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Unemployment status in Jordan during the first decade of the twenty-first century

Abstract

Unemployment is a global socio-economic problem that poses a tremendous challenge to all countries of the world, including Jordan. A country, which is considered relatively small, however, politically and economically, is open to the world. The rate of unemployment differs from country to country and fluctuates over the span of time, depending on the circumstances of each country and the nature of its economic system. Unemployment is the main challenge facing the Jordanian economy. It was estimated to be around 13% in 2011. This high rate of unemployment comes as a consequence to both external and internal factors. Both of these factors are interrelated to economic and political conditions of the world as well as of the neighboring countries. The internal factors are associated with the increase rate of population growth, increase in educational outputs, and increase in the long-term unemployment for more than a year. In addition to the continuous reliance on expatriate labor, the inefficiency of developmental and reform programs that bring about low rates of growth and, thus, economic recession and to the limited natural and financial resources. This study attempts to recommend several policy measures that will help in alleviating the aggravating problem of unemployment. This will be achieved by a thorough study of the nature of unemployment, based upon a comprehensive empirical research that includes statistics for the first decade of the twenty-first century. In which, the magnitude, cause and effect of this problem on both the economy and on the Jordanian society will be analyzed. It also includes recommendations that can minimize and limit the unemployment phenomenon.

Keywords: unemployment, external and internal factors, Jordan.

JEL Classification: E24.

Introduction

Unemployment is one of the most significant global, social and economic problems. The rate of unemployment varies depending on the circumstances of each country and on the nature of the economic system. The most significant causes of unemployment are the imbalance in the labor market between the available labor force and employment opportunities. Thus, unemployment is major cost to an economy not only in terms of the development programs, but also in terms of major long-term social cost including increased inequality, poverty, family problems, crime and social division, if left without adequate solutions, it could lead to political turmoil.

Therefore, governments are striving to achieve acceptable rates of full employment. The United Nations has warned that high rates of unemployment in the world, has grown to around 6.1% in 2010, amounted to 205 million unemployed in the world. In the Arab world, statistics show that the rate of unemployment has escalated to the point where it became higher than any other regions in the world.

Jordan, like other countries of the world and the Arab world is suffering from the effects of this problem by averaging up to 13% in 2011. The cause for this high rate is due to external factors related to global economic and political conditions in addition to conditions in the afflicted neighboring countries. Other internal factors primarily include the scarcity

of natural and financial resources, in addition to the lack of development and reform programs, which, in turn, brought about lower rates of growth.

Statement of the problem. Unemployment is one of the main problems that has a great impact on Jordan's economy as well as on its society. Hence, the study seeks to deeply address the nature of this problem as a concept, its causes and characteristics. It will then analyze its status in Jordan so that the economic and social implications of this problem can be recognized and appropriately solved, before such grave implications worsen.

Objectives of the study. The study aims to identify the nature of unemployment as a phenomenon in Jordan, during the first decade of the twenty-first century. It also aims to sort out and analyze the implications and reasons of this problems then formulate the appropriate recommendations and policies that can be further adopted and used by decision makers, researchers and academics.

Significance of the study. The importance of this analytical study lies in the fact that it attempts to explore and examine the issue of unemployment as a problem, encountered by all countries. It is required of all countries to constantly investigate its causes and find ways to tackle it. Further more, this study attempts to shed light on the prevailing situation of unemployment in Jordan and seriously consider its impact on the socio-economic situation. This comes in compliance with the ground facts of previous studies prepared in this area. Additionally,

this study is significantly important in how it tackles the unemployment problem during the years of the first decade of the current century.

Hypothesis of the study. Unemployment is a chronic situation in the Jordanian economy due to its limited natural and economic resources. It is, therefore, imperative to identify the characteristics and effects. This study aims to mainly address the unemployment as one of the most serious economic and social problems that can, if not addressed properly, affect the economic and social structure of the country gravely. Moreover, it tends to address the causes and consequences, which if neglected, will lead to negative impacts on economic development in Jordan.

Finally, in order for this study to deal with this issue, relied on the scientific methods, which is based objectively upon the analysis of the descriptive and statistical methods, we used the statistical data issued by the Department of Statistics (DoS) of Jordan and from some reports of local, Arab and international organizations.

1. The concept of unemployment

Unemployment is considered one of the socio-economic problems that threatens the growth and stability of any society of the world without discriminating the developing countries. Therefore, due to its negative repercussion as a constant threat to the stability and security of that country, adequate measures and procedures should be taken to minimize its consequences. Therefore, this problem must be given first priority in economic policy-making by any government that seeks to develop its economy and help the prosperity of its people. Consequently, it is required to identify the most important concepts and types of unemployment.

Despite the clarity of the linguistic concept of unemployment, which refers to the opposite of work yet, it also means the absence of adequate opportunities for job seekers (Madani, 1976) and here we find people who are able to work do not have enough jobs in their communities.

Unemployment in economy is defined as “involuntary unemployment to a portion of the labor force who despite their ability and desire to work and produce cannot find work” (Al-Sarahena, 2000). This concept was inevitable to the economic and labor market conditions. Moreover, unemployment could be “voluntary in the case of those who are disable due to old age or disease, are under the legal concept of social insurance are not included in the category of unemployed” (Khdoos, 1999). In this concept we find that the definition of unemployment only applies to active disabled or sick people who

are totally or partially unemployed, this concept is not applicable.

Finally, the International Labor Organization (ILO) has officially defined individual unemployment as, “that individual who is of certain age, capable, willing and actively seeking work, at the on going wage rate, cannot find it”. This implies that there is a gap between the supply of the workforce presented and the demand for labor force required by the community.

Thus, unemployment as mentioned previously can be considered a situation in which capable individuals are not successful in locating a job within a specific period of time, at an acceptable level of wages and in accordance with the labor law, despite their desire and their search to do so. This leads to substantial waste of the country’s economic work force resources, which in return is crucially reflected on the economic and social aspect of such country. Economists have estimated unemployment rate at 3-5% of the total active labor force. This percentage is considered normal in any economic system. The level of unemployment fluctuates according to the country’s economic conditions and other factors. The average rate of unemployment is a significant indicator of economic basis, which help to recognize the level of unemployment, the ability of the general public to meet its needs within the given economic configuration and the level of labor force utilization in the general economic activity. The unemployment rate is a measure of the prevalence of unemployment and it is calculated as a percentage by dividing the number of unemployed individuals by all individuals currently in the labor force within a specified period of time, then multiply that by 100 (Department of Statistics, 2011).

1.1. Types of unemployment. There are several types of unemployment classified according to the economic conditions of the country. These types are not fixed or unalterable, but they are constantly fluctuating in accordance with the researchers’ focus and interests in such phenomenon. Therefore, it is necessary to acknowledge the more important categories of unemployment in order to undertake the necessary measures and employ the appropriate policies.

1.1.1. Cyclical unemployment. This type of unemployment is connected with the nature and the activities of the business cycles, whereby the fluctuation of the economic activities play the role. When there is a recovery the demand for goods and services increases, the demand for labor increases. However when there is a downturn in an economy, the total aggregate demand for goods and services becomes deficient and thus, the demand for labor decreases. At the time of recession, unskilled and surplus laborers become unemployed.

1.1.2. Frictional unemployment. This type of unemployment is due to the continuous transitions of workers between regions and different professions. It occurs mostly due to changes that affect the economy of a country, the lack of coordination between job seekers and employers and inconsistent or incomplete communication or lack of information between the parties. Such imperfect information on available job offers makes it difficult for job seekers to meet the demand side of work with the supply side of it. This leads to the emergence of frictional unemployment. Therefore, as explained before, the forefront of reasons for frictional unemployment is the search of work movement of job seekers, between different professions or between cities and regions.

1.1.3. Structural unemployment. Structural unemployment focuses on the structural changes within economy. When an economy develops over time, the type of industries may well change. This may be because of technology that has moved on or because of the discovery of new resources, so the product or service is no longer in demand. This is applicable in the case of technology development and the introduction of new techniques, which consequently creates changes in the market conditions. In this case, less labor force may be needed and so many skills often turn obsolete. Thus, the demand for labor that is incapable of adapting to new technologies will certainly decrease and then practical and technological training of the labor force becomes essential to meet the new development in the labor market. Therefore, when there is a mismatch between the supply and demand of laborers with necessary skill sets, structural unemployment occurs (Jamal, 2000).

1.2. Causes of unemployment and its impact on society. The causes of unemployment differ depending on the nature of society and according to the economic and political system controlling it. While some of the causes are associated with poor planning and with the ineffective laws that should direct investment into the appropriate fields. Others are related to the low productivity of economic sectors, especially agriculture and industry. Added to that, the increasing rate of population growth, division of labor, the type of social organization and its degree of change, the level of scientific and technical progress reached by the community and the correlation between the educational and training outputs with the labor market. In addition to the decline in the state's role in responding to the requirements of creating new, job opportunities as a result to being affected by economic reform programs, privatization and the terms imposed by International Monetary Fund (IMF). Consequently, the failure of any economic system to identify and address the causes

of unemployment, will lead to economic crises that will implicate the society negatively. The most significant implications are identified as follows.

1.2.1. Economic implications. Here, we find that unemployment presents a significant downturn in the economy of the country, and it is considered a crisis that contributes to the severe decline in one of the countries' natural productive factor. We also find that lack of planning and correlation among different economic sectors, affects the productivity of one another. For example, the transition of labor from agriculture to industry randomly and without planning, could lead to the collapse of the agricultural sector. In addition, the presence of disguised unemployment in the public sector, leads to the exhausting certain resources without any return that would possibly been exploited in the far more important sectors. The increase and prolonging period of unemployment conditions will certainly lead to recession that has a negative impact on the economy of the society. Moreover, the deterioration of economic conditions and the lack of equal opportunities to all members of the society will lead to delinquent behavior as a result of people's dissatisfaction and disability of being able to acquire their basic needs which will otherwise, promote a healthier and acceptable standard of living.

1.2.2. Social implications. In this area, the unemployment affects significantly the social fabric of relations. Since, unemployment has dangerous negative dimensions on the standard of living, lack or drop in income to individuals who are deprived of decent life, will certainly lead to committing all kinds of crimes. Moreover, it causes frustration and despair to those members who are unemployed, which in return will unfavorably implicate their psychological behavior causing them numerous psychological problems of concern such as: disturbances, accidents, turmoil, vice, crimes, vandalism, fraudulence, the emergence of awful social habits and social disintegration. Unemployment also leads the society to poverty, ignorance, illnesses and begging, all of which are attributed to people's lack of satisfaction of their basic needs (Ajwah, 1995).

1.2.3. Political implications. In this aspect, unemployment influences the politics of the country and increases its problems that could be uncontrollable. When the government fails to follow adequate economic policies whereby the rate of unemployment is decreased, and economic problems are eliminated, then the opinion of the community will be highly diverted against the elected government. It will also lead to the emergence of a country's rebellion and the emergence of anti-government slogans. In addition to that, problems may lead to turbulence, pro-

tests and demonstrations that will do further damage in shaking people's confidence in the ruling regime. Thus, clashes between the government and the people could break out, leading to the instability of political and security system in society. Unstable political situations in the country should be avoided, particularly when all the international standards emphasize the importance of fostering public freedom and democracy, and individual rights to live in dignity and sustainable economic growth.

2. The unemployment status in Jordan

2.1. Unemployment status in the pervious century. Jordan is considered one of the countries, which suffers from the scarcity of natural and financial resources. Its economy is mostly dominated by agriculture, which accounts for most of the domestic needs. The economy of Jordan has been highly affected and vulnerable by economic changes and events taken place in the neighboring countries. Leading those changes is the unemployment problem, which is considered as one of the essential problems whereby, Jordan is doing its best to overcome its obstacles and its socio-economic problems. Table 1 illustrates the high population growth rates caused by the influx of Palestinian immigrants from Palestine to Jordan in 1948.

Table 1. The unemployment rate in Jordan during 1950-1999

Years	Unemployment rate (%)	Years	Unemployment rate (%)
1950-1952	25-33	1985	6
1955	16.5	1986	8
1961-1965	7-8	1987	8.3
1966	4-5	1988	8.9
1968	9.9	1989	10.3
1969	11.5	1990	16.8
1970	13.7	1991	18.8
1972	14	1992	18
1973	11.1	1993	18.8
1974	8	1994	15
1976-1980	1.6-3	1995	14.2
1981	3.9	1996	12
1982	4.3	1997	14.4
1983	4.8	1998	15.2
1984	5.4	1999	15.6

Source: Unemployment in Jordan (Al-Syrianni, 2008), Al-Yarmouk University, Jordan.

Consequently, this created a temporary instability in the economic situation and thus, creating a big gap in the Jordanian labor force, which was mostly agricultural and had been already suffering from seasonal unemployment. The new conditions aggravated the unemployment problem even further so it reached around 33% of the total labor force. Consequently, the Jordanian Government attempted end-

less efforts to overcome this problem by setting out an Economic Action Developing Plan for the period of 1970-1964 to reduce unemployment rate to 8% (Majless Aiammar, 1964).

The economy of Jordan prospered through the implementation of extensive development projects during the period of 1973-1980. Along was the significant decrease in the unemployment rate to 3%, which means that the problem of unemployment was no longer a threat. However, in the eighties and early nineties, the unemployment rates drove up again to 19% of the total labor force, causing economic and political instability. The turndown situation was attributed to the crisis in the gulf; first the Iraqi-Iranian war and then the gulf war. The impact of such crisis on Jordanian economy had a negative dimension on high population growth, high budget debt, and decrease in exports, private capital flight, and the governments' tightening expenditures. Consequently, the government began debt-rescheduling negotiations and agreed to implement an IMF – supported program targeting the economic, industrial and business sectors and designed to gradually reduce the budget deficit. Hence, despite Jordan's limited resources and the governments' efforts to reform and develop the economy yet, the external and surrounding conditions, burdened its economy, its developing programs and hindered its progress and was negatively reflected on the job market, labor force and unemployment (Al-Syrianni, 2008).

2.2. Population and labor force in Jordan 2001-2010. The labor market in Jordan displays certain characteristics that have significant implications for understanding unemployment problem. The nature and the structure of the population affect the supply of the labor market especially if we realize that the labor force includes the population group aged 15-65 years old, whether they are active in the labor market, unemployed or do not seek work, like housewives and retirees. Those who are unable to work or not included in the labor force are aged below 15 and above 65. While population growth is an important factor that can either increase the number of entrants to labor market or a threat that could accelerate unemployment if not treated adequately. According to the Department of Statistics the population growth in Jordan had been continually increasing and was around 2.2 percent during the period of 2001-2010. This is a high percentage when compared to the economic situation. The number of population growth elevated in the year 2001 from 4978 to 6113 in 2010. The percentage of males to females was relatively close. Table 2 illustrates the percentage of males to females in the year 2010. The male percentage reached 51.5% while the female percentage was about 48.5% of the total population.

Table 2. Population characteristics and some factors in Jordan during 2001-2010

Years	Population growth 100%							Urban	Rural	Illiterate +15	Economic activity	GDP*	Inflation rate
	No. of population			Rate	Age groups								
	Male	Female	Total		0-15	15-64	+65						
2001	2564	2414	4978	2.5	37.6	57.7	2.7	78.7	21.3	10.9	-	4.2	-
2002	2626	2473	5098	2.4	37.8	58.7	3.5	78.7	21.3	10.3	38.4	4.2	1.8
2003	2694	2537	5230	2.6	37.8	58.7	3.5	78.7	21.3	9.9	37.4	3.2	5.4
2004	2758	2592	5350	2.3	37.1	59.1	3.8	82.3	17.7	10.3	37.4	7.5	3.4
2005	2821	2652	5473	2.3	37.3	59.4	3.3	82.3	17.7	8.9	38.3	7.1	3.5
2006	2887	2713	5600	2.3	37.3	59.4	3.3	82.6	17.4	8.5	37.7	6.4	6.3
2007	2950	2773	5723	2.2	37.3	59.4	3.3	82.6	17.4	7.9	39.8	6.0	6.3
2008	3015	2835	5850	2.2	37.3	59.4	3.2	82.6	17.4	7.7	39.4	7.6	13.9
2009	3082	2898	5980	2.2	37.3	59.5	3.2	82.6	17.4	7.2	39.8	2.3	-0.7
2010	3151	2962	6113	2.2	37.3	59.5	3.3	82.6	17.4	7.0	39.5	3.1	5

Source: Department of Statistics (DoS), yearly statistics file for 2001-2010, Jordan.

Notes: *Gross Domestic Product (GDP).

Table 2 illustrates the overall population percentage in rural areas is decreasing gradually. It was estimated around 17.4% in the year 2010 in comparison with the urban sector with a percentage of 82.6%. This indicator tends to lower the effectiveness of the agricultural sector. Despite of the increase in the total growth population yet, the GDP growth has reached its lowest during the years of 2009 and 2010, reaching a growth of 2.3% and 3.1%. This is a frightening growth. These figures show the external economic impact upon the Jordanian economy. Economists indicate that if there is a 1% increase in

the population growth, then economic growth should be around 3%. However, the economic growth in 2010 did not exceed 3.1% while the population growth was around 2.2% in comparison to the inflation rate that was 5% in 2010 which most likely will increase the negative impact on the economic situations (Al-Nasser, 1980, p. 86). Table 3 shows the gradual decrease in the illiteracy percentage among the population. It went down from 10.9% in 2001 to 7.0% in 2010. This is a clear indicator of the progress made in the educational sector and the outputs of educational systems in all levels.

Table 3. Jordanians in employment (economic active labor) aged +15 by educational level

Level of education	2005	2006	2007	2008	2009	2010
Illiterate	60402	64569	53101	49930	56288	52528
Vocational apprenticeship	15962	1712	13461	9980	12466	13195
Less than secondary	553117	563922	581850	618305	649139	296477
Secondary	177641	171843	181879	175496	178331	173015
Intermediate diploma	146895	140245	155093	158488	159989	153836
Bachelor's degree	217493	234344	287289	289103	300896	132687
Bachelor's degree and above	29529	35193	39975	41512	43664	44960
Total	1201039	1227237	1312649	1342815	1400805	1412134

Source: Department of Labor Statistics estimation for labor and unemployment in 2005-2010.

Table 4 illustrates the labor force market as being young in nature. The percentage of youth aged 15 or less reached 37%. While economically, active employed population came to about 40%. There is also a decrease in the labor force.

The percentage went down from 1737 in 2009 to 1710 in 2010, due to the decrease in the number of licensed non-Jordanian labor. The drop of non-Jordanian labor went down from 336 in 2009 to 298 in 2010, while the Jordanian domestic labor force went up from 1401 in 2009 to 1412 in 2010. It is also noticeable from Table 4 that although the total number of population between males and females was

almost equivalent yet, employed males were 5 times higher than female employers in the labor force.

In Table 5, the economic activity rates in different sectors, indicate different rates during the period from 2001 to 2010. It is noticeable that the public administration sector was the most attractive one during the first decade of the 21st century, whereby the percentage of employed Jordanian in this sector went up from 16% in 2001 to 24.1% of the total employed population in 2010. The next highest rated sector for economically active Jordanian is the wholesale, retail trade and repair. The percentage reached 17.2% in 2001 and 2010.

Table 4. The total size of labor force in Jordan during 2009-2010

Indicators	2009			2010		
	Male	Female	Total	Male	Female	Total
Employed	1025	196	1221	1033	203	1231
Unemployed	118	62	180	1198	56	1762
Total of domestic active labor force	1143	258	1401	1153	259	1412
Non-Jordanian labor force	281	55	336	248	50	298
Total size of labor force	1423	313	1737	1401	309	1710

Source: Department of Statistics, yearly statistics file, 2009-2010.

This sector was followed by the education sector, which amounted to 12%, then followed by the manufacturing industries, and then consecutively followed by transport and communications, construction, other community social and personal services, real estate, renting and business activities, agriculture and hunting, hotels and restaurants, etc.

According to Table 5 female employees were mostly active in certain economic activities such as the education and health sectors; in the year 2010, 38% of employed Jordanian females out of 52.6% of the total female employee have mostly clustered in the

education sector and while 15% were employed in the health sector, 7.4% were in the manufacturing industries.

As for Jordanian males, they were mostly clustered in other sectors such as business administration sector whereby the percentage was 26.2% males out of 91.3% total employee, 18.1% of male employees were in the wholesale, retail trade and repair. Hotels and restaurants came up to 11.5% of the total. However, in the manufacturing industries sector, male employment reached up to 11% of 88.7% of total employment.

Table 5. Distribution by sector for employed Jordanians 15 years and above during 2002-2010

Indicator: economic activity	2002	2003	2004	2005	2006	2007	2008	2009	2010	2010		
										Male	Female	Total
Agriculture, hunting, forestry	3.9	3.6	2.5	3.4	3.1	2.7	2.6	2.8	2.0	22977	2038	25015
Mining and quarrying	1.1	1.3	1.2	1.1	0.8	0.7	0.7	0.9	0.9	10741	365	11097
Manufacturing industries	12.6	12.4	12.0	11.6	11.2	11.1	10.6	10.6	10.4	114086	15045	129131
Electricity, gas, water supply	1.5	1.7	1.7	1.7	1.7	1.5	1.6	1.3	1.0	10789	926	11715
Construction	6.3	6.4	6.4	6.3	6.3	6.7	6.4	6.7	6.4	77150	2457	79607
Wholesale, retail trade, repair, etc.	18.1	17.8	17.9	17.9	17.4	16.9	16.6	16.4	16.1	186820	12739	199559
Hotels and restaurants	2.3	2.5	2.5	2.4	2.6	2.5	2.3	2.1	2.2	118293	5899	124192
Transport and communications	10.2	10.0	9.9	9.8	9.5	8.8	9.2	9.5	8.3	25855	1499	27354
Financial services	1.8	1.8	1.8	1.7	2.0	2.1	2.2	1.9	1.6	15235	5144	20377
Real estate, renting, business activities	3.9	3.5	3.6	3.6	3.9	4.1	4.46	4.5	4.1	41030	9917	50947
General administration and civil defense	16.0	16.6	17.4	18.1	18.6	19.2	20.0	19.7	24.1	271601	25847	297448
Education	12.0	11.7	11.5	11.3	11.8	12.3	12.0	11.7	12.1	70818	79327	150145
Health and social work	4.7	4.7	4.8	4.9	4.8	5.1	5.1	5.0	5.1	33350	29819	63169
Other community social and personal services	5.2	5.6	5.6	5.6	5.7	5.6	6.0	6.1	3.0	29668	6721	36389
Private household with employed persons	0.2	0.3	0.3	0.3	0.3	0.5	0.3	0.5	0.4	1457	3911	5368
Extraterritorial organizations and bodies	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.3	0.4	3145	1280	4425
Total										1033015	202933	1235948

Source: Annual Survey of Labor & Unemployment, 2002-2010, Jordan.

2.3. Characteristics of unemployment indicators in Jordan. *2.3.1. The volume of unemployment in Jordan.* Despite the decline in the unemployment rate from 15.3% in 2002 to 12.5% in 2010, according to gender and the nature of unemployment, this rate is still high. It is still doubled the accepted global average. However, the decline was due to certain governmental reform programs that created new vacancies in the job market and instructions issued to encourage foreign investment. In addition to revitalizing the agricultural sector in various ac-

tivities and setting up small and medium size projects. With regard to gender participation in the labor market, there seems to be some disparities between men and women. Females economic participation rate is lower than males. So, while unemployment and economic activity rates have declined for men, it has almost doubled for females. This underlines the fact that low female participation in the labor market is justified partly for sociological and cultural reasons; related to the society's traditions and the nature of women. In spite of this justi-

fication, yet the concluded ratio is economically unacceptable, especially at the time when Jordan is going through social transitional improvements as in Table 6.

If we compare between the unemployment rates in Table 6 with GDP growth in Table 2, we find that the economic situation is critical particularly during the last two years.

Table 6. Distribution of unemployed Jordanians by gender aged 15 and above (2001-2010)

Unemployment rate	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male unemployment	13.7	14.0	13.4	13.1	12.8	11.8	10.3	10.1	10.3	10.4
Female unemployment	20.5	21.9	20.8	23.4	25.9	25.0	25.6	24.4	24.1	21.7
Total unemployment	14.7	15.3	14.5	14.6	14.8	14.0	13.1	12.7	12.9	12.5

Source: Department of Statistics, Employment Statistics section, 2001-2010, Jordan.

2.3.2. *Unemployment rate and the level of education.* Table 7 illustrates the Jordanians unemployment rates for employed workers whose age is 15 and above, classified by their educational level. It is noticeable here that the rate of unemployment has

decreased among illiterate from 11.1% in 2001 to 7.6% in 2010, due to the elimination in the number of Jordanian illiterates and to the capacity of the labor force to absorb a number of them in the unskilled employment.

Table 7. Jordanians in employment by educational level aged 15 and above by educational level during 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Illiterate	11.1	10.9	9.8	9.5	9.2	9.3	7.5	7.0	9.9	7.6
Less than secondary	16.1	17.0	15.6	15.3	15.0	13.7	12.5	12.1	11.9	11.5
Secondary	13.8	13.5	12.1	11.6	11.1	11.6	11.1	9.9	9.8	8.4
Intermediate diploma	13.8	14.7	13.2	13.8	14.4	13.9	14.0	12.6	13.7	13.1
Bachelor's degree and above	12.2	13.3	14.7	16.2	17.7	16.5	15.3	15.5	16.2	16.1

Source: Annual Report of Unemployment Survey for 2001-2010, Jordan.

Table 7 illustrates the rate of unemployment for Jordanians with less than secondary education. It has decreased from 16.1% in 2001 to 11.5% in 2010. The rate of unemployment has dropped for employed Jordanians with secondary education, from 13.8% in 2001 to 8.4% in 2010. However, for the intermediate diploma, there is no change in their employment situation for the last 10 years. In the case of workers who have bachelor's degree and above, the rate of unemployment has gone up from 12.2% to 16.2% during the years of 2001 to 2010.

The increasing high rate of unemployment among university students is a striking phenomenon. The reasons are due to a number of factors among these are the increased number of graduates, who are a surplus in the market and so they exceed the demand of the labor market, the universities' admission policy and the rising numbers of high school

graduates. Moreover, lack of employment opportunities created by the government and the tendency in the private sector to employ workers with less education and less pay.

2.3.3. *Unemployment rate and age categories.* The structure of population group aged 20-24 has a high unemployment rate, as shown in Table 8. The low participation of youth in economic activities is more risky than other groups. The low participation in job market is tripled in the last 10 years and reached 7.9% in 2001 and increased to 26.7% in 2010. The unemployment rate has slightly declined for the age groups 25-39 in 2002 from 13.5% to 10.1% in 2010; however, this slight decrease is still high among this active category of people. The decline of the economic activity rate is due to the rejection of certain jobs where there is no social security benefits, no health insurance.

Table 8. Key indicators for population aged 15 and above during 2001-2010

Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
15-19*	-	38.0	37.0	37.9	38.8	35.6	34.7	32.9	31.2	33.0
20-24	7.9	8.9	28.2	28.7	28.7	26.8	26.6	25.8	25.7	26.7
25-39	12.0	13.5	10.5	11.6	11.6	11.3	10.4	10.3	10.5	10.1
40-54	13.9	13.6	5.3	5.1	5.1	5.2	5.1	4.9	5.5	4.9
55-65	10.4	11.1	3.1	4.2	4.2	5.3	3.8	2.3	4.5	3.3
65+	2.9	3.5	1.6	1.6	1.5	0.6	1.8	1.0	3.0	2.1

Source: Ministry of Labor, Annual Report 2002-2011, Jordan.

Notes: *No emphasis will be placed on this young group because they are still either in high school or at universities.

In addition to the disparities between the low wages offered and their level of education. Added to that, the social customs and traditions prevalent in their society that prevent them from accepting low service jobs and others.

2.3.4. Unemployment rate in Jordanian Governorate. The distribution of unemployment in Jordanian Governorates as shown in Table 9 has declined during 2001-2010 years. This obviously is due to the government reform programs in which it encouraged creating job vacancies and by the different legislations, that put forth the new investment opportunities.

As Table 9 shows, the highest percentages of unemployed people are found in the Governorate of Ma'an, in which the unemployment rate reached 15.7% in 2010. The next highest Governorates are, Karak, Madaba and Aqaba. Meanwhile, the most highly populated Governorate, Amman has considerably low unemployment rate that came up to 11.6% in 2010, followed by Irbid and Zarqa. The unbalanced geographical distribution of labor force and the disparity in the unemployment rates between the three highly populated governorates and the others is noticeable. At large, this is attributed to provided investment opportunities whether industrial, educational or in the tourist and trade sectors.

Table 9. Distribution of Jordanian unemployment by Governorate, for ages 15 and above during 2001-2010

Governorates	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Amman	12.8	12.6	12.0	11.9	11.2	12.1	10.7	9.7	11.2	11.6
Balqa	13.6	15.2	14.1	14.3	14.4	14.1	13.1	12.8	13.6	12.5
Zarqa	15.2	15.9	13.5	13.5	13.4	12.3	11.3	11.6	12.9	12.5
Madaba	19.1	21.2	14.7	15.9	17.0	15.5	18.0	14.6	15.3	14.5
Irbid	15.7	15.8	16.4	17.0	17.5	15.6	16.5	15.9	13.9	12.2
Mafraq	17.3	19.0	20.0	20.0	19.9	16.9	16.0	13.5	13.5	13.9
Jerash	14.7	17.8	19.8	19.2	18.5	15.5	16.2	15.6	13.3	13.3
Ajoloun	17.5	18.9	17.6	17.1	16.6	18.1	17.7	14.9	15.3	13.8
Karak	17.9	20.5	21.1	22.6	24.0	22.3	15.8	18.2	16.0	15.1
Tafiela	21.8	19.7	18.8	20.2	21.6	14.9	15.6	16.6	15.6	13.3
Ma'an	19.2	24.1	19.6	20.3	20.9	17.5	18.2	21.0	17.7	15.7
Aqaba	14.9	15.5	13.8	14.6	15.3	13.8	11.7	15.1	12.4	14.5

Source: Department of Statistics, Annual Survey Report for Unemployment during 2001-2010 in Jordan.

2.3.5. Unemployment in urban and rural population. The unemployment rate in urban and rural population of Jordan varies. The unemployment rate among Jordanians who were 15 years and above, in urban areas, has declined from 13.2% in 2006 to 12.2% in 2010. On the other hand, unemployment in rural areas went down from 17.8% in 2006 to 13.9% in 2010.

Table 10. Unemployment rate by urban and rural, for Jordanians aged 15 and above during 2006-2010

Areas	2006-2010				
	2006	2007	2008	2009	2010
Urban	13.2	12.6	12.1	12.5	12.2
Rural	17.8	15.9	15.8	14.8	13.9

Source: Department of Statistics, Labor Survey section, 2006-2010, Jordan.

However, in 2010, this percentage of unemployment between urban and rural areas was relatively close. The low rate of unemployment in rural areas could be due to the immigration of labor force from the rural towards urban areas, as a result to various investment projects implemented by the economic development programs in Jordan and as a result to the seasonal unemployment factor.

2.3.6. Rate and duration of unemployment. The general statistics department in Jordan, has identified the long-term unemployment as being unemployed for a period that lasts for one year or over. Table 11 shows that unemployment among Jordanians, for less than a year came around 80% in 2008, a proportion of 137 thousand of total unemployed people.

Table 11. Distribution of unemployed by duration of unemployment and gender in 2008-2010

Unemployment by months	2008			2009			2010		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-12	94243	42725	136968	81461	35943	117404	83095	32746	115841
13-24	12935	10271	23206	23828	13901	37729	23255	12279	35534
25-36	3022	3261	6284	8164	7665	15829	8645	6413	15058
36 and over	1715	1941	3656	4669	4655	9324	4843	4911	9753
	111915	58198	170114	118122	62163	180248	119838	56348	176186

Source: Department of Statistics, Labor Statistics, various years, Jordan.

This percentage however, went down to 65% in 2009, a proportion of 117 thousand to total unemployed population and to 66% in 2010 – 116 thousand of total population. On the other hand, the long-term unemployment was 20% in 2009 or 33 thousand of total unemployed population. This ratio increased to 63 thousand as 35% of total unemployed then increased again to 63 thousand with a percentage of 34 in 2010. This high rate of unemployment negatively affects the socio-economic conditions that lead to the lack of income sources, frustration and other social problems.

In summary, the problem of unemployment is widely spread among populations of Jordan with regard to age, gender, educational level, and Governorate, areas (urban and rural). It is also noticeable that density of unemployment is extremely high among the educated and the young people.

3. Expatriate labor force in Jordan

In spite of high unemployment, there is a significant number of non-Jordanian workers in the Jordanian labor market. In 2010 the estimated number of foreign workers was 298341 working in low-skilled

and manual jobs in Jordan. Those have little education and skills that cater to the needs of some sectors.

According to Table 12, the size of foreign workers was much higher in 2010 than that of years 2007, 2008 and 2009. The majority of the expatriate who came from 14 different countries were Arabs and the majority of them were Egyptians. The percentage of Egyptians in 2010 reached to 68.9% from the total expatriate labor force. While 90.8% of foreign workers were illiterate and 95% earned wages below 200 JD. Certain sectors are dominated by non-Jordanians and the social status assigned to jobs in these sectors are consequently low.

The dominant economic sectors employing non-Jordanians in 2010 were agriculture, hunting and forestry with a percentage of 28.7% from the total expatriate labor force. This is followed by a percentage of 25.3% in social and private services. Then the manufacturing industry with a percentage of 21.5%, followed by restaurants and hotels with a percentage of 13.0% and finally in the construction sector with a percentage that reached 8.3% (Department of Statistics, 2010, p. 70).

Table 12. Non-Jordanian workers holding work permits by gender and nationality

Country	2006		2007		2008		2009		2010	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Egypt	201385	210	222103	190	205196	162	239844	169	205510	172
Sri Lanka	7994	9685	7947	10161	8135	12455	8031	12605	10641	11370
Indonesia	2837	16751	1940	19631	903	23875	327	26647	169	21593
China	6481	4676	7408	3281	7526	2391	4922	1324	1379	13564
Bangladesh	10914	1275	8039	685	11683	689	8112	451	8894	493
Philippine	1849	10905	1734	13033	1564	11170	1513	12971	8239	102
India	4957	174	5269	100	5815	100	6174	80	2356	990
Syria	3024	75	4356	80	2939	78	2852	58	2060	287
Pakistan	1550	145	1903	155	1692	178	1957	248	2286	47
Iraq	1492	153	1421	133	1479	128	1306	115	1092	106
Sudan	450	16	468	13	492	10	454	15	410	30
Turkey	269	9	186	9	169	5	390	10	356	15
Lebanon	316	25	389	22	435	22	403	31	171	157
Morocco	154	365	141	216	311	221	203	180	317	9
Other countries	1277	317	2268	212	3163	339	4018	298	4569	957
Total	244949	44781	265275	47921	251502	51823	280506	55202	248449	49892
	289730		313196		303325		335910		298341	

Source: Ministry of Labor, Labor Statistics, 2006-2010, Jordan.

The priority of employing non-Jordanian workers in certain jobs can be related to their willingness to work longer hours, their great compliance, their high productivity with contrast to Jordanian worker, in addition to providing certain services that require skills lacking in the Jordanian workers. Moreover, the dominance of non-Jordanian workers in certain jobs may be connected with the type of work available, which could be either manual, low skilled jobs such as cleaning or it requires hard efforts or long

hours that extend to two shifts, while the wages are below the accepted figure. The expatriate workers added strains on certain services such as: housing, transportation, electricity and water and on food supplies which consequently led to raise the prices on consumers which consequently was reflected on low income families and on the whole socio-economic system. We believe that expatriate workers can be easily replaced by local workers by providing them with certain training techniques. How-

ever, if we consider the impact of 300 thousand expatriate workers on the Jordanian economy and its resources of foreign exchange, and assuming that the rate of monthly transfer of such employment is \$150, we will find that the Jordanian economy loses around \$45 million monthly of its reserved capital.

4. Unemployment causes and implications

4.1. Causes of unemployment in Jordan. The unemployment in Jordan has been the result of the interaction of several internal and external factors.

The internal factors are mostly related to the sluggishness of the Jordanian economy to create new job opportunities that will absorb the supply of labor. The fact the economy originally suffers from the limited natural and financial resources added to that the high population growth, the increase number of the education system graduates, the continued reliance of expatriate workers, all have significantly escalated the unemployment rate. The internal factors that have caused the unemployment are:

1. The rapid rate of population growth by 2.2 has substantially increased the number of job seekers in the labor market. Thus, the economy is facing pressure over its failure to provide economic opportunities for a fast-growing population.
2. The continuous internal immigration from rural to urban areas has been on the increase for a long time. This contributed to the collapse of the agricultural sector and hence, increased the seasonal unemployment. This problem was aggravated by the inflow of foreign workers who occupied certain sections in the labor force and thus, created a competition between the domestic labor and expatriate.
3. Lack of job opportunities and the disability of the Jordanian economy to achieve concrete rates of economic growth are main reasons for the phenomenon of unemployment. When these rates can be significantly reduced, then this will be reflected on creating new opportunities for the private and international investment, which in return could absorb the increasing number of unemployed people.
4. The lack of career guidance or counseling as a result of the failure of cooperation among key actors in the fields of education and employment authorities, has led to weakness on the part of the education system in closing the gap between graduate skills and labor market needs.
5. Jordanians' poor attitude towards certain manual and low skilled job, forced the labor market to depend on expatriate workers. This caused the local workers to miss the opportunities of exploiting many jobs available. Added to that,

the decline in demand for Jordanian labor force to work externally; this is attributed to several reasons that concerned these countries.

6. The unemployment problem has been aggravated by the continuous influx of expatriate workers who are willing to accept low-skilled and manual jobs, under conditions that are in-conformity with the laws of the Jordanian labor. Consequently, this created a challenge to local workers who wish to obtain these jobs.
7. The global fluctuation of oil and food prices has affected the Jordanian balance of payments and decreased the chances of governmental investment, which was reflected on the economy in creating new employment opportunities. Moreover, the global financial crisis had negative impact on Jordanian economy, especially in the field of financial aid and labor demand.
8. The instability of the political system to Jordan's neighboring countries such as Palestine, Iraq and Syria and the gulf regions resulted in adding to the burden of Jordanian unemployment problem.

4.2. The socio-economic implication of unemployment. Unemployment with its economic and social implications is one of the most pressing problems facing Jordanian policy market. The high rates of unemployment signal a deficiency in the labor market, deepening poverty incidence and spread indecent standards of living (World Bank, 1994). The socio-economic implications of the unemployment problem can lead to considerable economic and social problems if left without adequate solutions.

4.2.1. Economic implications. Unemployment can lead to the decline in production and manpower is a major factor of this production contributing directly to GDP growth through its productivity. It is estimated that in 2010 the Jordanian government had spent 1430 million JD which accounted for 10% of the total of GDP on educational development programs at all levels. However, 680 million JD was designated to high education only due to the importance of education in economic development in Jordan (Badran, 2010). Yet, if the unemployment rate reaches 50% in total and around 29% were holders of Intermediate diplomas and Bachelor's degree, then there is a tremendous waste in the educated population as one of the economic resources of the country.

We also note that the increase rates of unemployment affect significantly the income per person, which lowers the individual's standard of living and eventually leads to poverty. Accordingly, the aggregate demand for goods and services decreases and leads to the deterioration rates of GDP. Poverty rate went up in 2006 from 13.0% per person in 2008, which ac-

counted for 13.3%, while the absolute poverty level (food and non-food) was annually 680 JD per person, equivalent to 57 JD monthly. This rate could increase if the government interferes directly in lowering the current prices, and if other subsidies are received from the National Welfare Fund, the Zakat Fund or any others. This, in fact, increases the burden on the government resources (Department of Statistics, 2002). Also, there are negative consequences of poverty on the security and stability of the society. In addition, as mentioned earlier, there is an economic and social risk resulting from seasonal unemployment, which is the result of the migration of labor force from rural to urban areas. This increases the problems of housing and high demand for services.

Moreover, government revenues, mainly the country's income tax revenues, are affected negatively by unemployment. This is in the sense that the government

budget loses the sum of income tax revenues that the unemployed would have paid had they been employed. One economic study estimated that the budget has lost about (198.3%) million JD (Al-Utoom, 2003, p. 39) of the GDP during the period of 1970-1996.

4.2.2. The social implications of unemployment. High unemployment has been shown to be linked to negative social effects, such as high crime rates. Therefore, it signifies a substantial risk to society, if it continues to exist. As Table 13 indicates, the crime rate has increased despite the high security measures taken by security forces. Therefore, in 2003, the number of crimes went up from (29756) to double in 2010 and to reach (53362). According to reports from the Criminal Directorate of Public Security, more than 35% of the crimes committed in Jordan are carried out by unemployed individuals, who are males of young age group because of economic factors.

Table 13. Number of Crimes in Jordan during 2003-2010

Year	2003	2004	2005	2006	2007	2008	2009	2010
Number of crimes	29756	29927	29513	28811	42996	44722	46720	53362

Source: Department of Statistics, 2003-2010, Jordan.

This fact was stressed in the annual report of court action, issued by the Judicial Council of Jordan in 2010, in which it was indicated that the largest proportion of total offenders who committed these crimes were unemployed (Khrisat, 2011).

The types of crimes committed varied to include murders such as: abuse, suicides robberies, fraud, forgery, and rape. These ratios may increase or may go down but as noted, the unemployment is directly associated with the security of the country and the crime rate increases as the unemployment rises and standard of living is lowered. A study of the Economic Observatory of Jordan University, entitled "Economic Analysis of Crime in Jordan for the year 2009", shows that the economic cost of crime amounted to 380 million JD which is around half a billion dollars accounted for 4% of the GDP (Economic Observatory, 2011).

Available information prepared by the Ministry of Social Development entitled "drugs and their connection to poverty and unemployment in Jordan", has showed that there is a strong and direct correlation between unemployment and drug abuse. It has also indicated that 25% of the parents of those juveniles who were arrested and convicted on drug cases were currently unemployed parents. Therefore, the plight of the unemployed parents may create fear, suppression and depression, which leads to drug abuse (Ratroot, 2009).

4.2.3. Psychological implications. The psychological implications of unemployment mainly relate to

social isolation and the ability of unemployed to maintain the prevailing social values, for once he starts to feel unworthy and loses his self-respect and self – confidence. Moreover, he begins to experience negative attitudes towards common things in life including his feelings that all sense of purposes is lost which consequently, leads to the collapse of values and social norms. Table 14 illustrates that divorce cases went up from 2.1% in 2007 to 2.6% in 2010 while marriage percentages went down from 10.6% in 2007 to 10.2% in 2010. The phenomenon of late marriages among the youth as all reports reveal, that these implications of unemployment correlate with the period of unemployment.

Table 14. Indicators of marriage and divorce rates

Indicators (per thousand of the population)	2007	2008	2009	2010
Crude marriage rate	10.6	10.4	10.6	10.2
Crude divorce rate	2.1	2.2	2.6	2.6

Source: Department of Statistics, 2007-2010, Jordan.

4.2.4. Health implications. Unemployment has a direct negative impact on the standard of living through the lack of income. Hence, poverty spreads along with other health problems, among these, is malnutrition. The reports of the Department of Statistics in 2010, indicated that the percentage of widows who were more vulnerable to chronic diseases reached a rate of 94.4%, while 11% of the population of Jordan who were 25 years and above, suffered from high blood pressure. The same is true for malnutrition, which is the insufficiency of the

amount of food consumed. This also can lead to the increased risk of morbidity and death. Reports in 2009 showed that 8% of children, 5 years old and below suffered from malnutrition. On the other hand 34% of Jordanian children and 25% of Jordanian women aged 15-49 suffered from anemia. These are serious indicators caused by unemployment and will continue to exist as long as unemployment rises.

4.2.5. Impact on children's education. Other significant implications of unemployment affect the educational side of society. The insufficient or lack of income oblige family sponsors to reduce education expenditures or withdraw their children from schools earlier than expected. Some parents would force their children to join in the labor force in order to earn their living, while others would practice begging which could eventually lead to robberies, cheating or unlawful behavior. Consequently, all implications of unemployment lead unfavorably to broken family ties within broken homes.

Conclusions and recommendations

Based on the survey presented during the first decade of the 21st century, we can conclude the followings:

1. Unemployment is one of the main socio-economic problems that negatively affect both economic activities and social life. Its implications have been a cause of suffering for more than half a decade. It reached its peak at 5-33% during the years of 1950-1952 and its lowest at 1.6-3% during the years of 1976-1980. The decline in economic activity is due to political and social situations in the neighboring regions.
2. The average annual population growth during the first decade of the 21st century has accounted for 2.2%, whereby the population rate of males and females was compatible. The youth category dominated the majority of population. Those who were less than 15 accounted for 37%, while those individuals who were economically active, accounted for 40% of the total population. However, the proportion of rural population has dropped from 2.13% to 17.4% as a result of internal migration to the cities. This rapid population growth is seen as threat to the GDP which has reached 2.3% and 3.1% consecutively in 2009 and 2010 years.
3. Unemployment rate in Jordan was 12.5% in 2010 and was at its lowest rate during the periods of 2001-2010. It was noticed that in 2010, the size of unemployment among the youth aged 20-39 years, has reached 36.8% of the total unemployment population. However, the rate of unemployment in 2010 has elevated among university graduates to reach 16.2%. The percentage of unemployment in the Jordanian Governorate was

unbalanced; while it was high in the Governorates of Ma'an, Karak and Madaba, it was relatively low in the Governorates of Irbid, Zarqa and Amman. The low rate of unemployment in the latter is due to the investment opportunities available in these Governorates. It was also noted that the long-term unemployment accounted for 34% of the total unemployed in 2010. The high rate of unemployment is a negative indicator of economic and social implications.

4. It is noticeable that the most significant cause of high unemployment rate is the mismatch between the high rate of population growth and the low rate of economic growth. In addition to the increase in educational outputs, the increase in the long-term unemployment, the disability of the Jordanian economy to accommodate with the recent political and economic situations in the region, lack of foreign investment opportunities and the continuous influx of expatriate labor force who would accept low wages.
5. Unemployment leads to the deficiency of economic resources, both human and financial. It has also led to the loss of a lot of money tied up in programs of education and human development. Areas of high unemployment indicate the falling in real income, thus, people's living standards decline. Rising unemployment is linked to social deprivation, crimes (35% of crimes was committed by the unemployed), increased divorce rates, depression and broken family ties, worsening health and lower life expectancy.

In light of the findings of this study, it is recommended that:

1. Sufficient job opportunities should be created in proportion to population size and growth through the expansion of local and foreign investment projects and legislate various laws that facilitate these investments.
2. Aiming at providing university students with crucial skills and knowledge in order to improve their employment opportunities, and make them fit for the demands of the labor market. This can be achieved by the continuous reinforcement of training programs, creating government-funded workshops, and employment resource centers. Thus, the consistent evaluation of educational system and the overall university majors must be regularly done, so that certain majors that do not meet the requirements of the labor market can be eliminated.
3. Design and implement general awareness programs related to the improvement in the human capital's attitude of the workforce towards certain jobs, so that more of the unemployed have the skills to take up the available jobs and re-

place the foreign labor without any psychological or social impediments to any kind of work available.

4. Develop youth demand-driven training approaches, so as to replace the foreign workers locally and then to encourage the surplus manpower to work in foreign markets through government's facilitation in its external relations and agreements.
5. Promote knowledge on how best to reduce the population growth in proportion to the Jordanian

natural and economic resources and to meet the current requirements and future needs.

6. Adopt policies that encourage the unemployed to work in rural areas and the establishment of an agricultural scale so as to reduce the tendency of rural-urban migration.

The continual study of the unemployment phenomenon by the various universities and the research centers in order to identify its causes, ways of addressing it, so others can benefit from the experiences of those who dealt with this problem before.

References

1. Al-Utoom, H. (2003). Effect of replacing foreign labor with Jordanian labor on situation of unemployment in the Jordanian economy, MA Thesis, University of Jordan.
2. Ajweh, A. (1995). Unemployment in the Arab world & its relation to freedom, Arab Center for Security Studies, Al Riyadh.
3. Al-Nasser, B. (1980). *Economic Development*, Al Amani Publishing House, Aleppo University, Syria.
4. Al-Sarahneh, J. (2000). *The problem of unemployment and its cure: a comparative study between Jurisprudence and law*. Al Yamamah Publishing Co., Damascus.
5. Al-Syrianni, M. (2008). *Unemployment in Jordan*, Al Yarmouk University, Jordan.
6. Badran, A. (2010). Sciences & technology: A lecture at Petra University, Jordan.
7. Department of Public Statistics. (2010). Report on poverty in Jordan: based upon survey of family expenditures & incomes, July, 2002-2008.
8. Department of Public Statistics. (2010). Unemployment situation in Jordan, May 2011.
9. Department of Public Statistics. Employment Statistics, 2005-2009, Jordan.
10. Department of Public Statistics. Employment Statistics, 2006-2010, Jordan.
11. Department of Public Statistics. Unemployment situation for several years, Jordan.
12. Economic Observatory (2011). Economic analysis of crime in Jordan, University of Jordan.
13. Gawartney, J. & Astrop, R. (1999). *Macroeconomics: A translation by Abdul Fattah Abdul Raman & Abudatheem Mohamad*, Al-Marrekh Publishing House, Kingdom of Saudi Arabia.
14. Jamal, H. (2000). *The unemployment problem and its cure*. Al-Yamamah Publishing House, Damacus.
15. Khresat, H. (2011). Unemployment increases crime rates, *Arab Newspaper*, 5115, Saturday, July 9.
16. Lucas, R. (1978). Unemployment policy, *American Economic Association*, Vol. 68.
17. Madani, A. (1976). *Development of human power*, Al-Sha'ab Publishing House, Cairo.
18. Qudoos, A. (1999). *The relationship between the income and unemployment*, Aljela Publishing House, Mansura, Egypt.
19. Ramzy, Z. (1997). Political economy of unemployment, *Journal of World Knowledge*, 226, Kuwait.
20. Ratroot, F. (2009). Drugs & their relations with poverty & unemployment in Jordan: A paper by Ministry of Social Development, Jordan.
21. Samuelson, P. & Nordhouse, W. (1992). *Economics*, 4th edition, Mc Graw Hill, Inc.