as clearly as it happened in the negative oil shocks of 1986 and 2014, and the best witness to this type among the shocks that Iraq experienced in 1986, as it was still under the weight of the special oil shock, it was moving towards gradually raising its export capacities until it reached in 1986 (1.6 m/b/day), which is approximately (61%) of what it was producing In 1980, this decline coincided with the first international oil shock, with which the price of a barrel of oil fell to below (\$11) a barrel.

In 1997, the second negative international oil shock coincided with the second Iraqi private oil shock. Iraq was able to export only one million barrels in 1997. In contrast, 1997 was the beginning of the price collapse, which fell from 20 dollars a barrel to 11 dollars a barrel.

Chapter Two: The economic impact of the Iraqi oil shocks

First: Some macroeconomic variables for the period (1981-2003)

During the period (1981-2003), Iraq was subjected to four negative oil shocks, including two international and two special. This period can be divided into two sub-periods, the first (1980-1990), and the second after the comprehensive economic embargo (1991-2003).

The first topic: 1980-1990

First: The impact of the oil shock (1980-1987) on the Iraqi macroeconomic variables

Table (13) shows the exceptional period during which Iraq suffered from harsh conditions, including the first and second Gulf Wars, in addition to the comprehensive economic blockade.

a. gross domestic product

In the mid-1980s, the Iran-Iraq war broke out. The outbreak of the war led to a decline in Iraqi oil exports, due to a decrease in its export rate, as a result of military operations in the Gulf and the bombing of oil sites, as Iraqi oil exports decreased from (26096) million dollars in the year 1980 to (10039) million dollars in 1981, until it reached 7,699 million dollars in 1983, which formed an oil shock to



Iraq, represented by the drop in its oil exports. As soon as Iraq was able to increase its export capacity after extending two oil pipelines through Turkish and Saudi territory, the world markets suffered the third oil shock, but this time it was negative for producers due to the surplus in oil production by the OPEC countries. The impact of these two shocks was directly reflected on the total domestic product, as it decreased in 1981 to (32,850) million dollars, after it was (47562) million dollars in 1980, i.e. (69%), and it decreased in 1986 to (39992) million dollars after it was (44204) million dollars in 1985 due to a decrease Oil prices that formed the negative oil shock Table (11) shows the impact of the first Iraqi private oil shock, as the rate of change in the price of a barrel of oil between 1980 and

1981 was (4%) only, offset by a decrease of (30%) in the gross domestic product and this is due to The decline in the volume of Iraqi oil exports, not due to factors related to the international oil market, and this factor continued to influence until 1986.

B. household consumption

From Table (10), we note the impact of household consumption by the first special negative oil shock, as we notice a decrease in consumption after 1982, which decreased from (5606) million dollars in 1982 to (4215) million dollars, at a rate of (-25%), and consequently the volume of imports decreased By (110%), the imbalance in the trade balance without oil decreased by (113%).

Table (10) Oil prices, gross domestic product, ratio of oil exports to total exports and balance of payments to Iraq for the period from (1981-1990)

Year	Price of oil barrel Dollar	Production million \$	total exports million \$	The ratio of exports to the output	oil exports million \$	Oil exports/total export %s	GDP per capita	house hold consumption	Imports million \$	trade balance	Trade balance without oil million \$ n
1981	35.75	32,580	10140	31.1	10039	99.	830.1	3667	20,735	-10595	-20,634
1982	31.83	36,777	10033	27.2	9933	99	901.1	5606	21,464	-11431	-21,364
1983	29.08	37,495	9298	24.7	7699	82.8	865.3	4229	10,602	-1304	-9,003
1984	28.75	42,531	11501	27.0	9095	79.	965	3624	10,803	698	-8,397
1985	26.92	44,204	11787	26.6	11259	95.5	963.2	3821	11,327	460	-10,799
1986	14.44	39,992	7396	18.4	6913	93.4	909.5	7642	9,844	-2448	-9,361
1987	17.75	43,702	12813	29.3	11112	86.7	1077.4	5030	11,388	1425	-9,687
1988	14.87	43,411	12388	28.5	11315	91.3	1151.1	5832	10,194	2194	-9,121
1989	18.33	48,422	15017	31.0	14806	98.6	1171	5153	11,785	3232	-11,578
1990	23.19	13,982	13710	98.0	9933	72.4	3126	5122	9,909	3801	-6,132
معدل النمو	-4.7	-11	-6.3		-9.2	-3	14	3.3	2.8	32-	-1.6

Source: The table is the work of the researcher based on data

1- OPEC. opec.org/opec_web/en/data

2- Household consumption is available on (Knoema.com)



c. Total exports and imports:

The total volume of exports decreased (10039) million dollars in 1981, compared to (26349) million dollars in 1980, due to the decline in oil exports, but it is noticeable here that imports rose (20,735) million dollars, after it was (7477) million dollars in 1980. Imports also achieved a growth rate of 2.8% due to the increase in military spending, while exports achieved a negative growth rate of (-6.3), due to the decline in oil exports as a result of the outbreak of the first Gulf War.

D. trade balance

1. The trade balance in 1981 achieved a deficit of (-10595) due to the decline in oil exports, which achieved a negative growth rate of (-9.2) on the one hand, which led to a decrease in Iraq's foreign exchange earnings, and on the other hand, the growth of imports at a rate of (2.8), the two factors combined to form a pressure tool that caused the great imbalance in the balance of payments, but it is noticeable that it improved in 1985, but with the oil shock of 1986 it returned to the negative situation, achieving a deficit of (-2448)

From table (14) it becomes clear to us the size of the special oil shock to the Iraqi economy due to the war.

The average oil price decreased by (4%) only, offset by a decrease in the gross domestic product by 31% for the period (1981-1986) and this is due to the impact of the war and not to Factors related to the global oil market, as Iraqi oil exports decreased by 62% and by the same percentage total exports decreased, in contrast imports increased by (177%), due to military spending, and thus we note the significant shift in Iraq's balance of payments from surplus to deficit by (156) As for the trade balance without oil, the deficit in it increased by (18%).

These figures show that the Iraqi economy was subjected to a very large private oil shock, coinciding with the rise in large military spending, with the continuation of the war, the continued decline in oil exports, and the increase in military spending, which reached (100) billion dollars during (1980-1985) (Zinni, 2009, 189), (at 20) billion dollars per year. The foreign exchange surplus that Iraq achieved in the seventies due to the first and second oil shocks, estimated at (40) billion dollars, turned into a deficit, and Iraq became one of the debtor countries, and this is clear from the large deficit in the payments' balance, which reached in 1981 (10595) million dollars

Table (11) Impact of local and international shocks (1980-1986)

Indications	1980 \$	1981 \$	Change ratio	1985 \$	1986 \$	Change ratio
Price of oil barrel (dollars)	37.42	35.75	-4%	26.9	14.4	-46%
Gross Domestic Product (m/\$)	47562	32580	-31%	44208	39992	-10%
Total exports (m/\$)	26349	10140	-62%	11787	7396	-37%
The ratio of exports to the output	55.3	31.1	-44%	26.6	18.4	-31%
Oil exports (m/\$)	26096	10039	-62%	11259	6913	-39%
Ratio of oil exports/total	99	99	0%	95	93	-2%
Imports (m/\$)	7477	20735	177%	11327	9844	-13%
Trade Balance (m/\$)	18872	10595-	-156%	460	4448-	-1067%
Trade balance without oil (m/\$)	7224-	20634-	186%	10799-	9361-	-13%

Source: The table is the work of the researcher based on the data in Table (4).

In 1986, the global oil industry was exposed to the third oil shock, which this time was negative for

producers and for Iraq in particular, as the price of a barrel of oil fell to less than ten dollars, this decline



caused an increase in the Iraqi budget deficit, which pushed Iraq to more debts, which its impact became clear after the end of the war in 1988, as Iraq faced a number of complex economic problems, including the large unemployment rate that formed from the soldiers who had been released from service, and the high level of inflation after the devaluation of the Iraqi dinar, as well as the demand of some countries for their debts on Iraq, all that was under the impact of the oil shock.

From table (12), we note a decrease in oil prices by (46%), and it is noted with it a decrease in Iraqi oil exports also by (37%), and the workers met in 1986 to achieve a double oil shock that caused a large deficit in the balance of payments, which reached (4448) million dollars. After achieving a surplus of (460) in 1985, the rate of change was (1067%) between the years (1985-1986).

One of the most important effects of the two oil shocks in the 1980s was the deviation of the economic development process in Iraq, after Iraq became equipped to reap the fruits of previous development plans, as the development of industrial infrastructure and means of transportation increased the absorptive capacity of Iraq, but the war destroyed the gains of the previous period from the foreign reserves and important development plans and investments in the oil sector enabled Iraq to export (3.2) million barrels per day, destroying an important part of the physical capital and stopping the development of human capital. Iraq tried to continue at the same pace of economic activity before the war. In the first and second years of the war, work continued to implement plans development, especially since the administration in Iraq thought that oil revenues would continue to grow in a positive way, but what happened is the opposite of these expectations.

Second: The contribution of oil to the general budget (1981-1990):

Iraq's budgets after the outbreak of the war with Iran were characterized by several features, including a decrease in oil revenues by 25% compared to 1980, and other revenues, which represent government activities other than taxes, decreased by 65%, which led to a decrease in total revenues by 60%, and this is evidence of the correlation of all Economic activities, which are governmental in nature with oil, after the private sector was excluded from oil exports, and in contrast to the decrease in revenues, we notice an increase in expenditures, as they rose in 1981 by 48.5%, and thus the deficit appeared clearly in the

1981 budget by (11703-) million dollars, After the surplus in 1980 was (15,967) million dollars, and Iraq's budgets continued to suffer from a large deficit, as it rose in 1982 to (-22110) until it reached in 1990 to (-17064) (Iraqi Ministry of Finance, Budget Department), achieving a slight decrease as shown.

The second topic: the period (1991-2003)

The period (1991-2003) was one of the most dangerous stages that Iraq passed through, as the international community imposed a comprehensive siege on Iraq, which made it completely isolated from the world, which is the worst thing that any country's economy can face.

a. gross domestic product

The period (1991-2003) that followed the Kuwait war constituted a serious turning point in the economic and social history of Iraq. In the eighth month of the year 1990, the United Nations Resolution No. 661 was issued, according to which an economic embargo was imposed on Iraq, in which the Security Council demanded that all countries refrain from any Trade exchanges with Iraq, with the exception of medical and food supplies, this decision constituted the second Iraqi oil shock, after the Iraqi oil exports were zeroed. This can be seen from Table (12), as the gross domestic product decreased to (4,245) million dollars due to the decrease in oil exports to (276) million dollars and imports to (3,034) million dollars in 1991. By calculating the rate of change between 1989 and 1991 In Table (13) it becomes clear to us the size of the second large Iraqi oil shock, on the gross domestic product, which decreased by 70%, from (48,422) million dollars in 1989 to (4,245) million dollars in 1991, which was supposed to be (50843). million dollars, and thus the loss of the Iraqi gross domestic product for one year is (46598) million dollars, and this loss is due to the decrease or zeroing of Iraqi oil exports, which decreased by (97%) and became (4245) million dollars after it was (14806) in 1989, By subtracting what was supposed to be achieved from oil exports in 1991, from what was actually achieved for the same year, we find that Iraq lost (15270) million dollars, and there is no doubt that it was a great loss due to this oil shock, or rather because of the heavy dependence on oil exports.

B. household consumption

From Table (15) we note that household consumption did not change much in the nineties from the eighties, but that in some years such as 1996 the household consumption was greater than some years of the eighties, which is illogical, we are facing a significant



decline in GDP that exceeded (120%) and a decrease in the volume of imports between the eighties and nineties by (70%), which means that consumption should decrease by the same percentage or close to it. The researcher believes that the reason for this is the adoption of the official exchange rate in converting consumption from the dinar to the dollar, which amounts to 3 dollars per dinar.

c. Total exports and imports

In 1991, exports decreased to (1730) million dollars, compared to (13710) million dollars in 1990, which led to a decrease in its contribution to the formation of the gross domestic product to (15.9%). This imbalance certainly withdrew on the volume of imports, which in turn decreased to (3801) million dollars after it was (11785), and for two reasons, the first is the United

Nations resolution that prevented the countries of the world from trading with Iraq and the second, and most importantly, is that Iraq has lost the source of foreign exchange necessary to conduct its transactions Trade with abroad due to the interruption of his oil exports, and of course Iraq was not able to obtain international loans to compensate for this deprivation for the same first reason. This situation continued until 1996, after which we note the recovery of imports due to the easing of restrictions on the export of Iraqi oil until the volume of imports reached (11152) million dollars in 2002.

d. trade balance

In 1991, the trade balance achieved a deficit of (-1304) after the surplus in 1991 was (3801) million dollars, due to the economic embargo.

Table (12) Oil prices, gross domestic product, ratio of oil exports to total exports and balance of payments to Iraq for the period (1991-2003)

الميزان التجاري بدون النفط مليون \$	الميزان التجاري مليون \$	الاستيراد مليون \$	استهلاك الاسر	نصيب الفرد من الناتج المحلي الاجمالي	الصادرات النفطية / الصادرات الكلية %	الصادرات النفطية مليون \$	نسبة الصادرات من الناتج	الصادرات الكلية مليون \$	الناتج مليون \$	سعر برميل النفط دولار	السنة
-1,580	-1304	3,034	3543	2304.8	15.9	276	40.7	1730	4,245	20.20	1991
-2,526	-2146	4,254	6569	6074.6	18.0	380	38.4	2108	5,481	19.25	1992
-1,954	-1624	3,418	4145	16513.3	18.3	330	41.2	1794	4,347	16.75	1993
-1,254	-962	2,682	3728	82887.3	16.9	292	47.5	1720	3,621	15.66	1994
-1,278	-928	2,891	3222	326039.4	17.8	350	49.0	1963	4,000	16.75	1995
-846	-187	2,943	5309	307750.6	23.9	659	49.6	2756	5,556	20.46	1996
-1,907	2702	3,683	4410	684621	72.1	4609	62.2	6385	10,261	18.64	1997
-3,375	2442	4,986	4707	754376	78.3	5817	70.2	7428	10,572	11.91	1998
-7,980	3970	9,097	4467	1473955	91.4	11950	74.7	13067	17,477	16.56	1999
-10,585	7734	11,009	3974	2084767	97.7	18319	72.0	18743	26,018	27.39	2000
-9,865	1720	11,152	5890	1665037	90	11585	63.2	12872	20,342	23.00	2001
-8,844	2402	9,817	7116	1604652	92	11246	62.1	12219	19,657	22.81	2002
-7,749	-223	9,934	15325	1124227	77	7526	63.5	9711	15,282	27.69	2003

Source: The table is the work of the researcher based on
1- OPEC data. opec.org/opec_web/en/data
2- Household consumption is available on (Knoema.com)

The process of preventing Iraq from exporting oil continued until 1996, and during these years (1991-1996), Iraq lost approximately \$279,588 million of its

total product, and this loss came due to the loss in oil export, which for the same years was \$91620 million. There is no doubt that this shock and the great loss it



achieved for the Iraqi economy withdrew to the rest of

the commodity, distribution and service sectors.

Table (13) The impact of the Iraqi oil shock through the rate of change between 1990-1991

	1989	1991 supposed *	change ratio	1991 achieved	change ratio
The price of oil barrel	18.33	20.2		20.2	-13%
GDP	48422	50843	5%	4245	-70%
total exports	15017	15767	5%	1730	-87%
The ratio of exports to the output	31	31	0	40.7	-58%
oil exports	14806	15546	5%	276	-97%
Ratio of oil exports/total	98.6	98.5	0	15.9	-78%
imports	11785	10785	-9%	3801	-62%
trade balance	3232	4982	54%	1304-	-134%
Trade balance without oil	11578-	10564-	5%	1580-	-13%

Source: The table is from the researcher's work based on the data in Table (6), it was calculated (1991) on the basis of the compound growth rate (1980-1989)

Iraq re-exported oil, but with restrictions in 1997, after it agreed to the oil-for-food program and began to export two billion dollars every six months, as oil exports rose from 659 million dollars in 1996 to 4609 in 1997, and remained in A continuous increase until it reached (5) billion in 1998, until the ceiling was completely canceled in 1999 according to UN Resolution No. (1284) (Dr. Muhammad Ali Zaini, 2009, p. 297) until 2003, and it is worth noting that the international oil market was subjected to the oil shock (1997-1998), and the decline can be seen from Table (15), as the price of a barrel of oil fell to (11) dollars, but in fact it did not have a significant impact on the Iraqi economy, as the Iraqi economy and society are still under the influence of its own oil shock.

This reality continued until the year 2004, and as a result, the material capital in Iraq was almost completely destroyed, due to military operations and the cessation of investments, and trade with the outside world, especially that the operating factories began to be destroyed, due to the government's inability to provide spare parts for the machines. As for the process of human capital formation, it stumbled and began to descend, after the process of building and developing schools stopped, in addition to the interruption of scientific communication with the outside world, and the suspension of scholarships, training and development courses, and the real per capita income decreased below the subsistence level due to the high rates of inflation. And the deterioration of the health and educational level due to the cessation of investment in it.

In the sub-period (1980-1989) the growth rates of oil revenues, government revenues, government spending, investment, money supply and household consumption were as follows (0.4, 26, 30, 8-, 19.23%). During this period, we notice a significant decrease in oil revenues However, the growth rates remained relatively high, except for investment, which achieved a negative growth rate (-8), and the researcher attributed this to Iraq's resort to cash reserves and large loans, knowing that most of the spending was military spending.

As for the period (1991-2003), which witnessed two negative oil shocks, the growth rates of oil revenues, government revenues, government spending, investment, money supply and household consumption, respectively, were as follows (-7, -6, -12, -26, -16, 8%) , The period (1981-1990) is similar to the period (1991-2003), as during the two periods, Iraq was subjected to two oil shocks (private and international) in each of them, but the fundamental difference was in what Iraq possessed of foreign exchange reserves, before the eighties, and the volume of aid And the loans Iraq obtained from the outside world, in contrast to what happened in the nineties. In addition to the two oil shocks, Iraq did not have any significant cash reserves, in addition to the reluctance of the international community to give any loans due to United Nations resolutions, and therefore the period (1991-2003) constituted the most severe An economic shock passed through Iraq in its modern history, as we note that most growth rates have become negative, except for inflation rates that have reached record levels, reaching 2400% annually, and



with the government's inability to provide operational spending, more than two thirds of employees have been laid off, not to mention the cessation of growth employment rates. And it was one of the results of the 1991 special oil shock that occurred because Iraq was deprived of the most important source of financing its budget, and that oil constitutes more than 95% of its revenues, which caused serious negative effects on human capital in Iraq, as the proportion of health care in Iraq reached 97% of the urban population. And 78% of the Bedouin population, according to the World Health Organization, prior to 1991. The health care system relied on a large extended network of health facilities linked to a communication network and a large fleet of service vehicles and ambulances. A report by the United Nations Children's Fund (UNICEF) indicates the existence of a well-developed welfare system in Iraq to help orphans and disabled children and support poor families. As for under the siege and in a clear contrast to the prevailing position prior to the events of 1990-1991, we find that infant mortality rates have become one of the highest in the world. Also, chronic malnutrition affects every child under the age of five. The International Committee of the Red Cross declared that the health care system in Iraq, beyond 1991, is in a dire state. The halt in scientific and technological development has also led to a deterioration in the educational level at all levels, in addition to the mass migration of more than 23 thousand researchers, scientists and professors.

Second: The impact of oil on the Iraqi budget (for the period 1990-2003)

In 1990, Iraq entered a second major war after the occupation of Kuwait, and because of it, economic sanctions were imposed on it that lasted for 13 years, which led to the deprivation of the Iraqi budget from oil revenues almost completely after its oil exports were zeroed for the first five years, then the siege was eased after the approval of Iraq On the oil-for-food and medicine project, in light of which Iraq has gradually resumed oil export operations at limited rates under the supervision of the United Nations.

From table (21) it is clear that the volume of revenues decreased to (422) million dollars, after it was (15.9) billion dollars in 1990, compared to the low volume of expenditures as well, which became (1.7) billion dollars after it was (42.5) billion dollars in 1990. dollars, and the decline continued until 1995, when revenues became only 63 million dollars against expenditures estimated at 412 million dollars, with a compound growth rate of (-34). It is clear that these figures show the great economic decline and the

collapse of the development process. Because of the severe damage to the health, education and services sector that affected the entire society, as these figures show the damage of the second Iraqi oil shock, as mentioned in the first topic, and the cessation of oil revenues showed the level of budget deficit, and to pay this deficit the Iraqi government resorted to financing with deficit, which caused huge waves of inflation, which caused the Iraqi dinar to lose a large part of its value as it fell, which caused the collapse of the value of the Iraqi dinar, and the rise in inflation rates. But after 1996, that is, after the Memorandum of Understanding, we note, the positive growth of revenues and public expenditures, which improved relatively the standard of living of the Iraqi individual.

CONCLUSION:

We noticed that Iraq was subjected to two special oil shocks, as these shocks were not associated with the movement of international oil prices. Rather, their causes were a policy specific to Iraq, but their economic and social dimensions were dangerous to Iraqi society.

In the period (1980-1989) the growth rates of oil revenues, government revenues, government spending, investment, money supply, and household consumption were as follows (0.4, 26, 30, 8-, 19.23%). During this period, we notice a significant decrease in oil revenues However, the growth rates remained relatively high, except for investment, which achieved a negative growth rate (-8), and the researcher attributed that to Iraq's resort to cash reserves and large loans, knowing that most of the spending was military spending.

As for the period (1991-2003), which witnessed two negative oil shocks, the growth rates of oil revenues, government revenues, government spending, investment, money supply and household consumption, respectively, were as follows (-7, -6, -12, -26, -16, 8%) , The period (1981-1990) is similar to the period (1991-2003), as during the two periods, Iraq was subjected to two oil shocks (private and international) in each of them, but the fundamental difference was in what Iraq possessed of foreign exchange reserves, before the eighties, and the volume of aid And the loans he obtained from the outside world, in contrast to what happened in the nineties. In addition to the two oil shocks, Iraq did not have any significant cash reserves, in addition to the reluctance of the international community to give any loans due to United Nations resolutions, and therefore the period (1991-2003) constituted the harshest



economic shock It has passed through Iraq in its modern history, as we note that most growth rates have become negative, except for inflation rates that reached record levels as it reached 2400% annually, and with the government's inability to provide operational spending, more than two thirds of the employees have been laid off, not to mention the cessation of employment growth rates , as it was One of the results of the 1991 special oil shock that occurred because Iraq was deprived of the most important source of financing its budget, and that oil constitutes more than 95% of its revenues, which caused serious negative effects on human capital in Iraq, as the percentage of health care in Iraq reached 97% for the urban population and 78% (Zinni, 2009, 280) for the Bedouin population according to the World Health Organization prior to 1991. The health care system relied on a large extended network of health facilities linked to a communications network and a large fleet of service vehicles and ambulances. A report by the United Nations Children's Fund (UNICEF) indicates the existence of a well-developed welfare system in Iraq to help orphans and disabled children and support poor families. As for under the siege and in a clear contrast to the prevailing position prior to the events of 1990-1991, we find that infant mortality rates have become one of the highest in the world. Also, chronic malnutrition affects every child under the age of five. The International Committee of the Red Cross declared that the health care system in Iraq, beyond 1991, is in a dire state. The halt in scientific and technological development has also led to a deterioration in the educational level at all levels, in addition to the mass migration of more than 23 thousand researchers, scientists and professors.

RESULTS:

1- The impact of the oil shock is related to the extent to which the economy is linked to oil revenues. In the case of Iraq, the oil shocks had a significant impact on all macroeconomic variables, due to the high contribution of oil to the volume of budget revenues, and since the Iraqi economy suffers from the dominance of the government sector, the oil shock had a significant impact on Iraqi society.
2- Iraq suffers from limited ways of transporting and exporting oil, as the export of Iraqi oil depends largely on the export of oil through the Arabian Gulf.
3- The impact of the two special oil shocks had a severe impact on the Iraqi economy and human capital. The first turned Iraq into a debted country, after it had an important reserve, and the second

caused the deterioration of the health, education and environment sectors.

4- The private sector is of great importance in increasing the country's ability to face economic and financial shocks.

RECOMMENDATIONS:

1- Reducing the contribution of oil to the formation of the annual budget, as the annual budget is the channel through which the impact of the shock is transmitted to the rest of the components of the Iraqi economy.

2- Increasing the oil transport lines in Iraq and diversifying them between transport by pipelines and oil tankers, and diversifying the pipeline routes geographically.

3- Reducing the burden of the public budget and easing the links between health and education institutions with it.

4- Increasing the role of the private sector and making it a real partner for the government in managing vital economic sectors, supporting industry and agriculture and increasing their contribution to the formation of the Iraqi GDP.

REFERENCES

First: Arabic References:

A. Books

1. Abrihi, Ahmed. (2013), Iraq's Economy in Studies, 1st Edition, Amman: Dar Al-Ayyam for Publishing and Distribution.
2. Ross, Michael. (2014), The Curse of Oil, (Translated by Muhammad Haitham Nashawati), 1st Edition, Qatar: Arab International Relations Forum.
3. Zainy, Muhammed Ali. (2009), The Iraqi Economy, Past, Present, and Future Options, 3rd Edition, Iraq: Dar Al Malak for Arts, Literature and Publishing.
4. Saleh, Mazhar Muhammad. (2011), Monetary and Financial Policy and the Control of Inflation and Exchange Rate Variables, Iraq: Hammurabi Center for Research and Studies
5. Al-Atbajali, Ahmed. (2018), Iraq's debts: an overview of the status and origins of debts, 1st edition, Iraq: Al-Bayan Center for Studies.
6. Abdel Reda, Nabil Jaafar. (2018). Oil Encyclopedia, 1st Edition, Iraq: Al-Ghadeer Printing and Publishing Company.
7. Mirza, Ali (2018), The Iraqi Economy, Crises and Development, 1st Edition, Beirut: Arab House of Science



8. Harvey, David . (2013). *Al-Wajeez in the History of Neoliberalism*, (Translated by Walid Shehadeh), 1st Edition, Damascus: The Syrian Ministry of Culture
9. Harold, C. Paul. McDonald, Roland (2007), *International Money and Finance* (translated by Mahmoud Hassan Hosni), Riyadh: Dar Al-Marikh.
10. Hudson, John. Hernder, Mark. (1987), *International Economic Relations* (translated by Taha Abdullah Mansour and Muhammad Abdul-Sabour), Riyadh: Dar Al-Marrikh
11. Younes, Adnan. Abdul Majeed, Ismail (2016), *The Financial Dominance of the Rentier State*, 1st Edition, Jordan: Dar Al-Ayyam for Publishing and Distribution
12. Younis, Adnan. Abdul Majeed, Ismail. (2016), *the financial dominance of the rentier state*, 1st edition, Jordan: Dar Al-Ayyam for Publishing and Distribution.

B. Research and Studies

1. Al-Tamimi, Sami. Hadi, Adnan. (2015). *The political and economic landscape of the movement of oil prices*, Proceedings of the Eighth Scientific Conference, College of Administration and Economics, University of Basra, Iraq: University of Basra

C. Bulletins And Reports

1. Republic of Iraq, Ministry of Planning, Central Statistical Organization, *Annual Statistical Collection for the Years 1980-2019*, Baghdad, Central Statistical Organization.
2. Republic of Iraq, Central Bank of Iraq, *Annual Economic Report, for the years (1980 to 2019)*
3. Republic of Iraq, Central Bank of Iraq, *statistical bulletins for the years (from 1973 to 2019)*
4. Republic of Iraq, Ministry of Finance, Budget Department, *Iraq's budgets for the years (1973 to 2019)*
5. Republic of Iraq, Ministry of Justice, *Iraqi Gazette, Issue (2004-2005-2006-2007-2008-2009-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019)*

Foreign References:

1. A. Kitous, B. Saveyn.(2013). *ANALYSIS OF THE IRAN OIL EMBARGO*, Luxembourg: Publications Office of the European Union: European Commission,
2. Hamilton, Games .(2000). *What is an oil shock*, Combridg., Luxembourg: Publications Office of the European Union

3. Hamilton, Games .(2012)*Oil Prices, Exhaustible Resources, and Economic Growth*,USA: University of California,
4. 4. Howard,Roger.(2008). *Iran Oil The New Middle East Challenge to America*,1st,USA: Bloomsbury Publishing
5. Katzman, Kenneth.(2021). *Iran Sanctions*.USA: Congressional Research Service
5. Hamilton. James .(2011). *Historical Oil Shocks*. Cambridge,USA:NBER Retrieved from https://www.nber.org/system/files/working_papers/w16790/w16790.pdf
6. Hill,Edward . Wolman,Harold .(2011),*particle Atkins economics shocks . USA: University of California.*
7. Ramey, Velerie .(2016), *macroeconomic shock and their propagation , UK; Cambridge*

C. Report

1. OPEC, *Annual Statistical Bulletin*, Vienna, Austria (1973-2019)
2. Federal Reserve Bank of St. Louis, *One Federal Reserve Bank : Retrieved from <https://fred.stlouisfed.org/searchresults/?st=iraq>*
3. Oak Ridge National Laboratory is managed by UT-Battelle for the US Department of Energy: Retrieved from <https://tedb.ornl.gov/data/>
4. World Bank Open Data: Retrieved from <https://data.worldbank.org/>
5. IndexMundi, *Commodity Fuel (energy) Index annual Price - Index Number Retrieved from <https://www.indexmundi.com/commodities/?commodity=energy-price-index>*
6. BP, *Statistical Review of World Energy : Retrieved from <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>*
7. Don Geddis, Retrieved from <https://don.geddis.org/>
8. Inflation Calculators , *global oil production , Retrieved from https://www.sentech.no/products/levelprofiler/?gclid=EAIaIQobChMIksPu2uX69AIVDwGLCh0P2AB7EAAyASAAEgLQyvD_BwE*
9. International Energy Agency,iea: Retrieved from <https://www.iea.org/data-and-statistics/data-products>
10. Laurel Graefe. *Oil Shock of 1978–79, Federal Reserve History. Retrieved from <https://www.federalreservehistory.org/essays/oil-shock-of-1978-79>*



World Economics & Finance Bulletin (WEFB)
Available Online at: <https://www.scholarexpress.net>
Vol. 7, February 2022,
ISSN: 2749-3628

11. Organization for Economic Co-operation and Development, OCED Retrieved from <https://stats.oecd.org/index.aspx?queryid=60702>