

Graduate Unemployment in Iraq: Reality and Solutions

Muneam Ahmed Khudhair, Marwa Abd Jweir

College of Administration and Economics, University of Samarra

Gailan Ismael Abdullah

College of Administration and Economics, Tikrit University

Abstract: The graduate unemployment crisis in Iraq is of great importance among the negative crises and problems that Iraq is facing today without solutions. This phenomenon, in its various repercussions, represents an active source of social tension, and at the same time, it is one of the worst sources (crises) of the relationship between authority and society. The limited employment opportunities for university graduates is due to the weakness of the educational curricula and their weak connection with the needs of the labor market. The presence of large numbers of educated unemployed comes as a result of the inability of the production sectors to create job opportunities to the required extent. Studies related to contemporary global trends to confront the unemployment crisis of graduates emphasize the importance of linking education to production institutions, and thus to identifying the needs of the labor market, as the labor market occupies the utmost importance for many developed countries, through economic institutions which prepare and train the groups and cadres that they need at their own expense, or by spending on it in educational institutions.

Keywords: Graduate Unemployment, Education & Labor Market, Opportunity Cost, Social Stress.

1. Introduction:

Unemployment is one of the main difficulties and challenges facing the Iraqi economy because of its deep repercussions on the economic and social conditions. What exacerbates this problem is its persistence and high rates in recent years and its appearance in different forms and types, in addition to the fact that the Iraqi economy suffers in particular from structural unemployment resulting from Weakness of the ability of the economic sectors to absorb the increasing numbers of manpower who are able and willing to work.

The unemployment of graduates in Iraq is considered a great loss for their families and society, given the large education costs spent by those families and by society. The unemployment of graduates, as it is known, is a waste of available productive capacities and a loss of the most important element of production, which is the high-quality work element. The unemployment of graduates is also a direct reason for their emigration abroad, as this emigration is considered a continuous bleeding that deprives the country of their contribution to its construction and development. It also constitutes a clear waste of human resources.

Despite the importance of the phenomenon of graduate unemployment, it has not been officially monitored accurately, as the official statistics contradict them, as well as their contradiction with what is published by Arab and international organizations. Regardless of the conflicting numbers, economic

theories indicate that 15% of the capable and job-seeking labor force foreshadows the existence of a real crisis if the government, in cooperation with the private sector and international organizations, does not take practical and effective steps to reduce its seriousness and threats and develop solutions to confront it.

The economic, social and political burden of unemployment increases whenever it is concentrated in the educated and in the age groups that fall under the category of youth, where the energy wasted from the labor component is more efficient and able to work, and its political vitality is higher, and the preparedness of these groups for criminal violence is higher; By virtue of their young age, limited life experience, and the extreme frustration generated by the state of idleness, which violently and relentlessly shocks all the aspirations of achieving realization for young people, in addition to what unemployment creates of resentment on the part of young people towards the government that fails in their right and towards society in general, and sometimes towards the upper class of businessmen who look Many accuse them of having a lot and the state gives them a lot at a time when they do not play an influential role in operating the economy and creating job opportunities.

Thus, the unemployment of graduates in Iraq has now become the first urgent problem, because of its serious effects on the economic, social, security, moral and psychological aspects that impede development and progress in society. The unemployment of graduates is also more dangerous than the unemployment of other groups, as they are the most aware and ambitious group. It is not a reason for optimism that this problem may exacerbate with all its negative aspects in the short and perhaps the long term unless the means and measures are taken to confront it.

Iraqi universities annually add hundreds of unemployed persons to the Iraqi street, and the percentage of educated people among the mass of the unemployed is increasing, which means wasting energies and investment resources that were invested in the educational process without producing a return; It consists in operating this human energy to become productive. Each student costs the government large sums over the years of study (12 years), in addition to other sums during the four years of university. The statistics of the Research and Development Centers indicate that the student needs about (1500\$) annually, which the parents provide for the length of the study period, and the researchers consider more than 70% of this money lost due to the lack of job opportunities for graduates.

2. Concept and stages of unemployment:

Unemployment is one of the main difficulties and challenges facing the Iraqi economy because of its deep repercussions on the economic and social conditions. What exacerbates this problem is its persistence and high rates in recent years and its appearance in different forms and types, in addition to the fact that the Iraqi economy suffers in particular from structural unemployment resulting from Weakness of the ability of the economic sectors to absorb the increasing numbers of manpower who are able and willing to work.

Unemployment is defined as the state of unavailability of work for a person who desires it with his ability in a profession consistent with his preparations and abilities, due to the state of the labor market (Al-Rawi, 1989, 66). Unemployment is also defined as the state of the presence of unemployed individuals who are able to work and want it and search for it and do not find it (Abdul Qader, 2003, 170). According to the International Labor Organization (ILO), unemployment is defined as the unemployed person is every person who is able and willing to work and searches for and accepts it at the prevailing wage, but to no avail (Hassan, 1989, 170).

Unemployment is the opposite of employment. The worker and the unemployed are on opposite sides. The US Banking Department has made it clear that unemployment is a term that refers to the state of total non-employment, which refers to people who are able to work and who are willing and looking for it, but they do not find it (Khalil & Al-Ani, 1991, 23).

148	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

In view of the above, it can be said that the internationally agreed definition of unemployment or underemployment is based on three basic criteria that must be available at the same time for a person to be truly unemployed. Accordingly, the phrase (the unemployed) applies to everyone who is of working age, that is, those who are economically active.

It is clear from the foregoing that the above definitions agreed in essence despite their differences in details. This disagreement in itself stemmed mainly from the divergence of opinions about the types of unemployment. In general, the difficulty of converging on a specific definition comes from several fundamental considerations, namely:

- a. Unemployment is constantly changing and renewable, meaning that something new can be added to it constantly.
- b. Unemployment is intertwined and it is difficult to disentangle its elements and variables.
- c. Unemployment is difficult to measure, as there is a difference between countries in defining employment, unemployment, work age, and other elements that enter into the formation of employment or unemployment.

In general, the literature that dealt with this issue included multiple types of unemployment, and the Iraqi economy has gone through, since the end of the seventies of the last century until now, four stages of unemployment that can be identified as follows: (Hassan, No year, 3).

2.1 Behavioral unemployment stage:

This stage emerged in the second half of the seventies and early eighties of the twentieth century after the general budget resources increased significantly and many job opportunities were available, but a large number of Iraqis were rejecting many of these job opportunities because of the social view of those jobs.

2.2 The stage of structural unemployment:

It appeared at the end of the eighties, after the end of the war with Iran and the demobilization of large numbers of military forces that the Iraqi economy was not able to absorb at once.

2.3 The stage of disguised unemployment and compulsory unemployment:

It appeared during the nineties with the imposition of a state of economic blockade on Iraq and most of its sectors stopped working, which increased the unemployment rate, especially in the oil, agriculture and services sectors.

2.4 Stage of imported unemployment:

And this stage began after the year (2003) and the opening of the Iraqi market to all imports without any restrictions, which stopped many of the existing craft economic activities and small factories.

The previous identification of the stages that unemployment went through in Iraq certainly does not mean that they do not overlap with each other in some periods according to the circumstances of each stage, except that the last stage may be the most dangerous among them. In view of the importance of this subject and its great effects on the Iraqi reality, the Central Statistical Organization conducted a comprehensive survey of this subject in 2003 immediately after the war, and showed its results in its first report on employment and unemployment in 2003 and continued to update its data in the subsequent years.

149	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

3. The unemployment in the Iraqi Economy:

3.1 The reality of unemployment in the Iraqi economy:

The Iraqi economy has a peculiarity among the developing economies due to the nature of the economic and political conditions that the country witnessed during the eighties and nineties of the last century, as Iraq went through a series of exceptional situations that resulted in a certain economic structure that required a special kind of management of the national economy, which was represented by Iraq's waging a series of regional wars starting with The Iraqi-Iranian war followed, followed by the first Gulf war and the accompanying economic blockade imposed by the international community, where economic losses were estimated at about (1265) billion dollars, in addition to losses of about (150) billion dollars in unrealized oil revenues (Al-Shamaa, 2005, 34), and the accompanying indebtedness and compensation reflected on the overall national economic activity, as Iraq witnessed an unprecedented spread of unemployment and poverty, which was accompanied by the stopping of many small and medium industrial projects in addition to large industrial projects, as nearly 72% of the total small and medium industrial projects stopped. As for the remaining percentage, they were working with a capacity that was much lower than their levels of production capacity, which contributed to reducing job opportunities, laying off increasing numbers of workers, and exacerbating the problem of unemployment (Thunoun, 2005, 149).

The situation worsened after the year 2003 to increase the repercussions of the change from the problem of unemployment to becoming a dangerous phenomenon that threatens Iraqi society in most of its age, class and professional segments, where unemployment affected not only groups with limited education, but a wide segment including graduates of universities and graduate studies, where the Ministry of Labor and Social Affairs announced that the number of unemployed registered in the database of the Department of labor among graduates from 2003 to 2009 reached (1500000) unemployed, due to the war that destroyed the infrastructure and the subsequent acts of vandalism and looting of all public property, which led to Deterioration in economic sectors.

This economic chaos deepened the imbalance in the structure of the Iraqi economy and paralyzed it in its activity, as it could not maintain public forces in it, so how could it create additional job opportunities for new segments entering the labor market? What exacerbated the phenomenon of unemployment was the dissolution of a large number of state public institutions. The annual unemployment rate reached (19.7%) during the period (2003-2008) (the annual statistical group for the said period) for the year 2010, and males accounted for about (20%) as an annual rate and females (18.1%) during the said period. Thus, the unemployment rates in Iraq (even assuming the accuracy of the data of the Central Bureau of statistics may reach 45% (including underemployment) or to 39% according to World Bank estimates for the year 2010 (Salem, 2011, 34), in addition, unemployment among young people is the most dangerous thing that Iraqi society can face from the repercussions of the unemployment phenomenon, as the disruption of this most active group of other age groups from contributing to the construction process and the fact that this group remains unemployed may push them to carry out illegal work, especially under conditions such as Iraq.

Official statistics indicate that unemployment for the youth category within the age group (15-24) years has accounted for a rate of (30%) in 2008 for the whole of Iraq, (20.4%) in 2016, (25.2%) in 2020 according to (Table 1, Table 2), this confirms the importance of youth (especially graduates) in the national labor force, Dhi Qar governorate has occupied the highest rate for this category, with the unemployment rate for youth in it (59.1%) followed by Ninawa governorate (41.9%), Basra governorate (40%).

150	<p>ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm</p>
	<p>Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/</p>

Table (1) Youth unemployment rate by governorate for the period (2006-2016)

Governorate	Youth unemployment (15-24) years			
	2006	2008	2014	2016
Nineveh	43.5	41.9	12.8	-
Kirkuk	16.8	29.6	5.2	28.7
Diyala	33.5	33.1	17.9	12.0
Anbar	-	25.7	33.3	-
Baghdad	26.4	23.2	19.0	18.6
Babylon	21.1	20.3	21.3	11.0
Karbala	31.1	27.9	12.2	12.1
Wasit	14.0	22.1	12.5	20.2
Salahaddin	29.1	28.7	15.3	16.3
Najaf	32.2	27.0	10.6	16.4
Al-Qadisiyah	34.9	26.6	21.0	21.0
Al-Muthanna	33.2	38.4	12.0	26.0
Dhi Qar	48.6	59.1	31.0	34.8
Maysan	36.9	37.7	28.7	29.2
Basrah	29.6	40.0	22.7	25.5
Duhok	-	32.5	15.0	28.1
Erbil	-	23.4	11.2	22.2
Sulaymaniyah	24.2	20.4	12.3	19.4
Total	30.3	30.0	17.6	20.4

Source:

- Central Bureau of Statistics and Information Technology, Annual Statistical collection (2008-2009), March 2010, table 2/15.
- The results of the socio-economic survey of the family in Iraq for the year 2014.
- The results of the survey of evaluation of the nutritional status and fragility of the family in Iraq for the year 2016.

Table (2) Youth unemployment rate (15-24 years) of the total labor force for the period (2003-2021)

Years	Male unemployment	Female unemployment	Total youth
2003	17.1	20.0	17.4
2004	17.1	19.8	17.4
2005	17.2	19.5	17.5
2006	17.0	19.4	30.3
2007	16.9	19.3	17.1
2008	16.2	21.2	30.0
2009	16.3	23.5	17.0
2010	15.9	25.6	16.8
2011	15.3	27.4	16.5
2012	14.8	29.4	16.2
2013	16.1	37.2	18.2
2014	17.0	45.9	17.6
2015	18.6	41.6	21.4

2016	20.1	37.5	20.4
2017	21.9	62.8	25.5
2018	21.7	62.8	25.3
2019	21.6	61.6	25.1
2020	23.6	64.6	27.2
2021	23.5	65.2	27.2

Source: Table prepared by researchers based on World Bank data.

Unemployment in Iraq represents an imbalance in the human security system. It is a concept put forward in the United Nations literature in 1944, and it is intended to (the safety of people from chronic threats such as hunger, disease, persecution, poverty...) and these threats can affect all levels of income and development of any country.

Work is the main income channel for a person to be able to live in dignity and luxury. Income is the second component of economic security. If there is no security of work, there is no security of income. While the income of the Iraqi per capita reached (451.2) dollars in 1971 before the oil price correction in 1973, this income increased to reach (1776) dollars in 1974 after the Iraqi oil production reached its maximum extent. Then, the average Iraqi per capita income began to decline during the Iraq-Iran war to reach (1142) dollars a year, then the income soon declined to (7.3) dollars in 1994 after economic sanctions were imposed on Iraq and the deterioration of oil production and export and the deterioration of the exchange rate of the Iraqi dinar, and then rose to (11310) dollars in 2019.

This level is low compared to its counterpart in a number of Arab and foreign countries, as the per capita gross national income in Saudi Arabia reached (49520) dollars, in Bahrain (44250) dollars, in Qatar (91670) dollars, in Turkey (27660) dollars, in Iran (12950) and in Singapore (92270) (World Bank data). Poverty rates have reached between (40%-50%) of the population, 50% of them are below the poverty line, and this line has been identified as (77,000 Iraqi dinars per month), meaning that below this amount is below the poverty line, and this is a serious percentage that requires standing and treatment.

3.2 The causes of unemployment in the Iraqi economy:

After reviewing the reality of unemployment in the Iraqi economy, it must be noted that this unemployment, including graduate unemployment, has a number of reasons that can be summarized as follows:

3.2.1 Education-related causes of unemployment:

It is not surprising that the number of educated people looking for work has risen in light of their lack of experience to obtain suitable jobs, which constitutes a structural challenge to the government in particular, and requires it to increase attention to improving the quality of education and providing students with more skills and technical qualifications, especially technology and information skills, which are the main product of economic opportunities. in today's world. Education is one of the most powerful weapons against poverty and unemployment, so targeting poverty eradication should focus on providing quality education capable of alleviating poverty and reducing unemployment. Among the most important causes of unemployment in Iraq: (Al-Qolaib, 2008, 23)

- a. The general tendency towards classical or academic education and the reluctance to move towards vocational education, as inflation and sluggishness appear in the numbers of those who go into education and humanitarian colleges in particular.

- b. Poor planning policy or central distribution of students, as this is done contrary to their wishes, which leads to failure or academic delay, or that they graduate with weak competencies, or who are not qualified and unwilling to work, and thus a kind of unemployment arises.
- c. Professional or field illiteracy that most graduates suffer from, and because of which they face difficulties in applying what they have learned, and fear and anxiety in facing the profession. This comes for several reasons, including:
 - d. Negligence and laziness of the student most of the school years.
 - e. The student is not convinced of his specialization and the feasibility of learning.
 - f. Inadequate educational policy, due to inappropriate education programs and curricula, or the incompetence of teaching and training staff.
 - g. The lack of job opportunities in the same specialization as the graduates, due to an inflation in their numbers and their concentration in certain specializations that exceed the need for them after graduation.
 - h. Graduates refused to work in professions and businesses because they believed that they were not suitable for them and that they were of a lower level than them.
 - i. Poor distribution of graduates or their random distribution on channels that have nothing to do with their specialization or what they have studied.
 - j. The poor quality of education and limited training and qualification programs increase the difficulties for newcomers to find productive work.

3.2.2 Structural Imbalances in the Iraqi Economy

The Iraqi economy suffers from structural imbalances, as it is closest to the service economy (if we exclude the oil sector), so that the contribution of the services sector to the gross domestic product reaches about 22%, while the contribution of the industrial sector to the gross domestic product is about 1.8% in 2018. For the average period 2000-2010 (www.ahewar.org). The contribution of the agricultural sector does not exceed 2%, bearing in mind that the contribution of the oil sector to the gross domestic product represents the largest part, and it is a sector that does not contribute to the components of operating the Iraqi labor force except at a low rate that does not exceed, in the best case, (2%), which means that (98%) Of the labor force, there are sectors whose contribution to the gross domestic product does not exceed 30% (Abboud, 2008, 102). Therefore, the dominance of the marginal services sector in the components of economic activity has negative effects on the formation and installation of the Iraqi labor market and the ability to employ and productive use, as 50% of workers in the services sector work in marginal services (poor productivity), and it is among the unemployment classifications in the labor market Even the income they receive is marginal income (below the poverty line).

3.2.3 Wars:

During the past three decades, Iraq has fought several wars and what followed from a comprehensive international economic blockade on Iraq, the low level of production and development to the lowest level, and the directing of national income towards the requirements of wars, in addition to the destruction, looting and burning that afflicted state institutions and public money in 2003, and in particular institutions In addition to the dissolution of the army, the internal security forces, the various security agencies, and the Ministry of Information by the occupation forces, they contributed to the increase in the number of The unemployed, as the number of these people reached about one million. (Al-Husseini, 2004, 218).

153	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

3.2.4 The quota system in the state agencies negatively affected the labor force, which led to an exacerbation of the unemployment crisis and an increase in the number of the unemployed.

3.2.5 The slowdown in the reconstruction process and the continued downtime of many public sector facilities exacerbated the problem of unemployment.

3.2.6 Limitation of private activity:

Since 2003, the difficulties faced by the private sector have increased. Looting and robbery have targeted many private projects. In addition, the conditions of uncontrolled openness led to flooding the local market with very cheap commodities that are difficult to compete with in light of the antiquity of the approved production methods and means, the low levels of productivity, and the shortage of raw materials and energy. The security situation also cast a shadow over the owners of money and merchants, many of whom and their family members were subjected to kidnapping, murder and extortion, which forced many of them to leave the country. Therefore, it is not surprising that we find that the number of small industrial establishments for the year 2005 amounted to (662) establishments employing (2501) workers, which is a very small number of the general total, as it constitutes (6.5%) of the total establishments in the country, and (6.8%) of the total workers in the country. These establishments in the country. As for the relationship of this to the level of unemployment, it seems appropriate to say that the demand of the private sector for labor is a function of the activity of this sector. As a result of crowding out the public sector or the external sector, this led to a decrease in its labor needs.

3.2.7 Administrative and financial corruption:

The state of administrative corruption became evident after 2003 until Iraq came third after Myanmar and Somalia in the global ranking of Transparency International's 2007 report on administrative corruption. Administrative and financial corruption is rampant in all aspects of the Iraqi government. Administrative corruption affects the widening of the unemployment gap through the following:

- a. Appointment to jobs is not on the basis of competence and certification, but rather on the basis of nepotism, loyalties, and quotas in all ministries, including Iraqi embassies abroad, which makes those who are actually deserving of the job far from it.
- b. Disrupting investment programs through the corruption of some of those in charge of them, the corruption of contractors, and the employment of juveniles instead of unemployed youth as a result of the low wages for juveniles.
- c. Absence of follow-up on projects planned in the governorates, as the rate of implementation of projects is less than 10% for those projects in 2006, according to the statements of the Ministry of Finance, which leaves a profound impact on unemployment rates (Arab Economic Research Journal, 2008, 103).

3.2.8 The relationship between the phenomenon of violence and unemployment:

Unemployment is especially widespread in hot spots, which impedes any development or service projects that attract the unemployed. Studies indicate that most of those accused of murder are between the ages of (17-24 years), and their percentage is 33%, and that 85% of these are unemployed (Mohi, 2009, 128).

3.2.9 Numerical expansion in the armed forces, which absorbs mostly unskilled workers at the expense of graduates and certificate holders.

3.2.10 High population growth rate:

Iraq is characterized by a high population growth rate, and this rate ranges, for example, between (3-4.3%) for the period (1977-2009) (the annual statistical group for the aforementioned period), and it is higher

154	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

than its counterpart in developed countries and some developing countries, as this rate reached 2% In Norway, 1% in Australia, 4% in Japan, 3% in Belgium, 2% in the Emirates, 6.1% in Qatar, 3.2% in Saudi Arabia (Human Development Report, 2010, table 11).

This rise is due to the increase in the fertility rate, which in some years reached (5%) in 2008 (Unified Arab Economic Report 2010, Appendix 2/12), and this led to a doubling of the population of Iraq by 3.7 times during the mentioned period. This increase affects the population pyramid and leads to a youth base that reflects pressure on the labor market. We note from table (3) that the percentage of the economically active population (15-64 years) increased from 54.4% in 2003 to 58.58% in 2019, which means an increase The economically active population - the increase in the supply of the labor force - was not matched by an appropriate increase in the volume of demand for the labor force due to the current political, economic and security conditions, which led to an increase in unemployment rates, including the unemployment of graduates.

Table (3) Percentage distribution of the population in a selected age group (%)

years	Total population (thousands)	Under 15 years old	15-65 years	65 years and over
2003	26340	43.5	54.4	2.1
2004	27139	43.3	54.5	2.2
2005	27963	43.2	54.7	2.8
2006	28810	43.1	54.8	2.1
2007	29682	42.3	55.4	2.3
2008	31895	38.6	58.2	3.2
2009	31664	43.1	54.1	2.8
2010	32490	2.42	5.54	3.3
2011	33338	41.26	55.44	3.3
2012	34208	40.77	56.01	3.2
2013	35096	40.31	56.55	3.1
2014	36005	39.83	57.07	3.1
2015	35213	39.31	57.59	3.1
2016	36169	39.10	57.75	3.2
2017	37140	38.77	57.99	3.2
2018	38124	38.39	58.29	3.3
2019	39128	38.02	58.58	3.4
2020	40150	37.78	58.94	3.3
2021	41179	37.30	59.22	3.5

Source: Central Agency for Statistics and Information Technology, Annual Statistical Collection for the years 2003-2021.

3.2.11 Exacerbation of the external indebtedness crisis:

Iraq fell into the trap of foreign indebtedness and paid unjustified compensation, which drained much of its foreign currency needs. Iraq's debts were estimated at more than (160) billion dollars after 2014, of which 100 billion are internal debts. Foreign indebtedness and the payment of compensation, especially the \$178 billion demanded by the State of Kuwait, contributed to the slowdown in development efforts in various economic activities, and weakened the ability of the Iraqi economy to achieve high growth rates, which exacerbated the problem of unemployment.

Table (4) The number of unemployed and graduates in Iraq for period (2003-2021)

Years	Number of unemployed (Thousands)	Number of graduates (Thousands)	Ratio of Graduates to Unemployed (%)
2004	1517	74037	2.10
2005	2753	74349	2.01
2006	2624	75337	2.03
2007	1856	66966	2.76
2008	2840	68938	2.77
2009	1904	73940	2.81
2010	1957	75682	2.69
2011	2044	75644	3.88
2012	2299	98108	4.26
2013	2382	99721	4.19
2014	2175	100137	4.59
2015	2433	100848	4.15
2016	2256	130488	5.76
2017	2800	144201	5.14
2018	2889	152467	5.26
2019	2934	148401	5.04
2020	3063	149621	4.9
2021	3197	156563	4.9
Compound Growth Rate	4.38	4.41	

Source: Central Agency for Statistics and Information Technology, Annual Statistical Compilation for the years (2008-2022).

4. The effects of the widespread phenomenon of graduate unemployment in Iraq:

The available data on the problem of unemployment in Iraq indicates that the problem did not find practical solutions that could reduce its effects, which led to the economy, society and the security situation in Iraq being exposed to great losses. The following are the most prominent of these effects:

1. Unemployment in general and the unemployment of graduates in particular means marginalizing an important part of the labor force in Iraq, and placing them outside the economic process. This is a waste of one of the sources of wealth in Iraq. This waste represents the loss of production and income that could be achieved if these capabilities were exploited. As well as a decline or erosion in human capital as a result of the loss of knowledge or skills that they acquired throughout their studies. Rehabilitation of these forces that have been deprived of their opportunity to work requires additional costs.
2. In light of the prevalence of unemployment rates, a feeling of unwillingness to education will be generated, and that education may be a cause of unemployment, which leads to students dropping out and dropping out of school. Consequently, education and its importance, as well as the certificate and its holders, are less considered.
3. The emigration of many scientific competencies to search for suitable job opportunities in other countries. This means that the burden of education and education savings may be borne by Iraq, while

the benefits of its outputs will go to those countries that depend on these expatriate labor forces to implement their development plans and build their national economies.

4. Unemployment is the main source of the problem of poverty and the increase in the number of poor. Studies of the World Food Program have shown that 45% - 55% of the population of Iraq can be placed at the poverty line at the end of 2003. The increase in poverty is therefore due to the spread of the phenomenon of mending in the streets and public shops, which consequently affects human levels and feelings of internal frustration.
5. The increase in unemployment rates leads to an increase in the burden of support in the Iraqi family, as the head of the family bears the support of his family members, young and old, in addition to the support of those of working age who suffer from unemployment. This rate reached 3.78% in 2010 (Human Development Report, 2010).
6. The International Labor Organization and the Arab Labor Organization, as well as academic scientific sources, confirm that the increase in unemployment rates by (1%) results in a loss in the gross domestic product at a rate of (2.5%), or about 23 billion Iraqi dinars, which means that the unemployment rate of 28.1% will increase the loss Which the Iraqi economy is exposed to by (245) billion Iraqi dinars. This amount could provide job opportunities for about (1.016) million Iraqis (Unified Arab Economic Report, 2001).
7. An increase in the percentage of repetition and dropout in all academic levels, due to the students' inability to meet the requirements of the study. The number of students who dropped out of primary schools for the academic year (2010-2011) reached about (23053) students, i.e. (3%) of the total students in the first stage. Primary. As for the students who failed in the primary stage for the academic year (2010-2011), their number reached (687,718), i.e. (14%) of the total number of students. In secondary schools, the repetition rate was 24% of the total number of students at the secondary level. In the institutes for preparing male and female teachers and the institutes of fine arts, the failure rate reached 28% of the total number of students in these institutes (annual statistical group 2010-2011). Also, the percentage of illiteracy in Iraq has increased until it reached the program to eradicate illiteracy, according to the testimony of the international organization.
8. Increased anomalies of drug use, robbery, rape and murder. The results of one of the studies indicated that an increase in the unemployment rate by (1%) leads to an increase in homicides by (6.7%), violent crimes by (3.4%), and assaults on property by (2.4%) (Jeremy, 2006, 295). Crime is one of the most prominent and dangerous secretions of unemployment and the most threatening to the social structure. Some studies have confirmed the existence of a positive relationship between unemployment and crime. Some researchers believe that theft is one of the most prominent crimes related to unemployment. The issue of determinants of crime and statistical applications has captured a great deal of attention of researchers using different models of crime. One of the foundations of the standard economic models was that the individual chooses to commit crime if the marginal benefits of the act of crime exceed the marginal costs of that act. The researcher Hoeiti (Hoeiti, 1998) studied the relationship between unemployment and criminal behavior in a number of rehabilitation centers in Mauritania, Qatar, Sudan, and Syria. The sample included (463) individuals, and this study concluded that there is a correlation between unemployment and criminal behavior. The connection is due to the overlapping of economic, social and psychological factors that push the unemployed to commit the crime. The results showed that the low level of income affects the commission of crime (theft, murder, etc...). And it turns out that the crime of assaulting public and private funds came at the forefront of the crimes that are committed.

157	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

9. The continuation of the unemployment and the accompanying deprivation and suffering often affects the individual with depression, and the depression rates have increased in Iraq, reaching (3%) of the volume of the work force for the year 2006 (Abboud, 2008, 6). Also, the deteriorating psychological state of the unemployed is a cause of infection with many diseases and cases of physical awareness.
10. At a time when Iraq is one of the countries that have been able to eliminate many diseases, a deterioration in the health level, the migration of many medical competencies, and the spread of some endemic diseases.
11. Unemployment leads to the reluctance of young people to marry due to the lack of an income source that can cover the expenses required by marriage.
12. Unemployment leads to a state of political instability of the countries that are exacerbated, because political stability depends on the state's ability to create job opportunities.
13. Wasting the large money as a result of the graduate not benefiting from what they received and spent on them the education period or as a result of their academic delay.
14. This type of unemployment (graduate unemployment) leads to weak leakage to the path of science and education due to the failure of many competencies from work and wasting large money.

5. Addressing the unemployment in Iraq:

In general, in order to address the problem of unemployment in Iraq and the unemployment of graduates in particular – after it has become a rampant and increasing phenomenon day after day until it has become the highest rate in a country, as Iraq, blessed with riches, natural resources, and fertile agricultural lands suitable for the cultivation of various agricultural crops – the following must be followed:

1. Developing the education system in Iraq in a direction that leads to the development of skills and finding a high degree of integration between education systems and the labor market, and working to update educational curricula to keep pace with scientific developments and to ensure the qualification of graduates in both scientific and practical terms.
2. Benefiting from the experiences of developed countries in facing the graduate unemployment crisis, through the preparation and training of groups and cadres needed by economic institutions at their own expense in institutions that they establish or by spending on them in existing educational institutions. One of the most important evidences of the close connection between education and the labor market in the United States of America, for example, is the fact that industrial institutions and businessmen spend (40-200) billion dollars annually in preparing programs for raising the level of technicians, technologists, and others. What also confirms this close relationship is that most graduates who have received programs to update and develop their skills in companies and industrial establishments join the labor market directly (Ghoneim, 2001, 88). We conclude from the foregoing that the successful global experiences emphasize the importance of linking education institutions and the labor market, and when this link is achieved, spending on these high-cost educational institutions is reduced, and their responsibility is transferred to the sectors benefiting from them, and avoiding at the same time the surplus in the types of graduates that are not The labor market needs it. Accordingly, economic institutions are able to develop their programs and methods of preparing and training workers in accordance with the radical developments that characterize economic conditions and the continuous change in society's needs for professions and different specializations and the rapid developments that occur as a result of relying on modern technology, which is something that educational institutions are unable to do. which leads graduates to unemployment.

158	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

3. Benefiting from the experiences of Arab countries in employing graduates through the establishment of cooperatives among young people that are funded with (30%) as a grant and banks guarantee the rest. These cooperatives can be active in many sectors, especially agriculture.
4. Disbursement of financial benefits to the unemployed by a special social fund in the Ministry of Labor and Social Affairs until job opportunities are found for them.
5. Developing a national program based on coordination between the various ministries to create job opportunities commensurate with the qualifications of graduates.
6. Reconsidering the central admission plan by focusing on the goal of harmonizing education outcomes with the needs of the labor market.
7. Directing large proportions of investment allocations to support commodity sectors, especially agriculture, industry, infrastructure projects, electricity and water.
8. Acceleration of growth in the construction sector: This sector is one of the few active sectors in the Iraqi economy, as its contribution to the gross domestic product has continued to increase since the middle of the last century, and this increase reached its peak in 1985 when it contributed about 8.5% of the gross domestic product, but this contribution deteriorated under the economic sanctions, and reached In 2003, it reached 0.72%, and increased to 0.97% in 2004. On the other hand, this sector occupies a large percentage of the workforce, which reached its peak in 1990 when it contributed to employing more than 10% of the workforce, while its contribution in 2001 reached about 15% of the total workforce. worker. On the other hand, private activity almost completely dominates the activity of this sector.

The importance of accelerating growth in the construction sector lies at the heart of addressing unemployment because focusing on this sector achieves a number of goals in addition to providing housing for many families. Rather, this sector activates a large number of industrial and service branches that provide this sector with inputs, which increases Job opportunities are not in this sector alone, but in other sectors.

Reforming the work situation in the construction sector (which is currently very backward) can accommodate one and a half million workers if the government works to develop the potential of this sector. The starting point in this direction is government support for the establishment of companies specialized in various branches of building and large construction and capable of employing the latest technologies and methods of management and organization. The government can also offer the shares of these companies for subscription, allowing the private sector to gradually manage and own them.

9. Support for small and medium enterprises: Supporting small and medium enterprises can lead to the creation of new job opportunities in the economy that depend on self-financing of capital and can encourage savings and capital accumulation. The development of small and medium enterprises will have positive effects in creating new employment opportunities. Employment opportunities can be generated by making labor-intensive methods among the criteria for selecting projects to be funded. Small industries are characterized by characteristics that are more suitable for the requirements of addressing unemployment. In addition to low cost, they provide job opportunities that can be easily absorbed within a short period, and they depend mostly on local raw materials.
10. Private Sector Support Policies: The involvement of the local and foreign private sector in economic activity is of particular importance in the field of combating unemployment, not only because government resources are not sufficient to secure the necessary volume of investment in the future, but also because this sector is the one that holds the keys to eliminating unemployment. The revitalization

159	<p>ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm</p> <p>Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/</p>
------------	--

of the private sector requires work to facilitate streamlined and simplified governmental procedures at the level of business in Iraq (attention to the ease of doing business index), and laying the foundations for the rehabilitation of state-owned enterprises, which leads to transferring their ownership to the private sector. It also requires encouraging the private sector to implement local projects at the national level, restructuring government banks to encourage the merger and privatization process, and expanding lending areas by granting small loans and financing small and medium enterprises.

11. Increasing employment opportunities in the agricultural sector: Efforts to address unemployment should focus on increasing employment opportunities in the agricultural sector and expanding its production significantly, especially since many neglected or partially exploited lands are lands of high yield. The expansion of agricultural production is also welcome in light of the agricultural market conditions. With the difficulty of rehabilitating this sector after years of neglect, it is therefore today in need of exorbitant incentives. Therefore, work should be done on:
 - a. Encouraging income-generating agriculture, especially fruits and vegetables.
 - b. Creating new job opportunities related to the agricultural sector.
 - c. Work to link agriculture with industry and encourage agricultural industries to manufacture local agricultural products.
12. Increasing employment opportunities in the tourism sector: There is no doubt that the tourism sector provides promising opportunities for employment, especially in light of the security stability. The religious and historical status of a number of Iraqi provinces makes it the focus of attention for tourists. This sector has suffered from many difficulties as a result of its sensitivity to the security situation in the country. And the advancement of this sector in Iraq requires:
 - a. Investing in tourism facilities, especially outside the centers of religious governorates, to expand tourism activity.
 - b. Finding an entity or body to coordinate the efforts of the tourism private sector that can impose control on the quality of tourism services and moderate their prices.
 - c. Increased interest in craft industries.
 - d. Establishing tourism training institutes.
13. Reintroduction of the law of compulsory service in the Iraqi army for a short period of no more than six months or one year as a maximum, during which young people are built morally, behaviorally and disciplined, in addition to training them in professions and jobs that will benefit them in their future lives. Thus, we have contributed to creating a generation of young people committed to loving the country and defending it away from negative and immoral practices and behaviors, in addition to acquiring professional knowledge and skills to benefit from in their livelihood when they are discharged from service.

Conclusion:

The challenge of the phenomenon of graduate unemployment comes at the forefront of the challenges facing Iraq due to its abnormally high rate, and is linked to it with the same degree of importance as the repercussions and effects of them adopting negative behavior that harms society, such as crime and violence. The increase in the percentage of the young age group and the increase in the number of graduates year after year led to the lack of suitable job opportunities for them as a result of the mismatch between the outputs of educational institutions and the needs of the labor market. The exacerbation of the problem of unemployment and unemployment of graduates in particular in Iraq came as a result of the

160	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm
	Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

foreign occupation of Iraq and the destruction of the infrastructure of the Iraqi economy, and the absence of productive investment resulting from the cessation of economic development plans and the focus only on the security aspect exclusively, in addition to the policies of privatization and sudden opening to the outside world.

Therefore, a number of proposals can be made in this regard:

1. Achieving economic growth is indispensable in order to achieve sustainable development and eliminate unemployment, including graduate unemployment, and poverty in Iraq. On small and medium enterprises that would employ the largest possible number of unemployed.
2. Increasing investments in Iraq pushes to solve the problem of unemployment, which can increase job opportunities. Creating jobs is a priority that cannot be preceded by a priority. In order to expand opportunities, it is necessary to create a climate in which the private sector and foreign investments can contribute to eliminating this phenomenon and securing job opportunities for Iraqis only. Their academic qualifications and the establishment of an incentive system that contributes to attracting investors.
3. A condition must be set for acceptance in the new investment law by preventing foreign companies from using foreign labor and limiting themselves to specialized foreign labor that the labor market needs at the present time until preparing and training Iraqi cadres and relying on the use of labor intensity in projects.
4. Establishing an authority or center specialized in the economically active population and creating an integrated information base that provides all data on the labor market, conducts survey research, prepares studies on the current phenomenon, and builds future perceptions that help in setting employment policies to confront the problem and expedite the development of the strategy to ensure the availability of future job opportunities and analyze the effects The phenomenon and programs to reduce it.
5. Disbursement of financial benefits to the unemployed through a special fund in the Ministry of Labor and Social Affairs until job opportunities are found for them.
6. Encouraging vocational technical education for both sexes and demonstrating the importance of vocational education in developing human knowledge and technical skills and capabilities for employment. It will have an important role in preparing Iraqi labor to face the structural changes and shifts in the demand for labor in the labor market by developing training programs to qualify and rehabilitate the unemployed.
7. Improving education in general and higher education in particular, and paying attention to the applied and training aspects and field work by bringing about fundamental changes in the curricula of education and higher education to create a state of compatibility between the numbers of graduates and the requirements of the labor market.
8. Providing the requirements for operating the suspended factories by securing the raw materials and other requirements in order to be able to absorb an important aspect of the unemployed labor force.
9. The need to diversify the Iraqi economy and use oil resources optimally to promote other sectors, and this would secure job opportunities for a growing number of unemployed.
10. Restarting the industrial establishments of the Ministry of Industry and the Military Industrialization Authority after converting them into civilian industries. It can be used to restore what was destroyed by the occupation and to employ the unemployed.

161	<p>ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm</p> <p>Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/</p>
------------	--

11. It is necessary, as is the case in developed countries, to carefully calculate the issue of linking educational policy to the needs of development plans in terms of manpower.

References:

1. Abboud, Abdul-Jabbar, (2008), unemployment in Iraq, with special reference to youth unemployment, Economic Research Journal, Issue (43-44), Cairo.
2. Abdel Qader, Mohamed Aladdin, (2003), Unemployment, Manshaat Al-Maarif, Alexandria, Egypt.
3. Al-Husseini, Basil Joudeh, (2004), Iraqi policies in Iraq and political and social aspirations, Center for Arab Unity Studies, Beirut.
4. Al-Qolaib, Intisar Salim, (2008), the quality of university education and the requirements of quality performance, Tripoli.
5. Al-Rawi, Alaa Shafiq, (1989), Labor Economy, Baghdad Press, Baghdad.
6. Al-Shamaa, Hammam, (2005), Iraq's debts, Journal of the College of Administration and Economics, University of Baghdad, Issue 9.
7. Arab Economic Research Journal, Arab Society for Economic Research, Issues (43-44).
8. Arab Future Journal, Iraq Center for Research, Baghdad, 2007.
9. Arab Monetary Fund, Unified Arab Economic Report 2010.
10. Central Agency for Statistics and Information Technology, Annual Statistical Abstract (2008-2009), March 2010.
11. Central Agency for Statistics and Information Technology, Annual Statistical Abstract (2010-2011).
12. Central Agency for Statistics and Information Technology, Employment and Unemployment Survey for the years 2003, 2004, 2005, 2006, 2008.
13. Hassan, Bassem Abdel-Hadi, (No year) Unemployment in the Iraqi Economy, Central Bank of Iraq, Baghdad.
14. Hassan, Hassan Ali, (1989), Rural and Urban Society, Alexandria, Egypt.
15. Hoeiti, Ahmed, Badr Abdel Moneim, and Dial Diba, (1998) The Relationship of Unemployment to Crime and Deviation in the Homeland, Nayef Arab Academy for Security Sciences, Center for Research and Studies, Riyadh.
16. Jeremy, Rifkin (2006), on link (<http://66k.com/vbfi26t17837.html>).
17. Khalil, Maan & Al-Ani, Abdul Latif (1991), Social Problems, Ministry of Higher Education and Scientific Research, University of Baghdad, Baghdad.
18. Mohi, Inam Samir, (2009) The reality of the geographical distribution of unemployment in Iraq, Journal of Economic Studies, House of Wisdom, Baghdad.
19. Salem, Emad Abdel Latif, (2011), the private sector and employment patterns in Iraq, Economic Studies Journal, Issue 26, House of Wisdom, Baghdad.
20. Thanoun, Hisham, (2005), means of promoting small and medium industries in Iraq. Journal of Administrative and Economic Sciences, University of Baghdad.
21. United Nations, Human Development Report 2010.

162	<p>ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 6 Issue: 6 in Jun-2023 https://globalresearchnetwork.us/index.php/ajebm</p> <p>Copyright (c) 2023 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/</p>
------------	--