

The Socio-Economic Implications of Syrian Refugees on Jordan



Konrad
Adenauer
Stiftung

Khalid W. Al Wazani (Ph. D. Econ.)



A Cost-Benefit Framework

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List of Acronyms

CDD	Civil Defense Department
CSS	University of Jordan's Center for Strategic Studies
DoS	Department of Statistics
EDCO	The Electricity Distribution Company
ESCWA	The United Nations Economic and Social Commission for West Asia
EUROMED	The Euro-Mediterranean Partnership
FAO	Food and Agriculture Organization
GAFTA	The Greater Arab Free Trade Agreement
GDP	Gross National Product
ICRC	The International Committee of the Red Cross
IDPs	Internally Displaced Persons
IMF	International Monetary Fund
JAF	Jordan Armed Forces
JD	Jordanian Dinar
JHCO	Jordan Hashemite Charity Organization
KAS	Konrad-Adenauer-Stiftung
MoH	Ministry of Health
MoIT	Ministry of Industry and Trade
MoU	Memorandum of Understanding
NCHR	The National Centre for Human Rights
NEPCO	The National Electric Power Company
PSD	Public Security Department
SRCD	Syrian Refugee Camp Directorate
SYP	Syrian Pound
UAR	United Arab Republic
UN	United Nations
UNDP	The United Nations Development Program
UNESCO	The United Nations Educational, Scientific and Cultural Organization
UNHCR	The United Nations High Commission for Refugees
UNRWA	The United Nations Relief and Work Agency for Palestinian Refugees in the Near East
WB	World Bank
WTO	World Trade Organization



Introduction

Introduction

The Syrian conflict has entered its fourth year with no end in sight to the civil war. More than 2.6 million Syrians have fled their country— Jordan alone has opened its borders to almost 600,000 officially registered refugees to provide them with shelter, food and medical care. Unofficial numbers are even higher. With a total population of 6.5 million, an increase of 10 percent exacerbates the pressure on Jordan's already scarce resources and strained sectors such as the country's water supply, housing, education and healthcare and labor. While the international community has been of great help in this crisis, not enough aid is reaching people on the ground. The negative economic implications are affecting Jordanians and Syrians alike with one of the results being social tensions. In this context, the importance of assessing the socio-economic impact of the refugees on the Jordanian economy from an all-encompassing point of view provided the incentive for this study, which aims to address the challenges but also the few opportunities presented by the continuous influx of Syrian refugees for the Jordanian economy.

Konrad-Adenauer-Stiftung (KAS) Jordan Office has been present in Jordan since 1982. As a foundation seeking to promote political development and consolidate democracy, we would like to emphasize the importance of this study for our work and our partnership with Jordan. We especially thank Dr. Khalid W. Al. Wazani, Chief Economist and Chairman/CEO of Issnaad Consulting, for the significant research he conducted and his excellent analysis of the data. Thanks to his expertise and his outstanding commitment throughout the project Dr. Wazani successfully wrote the first comprehensive study on the socio-economic impact of Syrian refugees on Jordan. Konrad-Adenauer-Stiftung further would like to thank Dr. Wazani's team, in particular Dr. Ahmad Shaqran, Mrs. Maisoon Amarneh and Mr. Hamzeh Shamayleh, for their tremendous work in this project. Issnaad Consulting has been an important partner for us and we much appreciate our cooperation, which is based on common values and mutual understanding.

Dr. Otmar Oehring
Head of the KAS Office in Jordan
April 2014

Simone Hueser
Research Fellow at KAS Office in Jordan
April 2014



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I would like also to acknowledge with much appreciation the crucial role of Ms. Simone Hueser, the Research Fellow and Project Officer at KAS-Amman. She has always been there ever since the study was a research project until its realization into a solid piece of work. I cannot say thank you to her enough for her tremendous efforts and help.

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Khalid Wassef Al Wazani
April 2014

Preface

Since the outbreak of the Syrian crisis and the steady influx of Syrian refugees to Jordan, no other study has approached the socio-economic impacts of the crisis from a well-integrated, all-encompassing perspective. But this study is different. It is meant to elaborate on the often untouched issue of aggregate (and sometimes particular) costs of the crisis on Jordan's economy at large with specific reference to key sectors and the host communities. Previous studies have addressed the financial costs and the impact of the crisis on fiscal deficit, labor market or host communities. It seems, however, that the literature falls short of addressing both the positive and negative repercussions of the crisis on Jordan's economy. What is new in this study is that it offers an integrated matrix of macroeconomic, sectorial and microeconomic impacts represented by the costs and benefits accruing to Jordan's economy. It is no secret that Jordan's economy did make some benefits from the large-scale influx of refugees though, concurrently, it suffered from huge losses and financial and communal costs. It is reasonable, therefore, to set out an integrated 'trial' balance to review those assets and liabilities arising from the Syrian refugee crisis and affecting the national economy. The findings of the study have clearly shown that the burdens on the macroeconomic and microeconomic levels have outweighed all benefits enjoyed by the economy during the period 2012-2014.

Chapter I sets the scene by providing a full review of Jordan's economy throughout the years prior to the Syrian crisis (2009-2010). It highlights the economic challenges and distortions already plaguing Jordan before the gradual influx of refugees that has taken place since the Syrian crisis was sparked in March 2011. Then, it covers the period 2011-2013, with specific reference to the prospective impact of the Syrian crisis on Jordan's economy in 2014. Issues of special concern revolve around situational developments in Jordan's economic challenges and distortions as reflected in the budget deficit, public debt, trade balance deficit, unemployment, poverty and growth.

Chapter II inquires about the Syrian economic conditions in the heat of the crisis and their impacts on creating a large influx of refugees into Jordan. It traces back the history of the Syrian economy from its inception up till the threshold of the crisis and then examines the consequences on the Syrian economy since 2011. Related Syrian and international literature was reviewed and analyzed.

Chapter III discusses how the Syrian refugee crisis evolved in Jordan by providing a historical snapshot of Jordan and the refugee issues besetting the country since its foundation up till the current refugee crisis. It cites referenced facts and figures about Syrian refugees in Jordan in terms of numbers and demographic and geographic distribution and then analyzes other facts and figures about Syrian refugees in the region, particularly in Lebanon and Turkey.

Chapter IV analyzes the impacts of the Syrian refugee crisis on host communities in Mafraq and Irbid, which together host over 50% of the Syrian refugees in Jordan. The chapter also sheds light on the challenges faced by the two governorates today and the severe consequences that the crisis has had, both for the infrastructure and super-structure, particularly energy, water, municipal roads, sanitation and the environment.

Chapter V discusses the quantified results of this study presented in the form of a matrix for the socio-economic impacts of Syrian refugees under the overarching theme of this study: that is the benefits-costs perspective. It explains the methodology used in calculating those benefits and costs on the macroeconomic, sectorial and micro-economic levels. It also poses key hypotheses for calculating such benefits and costs to elucidate the approach pursued to make the respective calculations. A section of this chapter is devoted to giving quantitative estimates of economic benefits accruing from the presence of Syrians in Jordan; then, the cost (losses) estimates are reviewed in another section. The chapter ends with a final review calculation of those benefits and costs at the macroeconomic and affected economic sectorial levels. A further section in the chapter addresses some of the social impacts of Syrian refugee issues on Jordan, with specific reference to those impacts that cannot be quantified, including, for example, on the quality of education, impoverishment and the pressures on the environments generated by the large influx of refugees into Jordan's economy.

In conclusion, the study established a number of facts. The main finding is that the aggregate cost for the Syrian presence in Jordan is estimated at around JD5.8 billion up to the end of 2013, contrasted with aggregate benefits of around JD4.1 for the same period. The study, therefore, shows that the aggregate losses for Jordan's economy for the period 2012-2013 stand at more than JD1.7 billion. On the calculation of refugee costs for the year 2014, the study sets out two scenarios. The first (the base influx scenario) represents the daily introduction of around 400 refugees, while the second (the overflow scenario) expects no less than 1,500 refugees entering the country every day. In light of these findings, the study estimates the net losses for the subject crisis in 2014 to reach JD2.6 billion for the first base influx scenario and as much as JD3.5 billion in the second scenario. In the final analysis, depending on which scenario is adopted by decision makers, the aggregate cost as estimated by the study for the period 2012-2014 is in the range of JD4.2 and JD5.1 billion, which accounts for not less than 20% of GDP. There is also a clear indication that the contribution by the international community, aside from the assistance provided by the United Nations Higher Commission for Refugees (UNHCR), is far from adequate to address these needs. The assistance pledged by the international community covers up to 75% of the needs, while the remaining 25% is left for Jordan and the UN system. Both are left to manage the crisis alone.



Chapter I

Jordan's Economy – An Overview on the Eve of and Through the Crisis, 2010-2013

1. Overview of Jordan's Economy on the Eve of the Crisis

Jordan's economy is considered an ideal example of a small, open economy that is strongly connected in its regional and international spheres. There are, however, two important features that have persistently dominated the overall economic scene in the country: scarce natural resources and a small-sized economy. The former resulted in a focusing of key production goals on the use of the already scarce resources and a maximizing of their returns, eventually leading mega-production projects to rely on phosphates, potash salts and fertilizers. Another result was the domination of the service sector in the Gross Domestic Product (GDP). Such sectors as the retail trade, financial services, transportation, education, health care and tourism, in addition to the public service sector, account for around two thirds of the country's GDP. The other feature, that is the small size of the economy, manifested itself in geographical, demographic and economic aspects. Jordan's geographical area and population are both small, when compared with those of many other countries around the world, particularly its neighbors: Syria, Iraq, Saudi Arabia and Egypt. From an economic perspective, however, a small-sized economy is defined by the country's economic relations with the rest of the world as being a price taker in foreign trade of both imports and exports.

Consequently, there was no alternative for Jordan's economy except to link up with regional and international economies to achieve its developmental goals and meet its basic needs. The economy, throughout its evolutionary phases, has thus mirrored all fluctuations in regional and international markets alike. What needs to be said is that during its course, Jordan's economy has received a series of political and military shocks, particularly given the geo-political location of other economies adjacent to Jordan. Notwithstanding these challenges and thanks to the aforementioned facts, Jordan's economy has beaten the odds and turned many of those challenges into opportunities. This is evident in the country's ability to improve its GDP, economic development, per capita income and welfare, particularly by providing for substructure and superstructure in education, health and finance.

In pursuing its developmental goals, the economy has always been keen on the full integration between the public and private sectors, with each contributing to the building of economy and sustainment of development assets. Several evolutionary phases have marked the economy, beginning with the foundation of Transjordan (the precursor to modern Jordan) in 1921, independence and the establishment of the Hashemite Kingdom of Jordan in 1946, the unification of the two banks in 1950 up till the Israeli occupation of the West Bank in 1967, at which juncture the economy developed towards its current state. The 1970s was a particularly difficult decade, though afterwards the economy flourished to a considerable degree on the local and regional

levels. Nevertheless, a setback was sustained in the 1980s because of the economic recession in the region and worldwide, before the economy underwent a structural reform and economic stabilization in the 1990s. The decade ended with the death of King Hussein I and King Abdullah II's accession to the throne in February 1999. At the turn of the century, the economy headed eagerly for international models by negotiating accession to the World Trade Organization (WTO) and free trade agreements with a number of countries, most notably the United States, in addition to other agreements in the context of the Euro-Mediterranean Partnership (EUROMED) for the purpose of attracting foreign investments in communication, transport and natural resources (phosphate, potash and cement). Concurrently, ties between the local economy and international models were greatly reinforced by joining the Greater Arab Free Trade Agreement (GAFTA). Investments from other Arab countries were also attracted in several fields including real estate development, telecommunication, banking and tourism.

In a nutshell, Jordan's economy since 1967 has not followed a single pattern. On the contrary, it was marked by turmoil and instability (1967-1973), prosperity and recovery (1974-1982), downturn and recession (1983-1989), economic reform and regional turbulences (1990-1999), openness to globalization (2000-2009), up until the regional popular uprisings and upheavals (since 2010). Despite the hardship, however, Jordan has managed to meet the challenges and emerged vigorously, with developmental opportunities unfolding into a state of stability in the economic, social and political domains.

In complementing this overall economic picture, the state was a driver and a motivator of the national economy. The state budgets shouldered the main burden of leading the developmental process including investment in several mega- projects in telecommunications, mining, transport, energy and water. Along those lines, the state privatized many such public facilities by asset selling, debt swaps and the attraction of local and foreign investments. Needless to say, Jordan's economic base has centered on foreign aid, in all of its diverse regional and international forms. But it is also a fact that both internal and external public debts have been used as an instrumental method for offsetting the deficit and covering the state's capital and current expenses. The public debt, however, has been steadily on the rise in the last five years to address the deficit that was built up to cover the subsidization of energy and some basic commodities. As a result, the public debt imposed a heavy burden on the state, having arisen in absolute terms and as a percentage of the GDP to the extent that it violated the public debt law that requires governments to keep the public debt rates within a maximum limit of 60% of the GDP at current prices. The crux of the problem of increasing public debt can perhaps be blamed on the very structure of that debt, which was used to cover current expenses that do not generate any yields necessary to allow for its repayment. In addition, it has relied more than ever before on local financing resources, which eventually

led to an unhealthy crowding out of the private sector on the surpluses of the banking system and challenged to considerable degrees the financing of the sector that is meant to drive economic growth. Another significant factor was the recent trend to head, once again, for external borrowing from international organizations, such as the International Monetary Fund (IMF), which pledged a loan to the Kingdom of around two billion Jordanian dinars over the span of two years. The situation has been worsened by another trend that seeks to borrow from the Eurobond, with costs straining the country's foreign reserves in the short and medium terms.

Jordan's heavy reliance on foreign assistance in covering its internal and external gaps led such resources to be the key solution long adopted in pursuing continuity and sustainability. Foreign aid has been used as an important source for covering the deficit in public expenses to the extent that two categories were created to describe deficit, namely: deficit before grants and deficit after grants. Though such grants have been fluctuating in frequency and size, they have never ceased to flow into the state's budget since the establishment of Transjordan.

That sort of reliance on foreign aid has never been an efficient answer to the financial deficit, which made resort to public debt a necessary second best and another salient feature characterizing cash flows to the treasury. Reliance on public debt, the foreign debt in particular, has increased since the mid-1980s with a decline in aid that used to be injected into Jordan especially in the wake of Baghdad's 1978 summit, in which oil-producing states (the Gulf States and Libya) pledged to support Jordan's economy in response to the oil boom that started in the mid-1970s. Aid reached its lowest level after those states, excluding Saudi Arabia, broke their pledges leaving Jordan with no choice but to borrow from international institutions, some European countries and Japan to address the disparity in aid. There was a hope that those aids that ceased to exist would one day return and help in repaying the loans. What happened, however, was that debt steadily increased until it reached around 180% of GDP by the end of 1989. Still worse was to come with the economic stagnation hammering the Arab world and affecting Jordan, a country vulnerable by nature to economic turbulences in the region. In effect, the country was rendered unable to repay its due debts or service them as the foreign reserves continued to deplete. As a result, the Jordanian dinar lost nearly half of its value against the United States dollar and other currencies, leading to a sharp decline in its purchasing power. The government then carried out, in cooperation with the IMF and World Bank (WB), several economic reform programs starting in 1990 and ending in mid-2004. Those programs helped in bringing down the public debt to around 88% of GDP. In order to control the rhythm of public debt the government enacted the Public Debt Law No. 26 for the year 2001 that bound consecutive governments, through several controlling measures, to three main issues. First, it identified how borrowing is used to offset the deficit, cover the projects in the line items of the budget and restructure debt. Second, it prohibited the government from

guaranteeing any public or private entity. Third, it set a limit on the internal and external debt so that neither could exceed 40% of GDP, provided that their total value did not exceed 60% of GDP. The government succeeded, as implied by the figures for the state's public debt status (internal and external) for the years 2006-2010. By 2008, the debt had plunged to 54.8%, the lowest level since 1989, compared with 72.2% in 2007, all thanks to the use of privatization returns in repaying around JD1.7 billion. However, the debt started to rise again in 2009 to 57% of GDP; it then crossed the limits stipulated in the Public Debt Law in 2010 with rates hitting 70%, according to the latest figures published in 2012. The debt per se should not be a source of concern, given that several countries around the world have more debts than Jordan does. The real problems for Jordan are the structure, source and use of that debt. Though debt rates at the beginning of the Economic Reform Program in 1990 exceeded 180% of GDP, the debts at that time were mostly official concessional loans that could be rescheduled, swapped or written off. Conversely, though three times smaller than in the past, today's debts have emerged with totally different characteristics, to the extent that they puzzle economic analysts and raise fears about the structures, source and uses of such debts. In fact, the state's public debt is commercial in the first place and the volume of the internal debt that accrued from treasury and development bonds, borrowed in local currency through the local banking system, accounts for around two thirds of the country's total debts. It follows, therefore, that the major portion of the state's public debt is commercial and very costly, as interest rates reached around 8% in some borrowing cases in 2013. To repay this debt is, perhaps, a real challenge for the decision makers, since the only available repayment options are offering more bonds to redeem old ones and borrow anew. This mechanism, however, cannot continue in an environment where the banking cash surpluses are eroded by the crowding out policy drawn up by the government. Alternatively, the repayment will hinge upon more foreign aids, which have become scarce, or printing more banknotes; but this latter option can put purchasing power in jeopardy, create inflation pressures and drag the economy into the vortex of stagflation. A glimmer of hope may still be sought in getting more regional aid that is compatible with policies that stimulate the economy and secure for the treasury additional incomes. Sources could include direct and indirect taxes, sovereign fees and other public revenues that can help in the economic growth and stimulate national income drivers.

Jordan's economic problems clearly deepened after the 2011 crisis in Syria. The economic system had already been flawed by macroeconomic distortions, largely as a result of the global financial crisis that hit the world in the last quarter of 2008. In addition, Jordan's main partners in global trade and foreign assistance were steadily affected, both on the regional and international levels. Even before the quantitative easing policy advocated by the United States and the European Union could tackle the financial crisis, the Eurozone crisis began in Greece then moved to Spain, Italy and

Portugal. Jordan's economy was reliant on the latter international system in respect of over a third of its foreign trade, particularly for exports and the flow of financial assistance that is sought to cover the financial deficit and internal gaps in the economy. The financial crisis also reverberated substantially all over the region, particularly in the Gulf countries, which also serve as the outlet of over 40% of Jordan's foreign trade and the largest source of foreign support for the treasury and for covering the deficit. Tables (1) and (2) below give some key economic indicators of Jordan throughout the period 2009 and 2014. The figures are as estimated by the government in the state's Public Budget for the year 2014.

Table (1): Some economic indicators (2009-2014)

Indicator	2009	2010	2011	2012	2013 (Preliminary)	2014 (Budget)
Budget deficit Excluding Grants	1,842.7	1,446.9	2,602.9	3,300	2,900	3,700
Budget deficit Excluding Grants as a percentage of GDP (%)	10.9	7.7	12.7	16	12.1	14.8
Budget deficit Including Grants	1,509.3	1,045.2	1,383.8	2,500	2,000	2,200
Budget deficit Including Grants as a percentage of GDP (%)	8.9	5.6	6.8	12	8.3	9
Gross public debt (JD billion)	9.7	11.4	13.1	16.5	19.2	21.4
as a percentage of GDP (%)	57	61	65	78	80	85
Unemployment rate (%)	12.9	12.5	12.9	12.2	14	NA
Ratio of trade Balance deficit to GDP (%)	26.3	25.7	28.8	34	--	NA

Table (2): Real growth rates (2005-2014)

Period/Year	Real Growth Rate (%)
2005-2007	8.24 (Period average)
2008-2010	4.96 (Period average)
2011	2.60
2012	2.70 (Preliminary)
2013	3.3 (Preliminary expectations)
2014	3.5 (2014 Budgetary assumptions)

The above Table (1) shows that the economy was suffering by the end of 2010 from a financial deficit amounting to 8% of GDP before assistance. The rate is double the globally acceptable rates. The deficit was 6% after assistance, which is still higher than the globally acceptable rate. It is noteworthy that Jordan has been recovering from the global financial crisis since 2010, as the aforementioned table indicates that the value of the financial deficit is three percentage points less than in 2009, a reduction of around a third. It is also notable that the public debt reached, in 2010, around JD11 billion at a rate of 61% of GDP, a rise from the previous year of around JD1.7 billion and close to four percentage points from 2009. Unemployment fell and saw relative stability between 2009 and 2010, as did the trade deficit, though the change was slight. Table (2) highlights the relative stability of unemployment between 2009 and 2010 and a slight decline in trade deficit in 2010. As for the real growth rates, Table (2) shows that the real growth average for the pre-Syrian crisis period (2008-2010) stood at about 5% annually on average. The average growth in per capita income during the same period amounted to around 2.8% annually, given the fact that the natural growth of population in the period stood at around 2.2% annually. This records a decline of around three percentage points from the higher accelerated growth period achieved in Jordan during the three years preceding the global financial crisis (2005-2007), as the real growth rate amounted to 8.2% on average.

Figure (1)

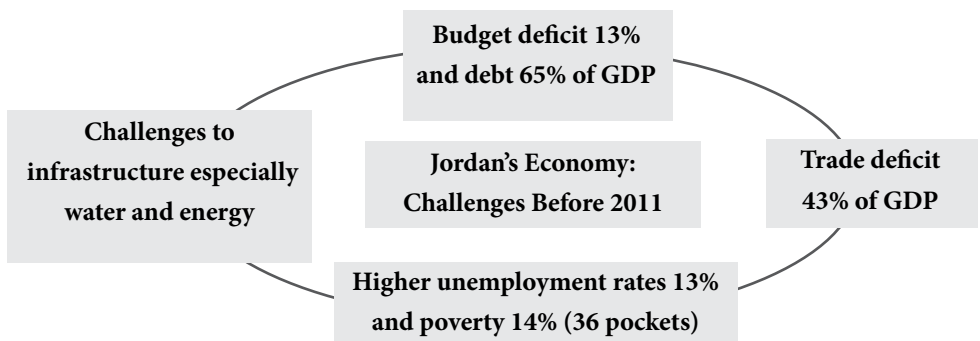


Figure (1) above shows the economic challenges Jordan was facing even before it became directly involved in the Syrian crisis by receiving large flows of Syrian refugees. By 2010, the economy, as mentioned earlier, had sustained a huge financial deficit and debt that surpassed the limits defined by the Public Debt Law. Other economic challenges include a huge budget deficit, a debt that surpasses the limits mandated by the Public Debt Law, chronically high rates of unemployment (13%) and the number of poverty pockets rising to 36 pockets in 2010 from 22 in 2006. The infrastructure, particularly energy and water, has, in addition, posed the biggest challenge to the economy today, the country being ranked as the fourth poorest country for water resources. The same applies to energy, in light of the rise in the costs of power generation that is entirely reliant on heavy fuel and Egyptian gas supplies, which fluctuated in 2010 even before the eruption of the political events in Egypt between late 2010 and early 2011. The annual reports of Jordan's National Electric Power Company (NEPCO) show losses sustained in 2010 amounting to around JD160 million. The company had made profits in 2009 amounting to around JD33 million thanks to the Egyptian gas supply, which was instrumental in meeting 90% of local needs.

Jordan's economy, therefore, has been involved in the Syrian crisis as it received the largest number of refugees, adding to the already sustained socio-economic distortions on the macro level. It is particularly challenged by the internal gap between budget deficit and associated debt and the external gap, which is the trade deficit in the balance of payments. It suffers from relatively high rates of poverty and unemployment, not to mention huge challenges facing the infrastructure. This reality is severely affecting the current population even before discerning the future trend of the Syrian crisis. The demographic increase is steady and abnormal, especially in the vulnerable age groups that need support in all facets of life to lead a decent life by satisfying their needs for electricity, health, education, roads and transport, to mention but a few. This reality entails the necessity of examining anew Jordan's economy and the challenges it has been facing since the beginning of the Syrian crisis in March 2011 until the end of 2013. Equally important is to make reference to current projections for the year 2014 in light of the state's General Budget estimates, which will be the subject of the next part of this study.

2. Jordan's Economy During the Crisis (2011-2013)

The main feature of Jordan's economy in 2011 is represented by Figure (2) below. It shows that the economy was orbited by four focal spaces, which are: domestic financial distortions, as mentioned earlier, a global financial crisis that is still affecting the European and global arenas, popular uprisings in the Arab world, the influxes of Syrian refugees and the Syrian crisis at large with all its implications for the national economy of Jordan.

Table (3) shows the developments in Jordan's macroeconomic indicators for the period 2010-2013 according to official public statistics, with specific reference to the estimates of those indicators according to the draft General Budget for the state for the year 2014. Jordan's economy has clearly seen a slightly higher real growth in 2011 than in the year preceding the Syrian crisis. The per capital income also started to recover, compared with that of the year before, though the budget deficit continued to rise significantly to around 13%, with a five point increase from 2010 amounting to around JD1.2 billion. However, in 2011 it amounted to just 7% of GDP thanks to the large flows of assistance into the country, amounting to around JD1.2 billion, which cut off the budget deficit from JD2.6 billion before assistance to around JD1.4 billion after assistance. The public debt has clearly increased in that year to reach around 65% of GDP at a net debt exceeding JD13 billion, an increase of up to JD2 billion in one year. The trade deficit's ratio to GDP rose by an unprecedented percentage of 18%. This increase is mainly blamed on the rise in the bill for oil imported from global markets after the complete disruption of the Egyptian gas supply. The socio-political atmosphere in Egypt was tense and led to the disruption of the Egyptian gas supply for several periods and for more than five nonconsecutive times. The macro situation is reflected in the unemployment rates in Jordan, which reached around 13% in that year, an increase by half a percentage point from 2010. Perhaps the abovementioned spaces have been the main reason for the said macro indicators, worsened by the exacerbation of the Syrian crisis and the steady flow of Syrian refugees to the country since June of the same year.

Figure (2): Spaces orbiting Jordan's economy

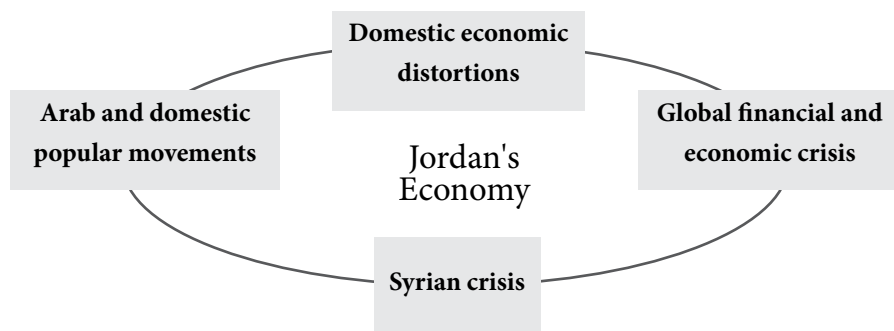


Table No. (3): Macro socio-economic indicators (2010-2014)

Indicator	2010	2011	2012	2013 (Preliminary)	2014 (Budget)
Nominal GDP					
Real GDP Growth Rate	18,762.0	20,476.6	2,1965.5	24,260.0	25,907.0
	2.3	2.6	2.7	3.0	3.5
GDP per capita growth	0.1 (3.5)	0.1 0.8	0.4 (7.8)	0.3 1.3	0.5 (1.3)
Budget deficit excluding Grants As a percentage of GDP%	1,446.9 7.7	2,602.9 12.7	3,300 16	2,900 12.1	3,700 14.8
Budget deficit including Grants As a percentage of GDP%	1,045.2 5.6	1,383.8 6.8	2500 12	2,000 8.3	2,200 9
Total public debt (JD billion) As a percentage of GDP%	11.4 61	13.1 65	16.5 78	19.2 80	21.4 85
Trade balance deficit Percentage of GDP (%)	6,833.2 36.4	8,787.3 42.9	9,984.2 45.5	1,0782.9 44.4	11,644.5 45
Unemployment rate (%)	12.5	12.9	12.2	14	14

Influenced by those spaces, Jordan's economy received throughout 2010 a number of shocks on the local, regional and international levels. Those have affected, to a significant degree, the performance of the national macro-economic indicators. According to statistics cited in Table (3), the downturn was worst in 2012. Perhaps the continuing negative consequences of the global financial crisis and the accompanying crisis in the Eurozone, in addition to the uprisings and popular movements in the region and Jordan, have altogether triggered the economic recession in Jordan since 2010.

There is evidence on the ground that the macro distortions negatively affecting the economy in such areas as public finance, debt, trade deficit, current account deficit, poverty and unemployment were exacerbated in 2012. The state's deficit, both on the levels of the central government and independent institutions, went above JD3.3 billion, which is unprecedented in absolute terms or as a ratio of GDP. This naturally presented a big challenge for the government to finance the deficit and required some sort of direct crowding out of the private sector on the surpluses available in the banks, which fell by the end of 2012 to below JD2 billion. Consequently, it was very difficult for internal borrowing to cover the next budget deficit. Concurrently, foreign assistance remained at their unprecedented lowest levels between the inception of the year up to its last quarter, though the country received some financial aids regionally and internationally worth no more than JD200 million. The channels of foreign debt have become narrower and more costly as Jordan's credit rating was downgraded and given the continuous instabilities of the neighboring countries. Consequently, external debt costs added a new challenge to Jordan's public finance. On the other hand, internal debt worsened to unprecedented degrees, exceeding in 2012 the sum of JD11 billion, all of which were high-cost commercial debts. In addition, such debts are no longer easily accessible with surpluses depleting in banks and being concentrated mainly in just two main banks.

The situation has become more severe with the rise of expenditure on oil importation to cover the differences in importing gas for electricity generation. Egypt's pipeline carrying gas to Jordan was attacked fourteen times from the eruption of the uprising in Egypt until the end of the year, which contributed to doubling the oil bill of Jordan to around JD4.5 billion by the end of 2012. This figure equals almost a third of Jordan's exports and 20% of GDP, which is an unprecedented and uneconomical percentage under regional and international standards. The situation is becoming more difficult as a result of the fact that the growth rates of total exports have not exceeded 2% over the year, as a result of the economic, political or social crises storming Europe and the region. In the unemployment and poverty area, official figures show an increase in unemployment by around 14%, that is two percentage points higher than in the previous year. The same applies to poverty, with poverty line rising from JD600 per capita in 2008 to over JD800 in 2012. It clearly implies a decline in people's purchasing power and the introduction of new segments to the multifaceted domain of poverty.

However, Jordan was clearly affected by the popular movements in the region and locally as it was affected by the Syrian crisis that erupted in the context of the “Arab Spring”. According to some studies, the economic losses of Jordan as a result of the popular movement in the region and Jordan exceeded JD3 billion. ⁽¹⁾The economy has furthermore been hit by the Syrian refugee burden with an estimated cost of over JD560 million. ⁽²⁾

By 2013, it was clear that Jordan had, therefore, been affected by a number of internal and external factors. They include local financial distortions, a global crisis that is still taking its toll on European and global spaces, a popular movement in the Arab region and the impacts of the Syrian crisis and refugee burden on Jordan. All of this is clearly reflected in the overall performance of the national economy. In respect of real growth, GDP grew by around 3% according to the reports of the Department of Statistics (DoS). It is not that different from the average growth of 2012, reaching 2.7%. As for the internal gap (fiscal deficit), it represents the biggest challenge for the government as local revenues fall short of covering the current expenses of the state. The deficit in the government and governmental units before assistance amounted to over 12% of GDP, while the net public debt hit JD19 billion, which is around 80% of GDP. It had already been JD16.5 billion in 2012, with the corresponding increase in the public debt reaching JD2.5 billion in one year at an annual rate of 16%. As for the foreign gap, the trade deficit in the trade balance is over 40% of GDP and the current account deficit is 18% of GDP. Although the ratio of fiscal deficit to GDP remarkably fell back from the level of 2012, the absolute figures indicate that macro distortions are increasing in absolute terms, as is the case in fiscal deficit, public debt and trade deficit.

On the labor market level, unemployment rose to reach, by the end of the year, around 14% compared with 12.2% for 2012, according to official figures. Inflation rates also steadily increased, reaching 4.8% in 2012 and 6.1% by the end of the third quarter of 2013. This brought the annual average inflation rates by the end of the year to around 5.6%, though they are still affected by the increases in oil prices and the amendment of electricity tariffs in compliance with the agreement signed by the government and IMF in fulfillment of the requirements for receiving the IMF's loan.

1 For more details, see the study by Issnaad Consulting, entitled “Popular movement in the region and Jordan and its impact on Jordan's macroeconomic indicators”, October 2012 (available in Arabic only).

2 For more details, see the study by the Socio-Economic Council on the issue, published in a series of reports by Issnaad Consulting, entitled “Socio-economic impacts of the Syrian refugee crisis on Jordan's economy”, February 2013, (available in Arabic only).

The national foreign reserves returned in the third quarter of 2013 to their safe levels (US\$11.8 billion), having dropped at the start of the year to below US\$6.2 billion. The growth of reserves may not have materialized had it not been for foreign assistance in 2013 amounting to JD3.4 billion, which is considered the largest assistance ever received by Jordan in one year. The Syrian crisis and flows of over a half a million Syrian refugees, in addition to the half a million Syrians already resident, helped in receiving such assistance. In addition, Jordan received a loan from the IMF and the local banking system in foreign currency, amounting to US\$1.15 billion; the highest in the history of the country.

Characterized by internal and external challenges, the year 2013 was far from ideal for the national economy. The same year witnessed the largest increase in the prices and taxes by the government in a bid to finance its increasing expenses and budget deficit. Taxes were raised on telecommunications and fuels along with other increases in electric bills and other miscellaneous public fees. The government also raised customs fees on a number of commodities, including clothes, as it continued to lift subsidies on all goods except for butane gas cylinders and bread. All of those measures had considerable impacts on the inflation rates discussed earlier.

In the meantime, the Syrian crisis continued to reverberate on all of Jordan's economic sectors, with Syrian citizens residing in the country exceeding 1.3 million, including refugees. The burden strained the infrastructure, education, health and other sectors subsidized by the budget, which in effect, led the government to more borrowing from internal and external sources to meet the increased spending finance. Foreign assistance, however, was scarce and several donors evaded their responsibility towards the Syrian crisis.

In 2014, the economic indicators in Table (3) above show that the government expected, in the budget speech and the draft budget law, a slight growth of the economy by 3.5% from the elapsed year. Perhaps this expectation was based on assumptions relating to the disbursement of the largest portion of the Gulf grant and the increase of governmental capital spending by 24% during the year 2014. Nevertheless, none of those factors has reflected on the fiscal deficit, public debt and unemployment. The draft public budget of the government and governmental units expected an increase in the fiscal deficit before assistance from 2.9 billion in 2013 to around 3.7 billion in 2014, accounting for around 15% of GDP as expected in 2014 compared with 12% in the previous year. The government expected the total fiscal deficit after assistance to amount to JD2.2 billion, a rise of JD200 million from 2013, accounting for around 9% of GDP compared with 8% in 2013. The public debt is expected to exceed JD21 billion in 2014, accounting for 85% of the GDP as expected for 2014 compared with 80% in 2013. As for unemployment rates, they are not expected to improve, given the modest growth and continued effects of the Syrian refugee crisis, which has, undoubtedly, had adverse effects on the labor market as unemployed Jordanians and migrant workers alike are facing tough competition from Syrians for jobs. This implies that poverty and unemployment rates are expected to increase in 2014.

In the final analysis, Jordan's economy continued throughout 2013 to face those tremendous challenges that arose early in 2011, given the repercussions of the global financial crisis hitting the Eurozone and the instability hammering the Arab world. The situation becomes more intense with the national economy's dependence on the European and Arab spheres, which account for nearly two thirds of Jordan's international trade. Those challenges are clear on the macro-economic level and are topped by the Syrian crisis and refugee issue with the country hosting over one million Syrian residents and refugees. That was the main challenge to the national economy that is burdened by a budget cost of over JD2,000 per Syrian refugee or resident, according to some studies. The cost incurred by the Syrian refugees and residents exceeded the annual sum of US\$3 billion, according to that same study, contributing to the main challenge of the economy, that is the deficit in the state's budget for 2013 (government and governmental units). That deficit amounted, after assistance, to around JD2 billion, that is 8% of GDP, compared with JD3 billion and 12% of GDP before assistance.

3 Ibid.

The developments of the Syrian crisis have been a key challenge since 2011. Official statistics talk about nearly 953,000 Syrian refugees registered with the United Nations High Commission for Refugees (UNHCR) until mid-January 2014. The figures also show that there were over half a million Syrian residents not registered with the UNHCR, taking into consideration that around three quarters of Syrians do not live in any of the official camps but reside in local communities, particularly near the northern borders cities in Mafraq, Irbid and Ramtha. This issue will be discussed in more detail in Chapter IV of this study.

In the meantime, the deficit in the trade account of the balance of payments continued throughout the year 2013 until early 2014, affected by the oil bill that exceeded JD4 billion and accounted for around a third of Jordan's imports and 17% of GDP. The figures imply an erosion of exports and foreign reserves. Unemployment rates rose, according to official figures for the year 2013, to more than 14% compared with 12% in the previous year. The poverty rates as well remained a big challenge for the General Budget, adding continuous burdens in a bid to extend subsidies to appropriately targeted groups. It is common knowledge that poverty pockets rose from 22 in 2006 to over 36, according to the 2012 statistics. The poverty average rose from 13% to 14.4% and so did the poverty line, from JD600 to JD480 per capita, an indication of a decline in consumers' purchasing powers and the expansion of poverty net. Apparently, the difficult conditions facing the country give no chance for any improvement in combating poverty for the time being.

Table (6) implies that there is hard evidence that the macro-economic distortions in the public finance, debt, trade deficit and current account deficit, along with poverty and unemployment rates, continued to rise in 2013, despite an insignificant improvement in some macro figures. The state's fiscal deficit before assistance (central government and independent institutions) is expected to reach JD3 billion compared with JD3.3 in 2012, which is a good improvement. However, it is not expected to persist, as the deficit is expected to reach JD3.7 according to the scenarios of the budget for the year 2014. This deficit is unprecedented in absolute terms or as a ratio of GDP, at least since 2009. To finance that deficit poses a big challenge for the government, particularly because the cash surpluses available in the banking system amounted to around JD3 billion by the end of 2013, thus bringing about the need for foreign borrowing during 2014 to cover the budget deficit.

The per capita GDP, having started to improve in the period 2010-2014, has failed to take into consideration the abnormal growth of population induced by the influxes of Syrian refugees, 80% of whom live in local communities rather than in the camps. The implication is that they have become part of the demographic fabric of the country. It follows, therefore, that the real growth of per capita income for the period 2012-2014 indicates a steady, though fluctuating, decline in that indicator. The above Table (3) shows a decline in the per capita income to around 3.5% in 2012. It then further declined to 7.8% in 2013 with an expected further decrease of 1.3% in 2014, depending on the influxes of refugees in this year. In the context of the huge challenges facing Jordan's economy due to the influx of Syrian refugees, most notably since mid-2012 and throughout 2013, it is relevant to invoke the obligations of the international community towards Jordan in addressing the Syrian refugee crisis. The costs are high for Jordan's economy, though the crisis constitutes, sometimes, an economic lever in some socio-economic fields. In the ensuing chapter, the study will highlight the cost and benefits of Syrian refugee crisis.

3. Jordan: International Commitments towards the Refugee Crisis

Jordan is a committed party to many human rights and refugee covenants and charters. It fully abides by the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights.⁽⁴⁾ It also ratified all of those covenants and conventions related to such areas to cover all residents on its territories, thus giving them full rights within the domains prescribed by that covenant in political, civil, economic, social and cultural spheres. Those conventions, when ratified, will have the same powers as a country's legislation and prevail over its national laws.⁽⁵⁾ In late 2002, Jordan established the National Centre for Human Rights (NCHR) by a provisional law ratified and passed as a permanent law in 2006. The institution has legal status with financial and administrative independence. Its mandate relates to human rights in political, intellectual and human domains.⁽⁶⁾ However, in relation to the refugee issue, in particular, Jordan has not yet ratified the 1951 Convention relating to the Status of Refugees and the 1967 Protocol Relating to the Status of Refugees. However, it signed in 1997 an MoU with UNHCR setting standards for dealing with the affairs of refugees and other persons covered by the UNHCR. Under the MoU, the UNHCR is

4 <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CCPR.aspx> and <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx>

5 Article (24) of Jordan's Civil Code.

6 For more information, visit the National Centre for Human Rights: <http://www.nchr.org.jo>

permitted to commence its activities relating to refugees and other persons under its mandate in the Hashemite Kingdom of Jordan, except in relation to Palestinian refugees who are covered by the mandate of another special agency for Palestinian refugees. Key articles in the MoU define “refugee” in accordance with international norms, prohibit the expelling of any refugee accepted by the UNHCR and bind refugees to abide by the laws, regulations and measures in observance of the public order in the country. It also requires the UNHCR to find a durable solution for refugees, including voluntary return to the country of origin or resettlement provided that the period of temporary residence will not exceed six months. Other articles relate to refugees’ human rights and freedoms including religion and ethnic rights, the rights to self-employment and working for others and exemption of refugees from overstay fines.

It further provides that the UNHCR will continue to afford refugees food, water and medical treatment in accordance with the principles observed in UNHCR. The last article of the MoU also provides for those cases of large influxes of refugees and binds both parties to fully cooperate with each other in such circumstances, particularly in ensuring fast response to emergencies. It also provides for the establishment of a joint mechanism to meet the requirements of food, water, sanitation, shelter, health services, safety and security of refugees.⁽⁷⁾ Although the MoU makes the provision that the stay of refugees should not exceed six months, at which point the UNHCR returns the refugee to his or her country of origin or resettle him or her in a third country, the situation differs with the Syrian refugees. Since March 2011, increasing numbers of Syrian refugees have been hosted, especially since mid-2012. This stems from the ethical commitment to hosting refugees coming from an Arab Muslim neighboring country, as pronounced by the highest leadership on several occasions. Most recent official affirmation of that commitment was echoed in King Abdullah II’s address at Muta University on June 16th, 2013. This was in line with Jordan’s signing of the Arab Convention on Refugees adopted by the League of Arab States on March 27th, 1994, entitled “Arab Convention on Regulating Status of Refugees in the Arab Countries.”⁽⁸⁾ The outcome of several inter-Arab meetings specifically held on the protection of refugees and internally displaced persons (IDPs) in the Arab world, the Convention highlighted the principles of human rights in light of the Islamic Sharia law. It also affirmed the observance of the international refugee regime, which implies an indirect endorsement of the 1951 Convention and the 1967 Protocol. In the preamble, it states: “Confirming the provisions of the Universal Declaration of Human Rights, the International Covenant of Civil and Political Rights, the International Covenant of Economic, Social and Cultural Rights, the 1951 Convention relating to the Status of Refugees, the 1967 Protocol relating to the Status of Refugees and the 1992 Cairo Declaration on the Protection of Refugees and Displaced People”. As such, it does imply a commitment by the signatory states, including Jordan, to the 1951 Convention and 1967 Protocol, notwithstanding that Jordan refrained from signing the 1951 Convention. The Arab Con

7 For more details, see the Memorandum of Understanding published in the Official Gazette, no. 4277 on 3/5/1998.

8 More information about this Convention is found here: <http://www.lasportal.org/wps/wcm/connect/c2da970049c399699c869c526698d42c/legalnet-3-14.pdf?MOD=AJPERES>

vention expanded the definition of a refugee to include persons forced to leave their countries of origin for fear of persecution, reasons related to foreign occupation of their countries, natural disasters or reasons related to serious disruptions that breach the public order in their countries of origins. The provision, though, exempted war criminals and other persons convicted of crimes against humanity or terrorist acts and other serious non-political crimes.⁽⁹⁾

Jordan has, throughout its history, made a commitment in respecting peoples' rights to self-determination, particularly in matters relating to their political rights and right to pursue their economic, social and cultural ambitions. This trend is evident, as explained earlier, in the county's approach to the Syrian situation and Syrian refugees, an issue that is still unresolved. This commitment mirrors the complete adherence to the international and Arab-relevant covenants on human rights and refugees. This will be discussed in detail in the ensuing part of this study.

9 For more information about the Arab Convention on Refugee Rights see:
<http://www.blog.saeed.com/2010/10/legal-framework-refugees-arab-world-arab-convention-refugees/>

Chapter II

Syria's Economy: An Overview

1. The Syrian Economy before the Crisis

Economic literature in the region shows that the Syrian economy enjoys a special geopolitical position, with the country standing as a gateway for the West to the East. This economic geopolitical position has been instrumental in the internal and external wars and invasions that have battered Syria throughout its history. Instability has taken hold of the country for extended periods of time and has affected the Syrian economy in a context of changing political systems and frequent changes of governments. However, the diversified natural and human resources that the Syrian economy has always enjoyed emerged as a model for a relatively well integrated economy. To this end, with the collapse of the Ottoman Empire and dissolution of its states, Syria was placed under the French mandate until it gained independence in 1946 and the Syrian state was formed with its current features and geographical and demographic fabric. Modern Syria extends on an area of land 185,180 km² in size, of which 1,550 km² is water. It borders five countries with total land borders of 2,253 km: Iraq (605km), Palestine (76km), Jordan (375km), Lebanon (375km) and Turkey (822).

Like other countries in the Middle East, especially in the Levant, Syria is made up of a blend of sects and ethnicities with Arabs accounting for the majority (90.3%) while the remaining 9.7% are accounted for by Kurds, ethnic Armenians, Circassians and other minorities. Sunni Muslims amount to 74% of the population. The rest includes other Muslim sects, namely Shiites, Alawites, Ismaeelis and Druze (16%), as well as Christians (10%), the highest proportion in the region. There is also a small percentage of Arab Jews. According to the latest (2013) estimates, there are roughly 22.5 million inhabitants in the 15 to 64 age group, accounting for the highest portion (62.3%). The figures indicate that the active economic segment is the largest in the society and that Syria, like Jordan, is undergoing a “demographic opportunity”. The age groups 0-14 and 65+ account for a third and 4% of the population, respectively. This makes Syria a young society, just like other Arab societies, with the young making up the largest segment of population.

In March 2011, protests broke out all over the country starting in Daraa, a city near the northern border of Jordan in the context of the so-called “Arab Spring” and popular uprisings sweeping the region. Demonstrators rallied peacefully, calling for reform, but as demonstrations gained momentum and were confronted by the Syrian authorities, the events unfolded into an armed conflict between the opposition and the regime. Several foreign attempts and interventions were made to end the dispute, but the situation escalated leading to a situation similar to a civil war. Syria had already become a battleground for several forces, causing civilians to be caught between conflicting

interests and regional and international accounts. Fighters and gangs proliferated, while international reports talked of Syria being used as a stronghold for Al Qaida and other extremist Islamic groups. This presents the alarming prospect that the situation will persist and that the crisis will last for years rather than for months. This reality has impacted on the Syrian economy, as will be highlighted in the ensuing parts of this chapter.

The Syrian Economy: Phases of Development since Independence⁽¹⁰⁾

The history of Syria demonstrates six main phases of development beginning with the independence of the country in 1946 up until the early days of the crisis in 2011. It has experienced several fluctuations, making it among the most volatile economies in the region. Any discussion of the Syrian economy, however, should invoke an overview of its phases of development up to the current crisis, as an in-depth analysis helps in understanding the pillars of the economy.

Phase I (1946-1963): Economic Openness and Free Movement of Capital

The post-colonial Syria witnessed a huge development on all levels and enjoyed a state of economic recovery. An economic liberation policy was pursued, allowing for a free movement of capital, particularly in the 1950s under the rule of President Shishakly. The early republican era was a time of propensity for agriculture, a main source of income in the absence of excavation of natural resources such as oil and gas. Around 75% of the active population worked in agriculture and due to the vital role of the sector in domestic economy the concerns of farmers dominated the disputed issues in Syria. In that era, the movement of capital inside the country was smoothed to a large degree, with Aleppo and Damascus emerging as the hubs for sending out and receiving capital, respectively. Socialists, however, considered this an era of bourgeois and feudal hegemony, based on the assumption that agricultural lands were run by a small group of the population with meager returns going to the farmers. Intense political and economic conflicts and unrest followed, leading eventually to the first military coup, led by Husni Al-Zaeem in 1948. Subsequent transfers of power and instability dominated the scene until the rule of Adib Shishakly in 1952. The decade from the late 1940s until the end of 1950s saw an economic boom with several trade contracts executed with countries such as the Soviet Union and Czech Republic. The port of Latakia was established and the Lebanese custom fees previously levied on Syrian goods were removed. Capital poured on the country, particularly from Aleppo merchants, as explained earlier. The production of wheat and cotton doubled, making them key crops in agriculture. In 1954, Shukri Quwatli came to power and under his rule Syria and Egypt merged in 1958 into one country, the United Arab Republic. However, the union did not last long and was soon dissolved for several economic and political reasons,

10 For more information, see Syrian Centre for Political Research, 2013, "The Syrian crisis and socio-economic impacts' (available in Arabic only).

leading Syria into a new state of political instability. Following the break-up of the UAR, the military took over in Syria and remained in power until the 1961 elections. The first pluralistic elections in the history of Syria ended with the nomination of Nazim Qudsi as a president. His reign encouraged an open economy, denationalization of banks and a proliferation of big corporations. The reforms introduced by Qudsi to agricultural laws brought resentment of the Ba'ath Party, which issued several statements opposing Qudsi's decisions. In 1963, the Ba'ath Party led a successful coup, putting an end to pluralism and economic liberation policies in Syria.

Phase II (1963-1970): Nationalization and Political Transformations

With the Ba'ath party having seized power, a state of emergency came into force and lasted until 2011. The era of political pluralism had ended and so had the open economy policy. To bring the economy into line with its socialist ideology, the Ba'ath party initiated a nationalization drive in private sector institutions including banks, major businesses and public utilities, leaving no room for actual competition in the Syrian market in the absence of the private sector. A closed economy prevailed until the 1970 coup d'état led by the then air force commander, Hafez Assad. The "correction movement", as it was called, ousted the government led by Salah Jadeed and Atassi. The rule of Hafez Assad continued until his death in 2000, when he was succeeded by the current president, his son Bashar.

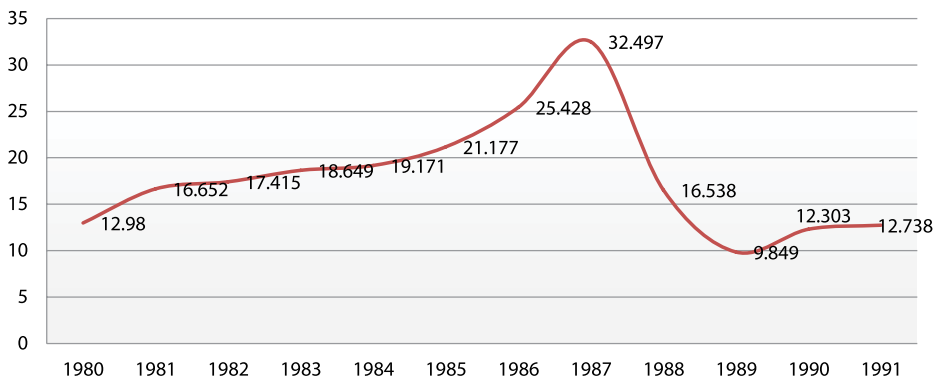
Phase III (1970-1981): Transformation towards Industrialization and Developmental Plans

In this period, the Syrian economy headed for developmental planning guided by developmental planning technique. A diligent observer may have noticed how the state's concerns were increasingly shifting towards industry, or "industrial economy". The pre-correction movement era had, conversely, focused on agriculture and agricultural production. The government was bent on transforming Syria into a fully self-efficient industrial country. It supported all types of industrial enterprises, though not at the expense of the state's role as a care-giver and guarantor for all educational, health and infrastructure services. The number of factories increased and craftsmen and industrial workers received tremendous support for building their own factories and enterprises. The infrastructure saw a fair advancement, particularly in transport, bridges, roads and water and sanitation systems. The aftermath of the October Arab-Israeli war saw a boom in the Arab world lasting from 1974 to 1982 as a result of the cash flows attained by the significant rise of oil prices. The Syrian economy benefited from the boom as it impacted on significant economic developments in all facets of life, in addition to improving purchasing power and GDP per capita. At the end of the 1970s, however, this economic recovery came to a halt because of a series of protests, mainly staged by the Islamic opposition. By then, the Syrian economy had plunged into an economic crisis that was not resolved until the early 1990s.

Phase II (1981-1991): Recession and Challenges

The political upheavals in the late 1970s unfolded into military strife, which was marked by the assassination of senior figures in the Syrian Arab Army. In response, the military launched a major offensive in Hama in 1982, which was met by heavy international sanctions ushering in an era of recession and challenges. With the suspension of aid from the Gulf States, Syria was propelled into a spiral of deteriorating political and economic strife. The Syrian GDP, nonetheless, continued to grow despite all challenges and sanctions, until 1988 when the value of the Syrian pound dropped 12 times. The national reserves of wheat and wheat flour fell short of meeting the need for even a few months. The hard times of the economy continued up until the early 1990s, the sanctions and the associated crisis having strained the economy and prevented any growth in GDP after 1988. It was not until 1991, after the Kuwaiti liberation war in which the Syrian army was involved with international forces, that the West started to be more open –though only partially - to Syria and to ease the decade-long sanctions. At that juncture, the economy started to recover and sustain some slow growth.

Figure (1): Syria's GDP (1980-1992) in US\$ billion



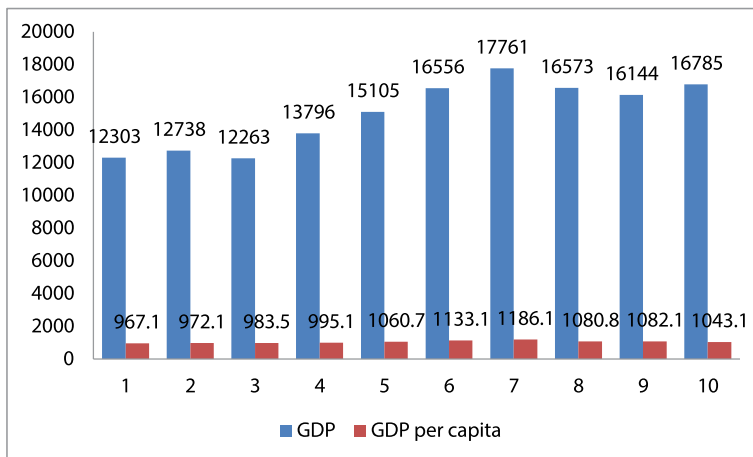
Source: IMF Database (2011).

As illustrated in Figure (1), the GDP underwent a fluctuating growth between the early 1980s and late 1987, an indicator of a steady growth resulting from the economic policies adopted in those years. However, the trend was challenged by the abovementioned realities, leading the economy to fall back in light of the accumulated crises, the failure of the economy to withstand the sanctions, the devaluation of the Syrian pound and a decline in GDP, first to around US\$16.5 billion in 1988 and then to US\$9.8 billion the following year, a rate of around 70% of its level in 1987. The early 1990s, however, witnessed a significant improvement in economic growth, promising kind of economic recovery.

Phase IV (1991-2000): Economic Recovery

The 1990s was an era of a form of economic liberation and prosperity, with an increasing trend for oil and gas excavation in Syria. The carbohydrate revenues increased as oil production went up to around 600,000 bpd in 1995, of which around 250,000 bpd was for domestic consumption while the rest was for export, having been as low as 194,000 bpd in 1986. The discovery of huge natural gas reservoirs boosted local industries and eventually contributed to the growth of Syrian economy to a significant degree.

Figure (2): GDP and GDP per capita (1990-1999)



Source: IMF Database (2011).

Figure (2) shows the development of the economy in the early 1990s, showing an increase in GDP from US\$12.3 billion in 1990 to around US\$17.8 billion in 1996: a yearly average growth of over 7%. The GDP per capita also increased from US\$967.1 in 1990 to US\$1,186.10 in 1996 with an aggregate growth rate of 23%. This development impacted on the economic climate of the country as a result of the adoption of less stringent economic and trade policies, leading to a partial kind of economic openness. A slight setback, however, was recorded in the second half of the 1990s, which was reflected in the GDP growth and GDP per capita. The economy, nevertheless, soon managed to catch up and restore recovery with the inception of the third millennium after the death of President Hafez Assad. With Dr. Bashar Assad's accession to power, more open economic policies were adopted and there were attempts to encourage the private sector and aim for a gradual abandonment of a centralized economy reliant solely on the government.

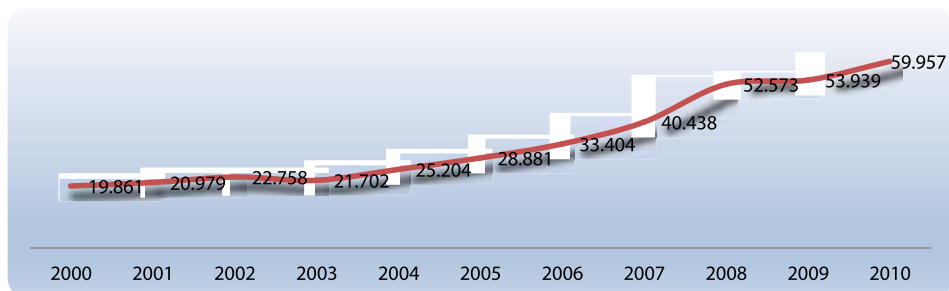
Phase IV (2000-2010): New Economic Trends

Upon assuming his presidential office in 2000, Bashar Assad introduced several economic reforms. The main features of those reforms were market liberalization, support for the private sector and the attraction of foreign investments. The economy started to gain momentum as new stimulating laws were enacted:

1. Law No. 29 for the year 2001 on the Establishment of Private Banks and Banking Confidentiality;
2. Legislative Decree No. 36 for the year 2001 on licensing private universities;
3. Several decisions by the Ministry of Education licensing private schools;
4. The Free Zone General Corporation law;
5. Legislative Decree No. 35 for the year 2005 on licensing Islamic banks in Syria;
6. Decree No. 43 for the year 2005 on investment in the insurance sector, health and higher education;
7. A number of measures on the possession of foreign currency and tax and banking reforms.

Substantial changes were made during the period on the economic, political and social levels in an attempt to find a place for Syria among global economies and ensure access to global markets. Salient achievements include the construction of industrial cities in Rif Dimashq (Adra), Homs (Hissiya), Aleppo (Sheikh Najjar) and Deir ez-Zur. Since 2000, the investment climate has changed. Macro-economic indicators show increases in growth rates, regression of inflation pressures and materialization of reasonable rates for the domestic and foreign trade balances with a rise in and variation of hard currency reserves. The Syrian pound was unpegged from the United States dollar in the context of a policy aimed at fixing the exchange rate of the Syrian pound. Another important step in opening and liberalizing the economy was Syria's accession to the Greater Arab Free Trade Area (GAFTA) and other bilateral free trade agreements.

Figure (3): GDP from 2000 to 2010 (US\$ billion)



Source: IMF Database (2011).

Figure (3) above shows the relatively significant growth of the Syrian economy during the period 2000-2010 with nominal GDP rising by an annual rate of 20%, surpassing all other rates recorded for other countries in the region. This can be mainly attributed to the economic policies adopted by the government, particularly in giving a freer hand to engaging in growth and attracting Arab and foreign investments. The contribution of the private sector to GDP increased from 52.5% in 2000 to around 61.5% in 2008 and 2009, though at the expense of the contribution of the public sector. The same situation applied to the private sector's contribution to investment and capital formation, averaging around 52% compared with 48% contributed by the public sector for the period 2006-2009. Table (1) shows the size of investment and capital formation in Syria.

Table (1): Capital formation at fixed market prices (2006-2009)

Year	Fixed Capital Formation at Fixed Market Prices for the Year 2000 (SYP Million)			Contribution Rates %		
	Public	Private	Total	Public	Private	Total
2006	143,791	164,878	308,669	46.6	53.4	100
2007	136,400	146,699	283,099	48.2	51.8	100
2008	112,739	153,794	266,488	42.3	57.7	100
2009	143,820	153,280	297,100	48.4	51.6	100

Source: The Fifth Annual Investment Report 2010 (Syrian Investment Commission).

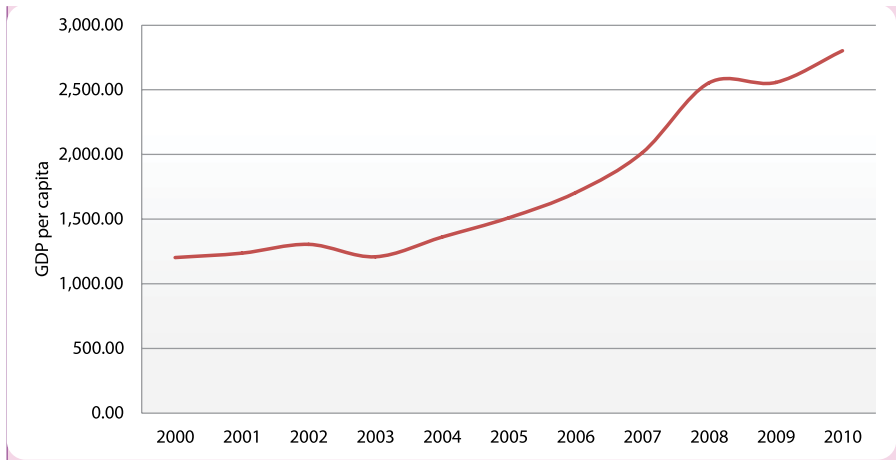
Unemployment rates gradually dropped to 2.3% in 2010 accompanied by a drop in inflation rates by 10.8% in 2010 compared with those of 2008. This means the Syrian economy had, by the end of the first decade of the third millennium, reached a healthy state and begun a trend of stable growth before the onset of the current crisis, as shown in Figures (4) and (5) below.

Figure (4): Rates of inflation and unemployment (2000-2010) (%)



Source: IMF Database (2011).

Figure (5): GDP per capita (2000-2010) (US\$ billion)



Source: IMF Database (2011).

It is important to point out that the above positive indicators are not free of distortions. Many skeptical economists have doubted the accuracy of the figures, which, according to them, conceal structural imbalances as they rely on quantitative factors, particularly physical capital. They base their argument on the inflationary growth in real estate speculation and in the financial sectors, as well as the unplanned expansion and growth in the tourism and commercial sectors in addition to decreasing labor costs. In addition, tax evasion is still an issue of concern as it rose to very alarming levels to the detriment of the economy through increasing indirect taxes at the expense of direct taxes. The result was a weakened investment climate and the businessmen's control over a large portion of the national income. Other researchers, however, put the blame on endemic corruption and political money that have plagued most elements of the state.⁽¹¹⁾

2. Syria's Economy in the Crisis: Determinants and Challenges⁽¹²⁾

With the end of the first quarter of 2011, Syria became the scene for a wave of mass protests calling for rights and freedoms, as well as condemning corruption and many of the Syrian government's practice. The protests, which were part of a wider protest movement in the Arab world known as the Arab Spring, soon escalated into a fully-fledged conflict and civil war in Syria between the Syrian regime and the opposition with all its factions. According to international studies and reports, this armed conflict has claimed the lives of over 100,000 people and left many times that number injured and millions displaced. The country had become the scene of battling local, regional and international powers in a crisis that is exacerbated by international sanctions. In the final analysis, production and labor were adversely reduced in the majority of sectors to a degree as high as a quarter.

On the statistical level, it is not possible to cite accurate figures to quantify the economy, given the repercussions of the crisis. It is equally hard, in addition, to make estimates on the financial losses sustained by the country for the following reasons:

1. No accurate figures or indicators relating to the situation in Syria are provided;
2. There are almost no reliable official or non-official statistics on such issues as the rates of unemployment and manpower;
3. The principles underlying public spending, particularly for the government's institutions, such as the army, are not disclosed;
4. The value of assistance given to Syria from its allies is not known;
5. The black market has expanded and so has tax evasion;
6. The revenues of exports and expenditure on imports are hard to know.

11 For more information, see: Hussein Bakeer, 2013, "The Syrian nightmare? Evaluation of the critical situation in Syria and Future Scenarios" (Arabic only). See also Syrian Centre for Political Research, 2013, "The Syrian crisis and socio-economic impacts" (available in Arabic only)

12 For more information, see Hussein Bakeer, 2013, "The Syrian nightmare? Evaluation of the critical situation in Syria and future scenarios" (Arabic only); "Impact of the conflict on Syrian economy and livelihoods", Syrian Analysis Project, July-2013, ACAPS, MapAction; "Socioeconomic roots and impact of the Syrian crisis", Syrian Center for Policy Research, 2013.

Impact on GDP and Capital

The destruction of physical and human capital in Syria has brought about economic catastrophes, with the financial losses sustained by the economy since 2011 estimated at around US\$48.4 billion at current prices.

Since the latest statistics on the GDP's value in Syria in 2010 suggest about US\$60 billion, it follows that the losses have so far accounted for nearly 81% of GDP for the year 2010. The losses are distributed into 50% of GDP, 43% in capital expenditures and 7% of military budget. Sustaining a major portion of the loss (83%), several factors have been hit especially hard by the crisis, including domestic and foreign trade, transport, telecommunications and extractive manufacturing. Sources of the damage include high inflation and a state of imbalance between the rates of production, consumption, investment and saving, with the consumer price index jumping as high as 51% and the largest segments of industry decreasing in production by around 25%.

Today, expectations are high that a further deterioration in the performance of Syria's economy will occur as the Syrian pound has lost around 67% of its value on the official market and 100% on the black market. Prices of basic commodities have soared higher than ever before, leading to the deterioration of private and domestic consumption and a decline in expenditure on investment to 7% of GDP. Negative net investment in the economy, trade imbalance and decreased exports of substantial economy-supporting goods, such as oil, as a result of the sanctions are all direct consequences of the situation.

Pre-crisis Syria had projected a possible GDP growth for the years 2011 and 2012 of around 7.1% and 5.1% respectively. The crisis, however, casts gloom on the scene with the prospect that GDP would drop by around -3.7% and -18.8% in that same period. This decrease is coupled with an increasing deficit in the trade balance of 18.8% and 9.1% in the financial and capital account, which entails an increasing aggregate deficit in the balance of payments to around US\$16 billion. This posed serious challenges for the foreign exchange reserves, which dropped from US\$18 billion in 2010 to US\$2 billion in 2012, indicating the Central Bank's failure to supply the market with hard currency. Those challenges are expected to raise unemployment to around 34.9% in 2012, which is likely to further increase so long as the crisis remains unresolved.

The crisis has been further complicated by the international sanctions imposed on Syria. According to statistics, 28.3% (US\$6.8 billion) of economic losses are attributed to the sanctions rather than the ongoing conflict. Oil export was the most damaged sector, with a decrease of US\$3.9 billion. Other exports have also decreased by 52% to Arab countries, 92% to European countries and 82% to Turkey. The decrease was accompanied by a decrease in imports and a failure to import the various types of production equipment, not to mention basic goods such as medicine and energy. Eventually, the prices of petroleum derivatives increased in the local market by 200%. All of those factors were collectively responsible for a rise in poverty rates in Syria and the increase in the number of the poor by around 887,000, according to latest statistics.

Table (2): GDP by Sectors (2010-2012) and the expected crisis-driven impact (SYP billion)

Sector	Actual	Crisis scenario based estimates		Continuous scenario based estimates (without the crisis)		Impact		Total impact
		2011	2012	2011	2012	2011	2012	
	2010	2011	2012	2011	2012	2011	2012	2011-2012
Agriculture	240	263	262	263	262	10	0	0
Extractive industry	186	163	99	185	185	23	86	109
Manufacturing	100	78	23	105	110	26	86	112
Facilities	37	39	32	42	48	3	16	19
Construction	52	59	48	54	55	-5	7	2
Trade	297	263	200	311	326	49	126	175
Transport and telecommunications	191	158	120	208	227	51	107	157
Money, insurance and real estate	80	87	66	88	96	1	30	31
Public services	207	228	210	230	257	3	46	49
Social services	59	60	73	67	76	7	4	11
Non-governmental organizations	1	1	2	1	1	0	-1	-1
GDP	1,452	1,398	1,136	1,555	1,642	157	507	664
Non-extractive Output	1,265	1,236	1,037	1,370	1,458	134	421	555

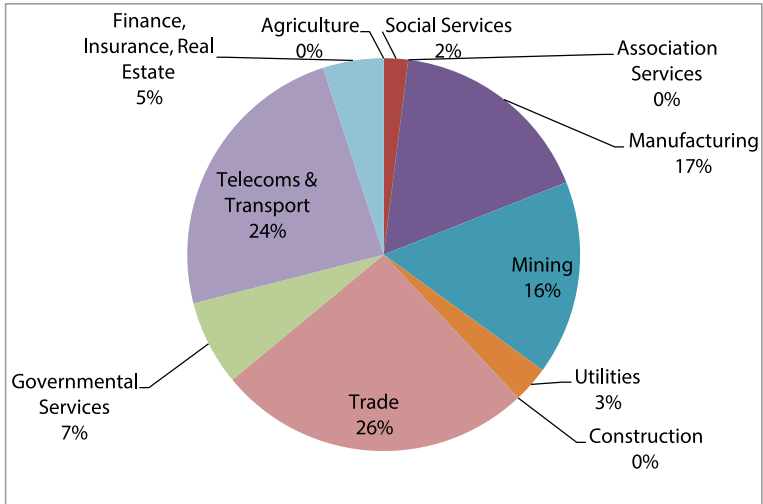
Source: Report on the Syrian Crisis: Roots and Socio-Economic Impacts, 2013.

Table (2) shows the imbalance and losses in all sectors, with agriculture, construction and public services standing at the lowest levels. Agriculture's growth was 10% and 0% in 2011 and 2012, respectively, owing to an improvement in the Syrian climate and the ability of farmers to better adapt to the effects of the crisis more than other sectors could. However, the major problem facing the farmers was logistics and transportability of their crops, which exacerbated the food situation for several regions. The construction sector started to recover in early 2011 by an increase in unlicensed building, but then receded in 2012 by 12%. The growth of public services increased in 2011 as more public spending was made after the beginning of the crisis, but the growth stopped in 2012 because of the state's failure to continue that increase, leading eventually to a recession in public services at a rate exceeding 7% in 2012.

The sector that is most damaged by the crisis is the retail and wholesale trading sector, including, for example, restaurants and hotels. The sector sustained losses at SYP175 billion, accounting for around 26% of total losses of GDP. The other sectors have experienced a great deterioration and losses amounting to 87%, with expectations that this will decrease their abilities to generate GDP from 53% in 2010 to 39% in 2012. In sum, the greatest impact of the losses sustained because of the current crisis has affected the domestic trade sectors, transport, telecommunications, mining industry and manufacturing. The decline is mainly caused by the international sanctions on Syria, the halting of Syrian industries, the destruction of a large number of factories and weak demand and domestic consumption.

The tourism sector lost 50% of its contribution as the foreign tourism revenues declined by around 60% in 2011. Oil production also dropped by around 47% in the same year while other sectors, specifically transport and telecommunications, lost around SYP175 billion in 2011. In addition, the value added of the manufacturing sector fell by 76% in both the public and private sectors.

Figure (6): Breakdown of losses (gains) as a result of the crisis according to sector (2010-2012)

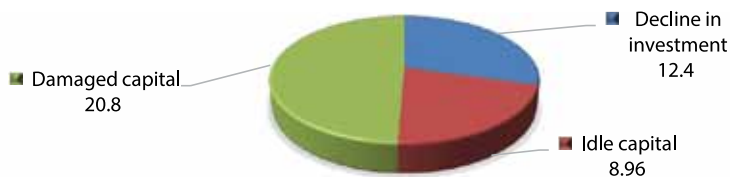


Source: Report on the Syrian Crisis: Roots and Socio-Economic Impacts, 2013.

Figure (6) above shows a sharp decline in private consumption demand accounting for 42% of total losses when a comparison is drawn between the crisis and its continuity scenarios. Those losses were reflected in Syria's trade balance, with exports falling in 2012 by as much as 38.4% compared to expectations before the crisis. Imports also suffered a decline in 2012 by 44.5% of the pre-crisis scenario and though they grew in 2011 as a precautionary measure by the government they soon fell dramatically as a result of the sanctions.

The total impact on the national economy is evinced by the huge losses sustained by GDP in Syria after the crisis compared with the scenario before the crisis. Those losses amounted to US\$42.1 billion distributed as shown in Figure (7), broken down into three elements: the decrease in net fixed capital formation, i.e., investment, by US\$12.4 billion, a decrease in production capacity by US\$8.96 billion and a decline in the fixed capital component by US\$20.8 billion.

Figure (7): Estimated losses (2010-2012) in capital stock at current prices (US\$ billion)



Source: Report on the Syrian Crisis: Roots and Socio-Economic Impacts, 2013.

A noteworthy element of the economic losses is the opportunity cost for the losses accrued by military spending. Such losses, according to studies, are not mentioned in the GDP accounts. In general terms, military spending directs resources from production into military operations, which are not economically feasible. Due to the lack of data and statistics, some studies estimate that the military spending increased by around 2.2% of GDP in 2011 and 6.6% in 2012, which is equal to US\$3.6 billion.

Table (3): Overall losses of Syria's economy (US\$ million)

	2011	2012	Total
GDP losses	6,460	17,637	24,098
Damages in physical capital	5,721	15,067	20,788
Exceptional increases in military spending	951	2,608	3,559
Total economic losses	13,132	35,313	48,444

Source: Report on the Syrian Crisis: Roots and Socio-Economic Impacts, 2013.

Table (3) shows the total losses of the economy amounting to US\$48 billion in 2011-2012. Those losses are distributed as follows: 50% of GDP, around 43% of capital stock and 7% for increased military spending.

Impact on the Budget

Table (4) shows the impact of the crisis on the Syrian budget, with revenues declining by 11 percentage points in 2012 compared with those in 2010 and by a rate of 48%. Public revenues also account for 12% of GDP in 2012, a decline from 23.1% in 2010.

Table (4): Impacts of the Syrian Crisis on the General Budget (2010-2012) (% of GDP)

Indicator	2010	2011 (estimate)	2012 (estimate)
Revenues	23.1	18.9	12
Oil revenues	4.4	3.8	1.9
Tax revenues, non-oil	11.5	9.9	6.7
Non-tax revenues, non-oil	7.1	5.2	3.4
Spending	26.9	27.6	22.1
Current spending	18.1	20.9	18.5
Salaries and wages	11.5	14.4	14.7
Goods and services	1.2	1.2	0.7
Interest payments	1.1	1.2	0.7
Spending on development	8.8	6.6	3.5
Budget balance	-3.8	-8.6	-10.0

Source: Report on the Syrian Crisis: Roots and Socio-Economic Impacts, 2013.

The decline is basically due to dropping oil revenues. The Syrian government lowered investment spending (as a ratio of GDP) from 8.8% in 2010 to 3.5% in 2012. In return, there was an increase in wages from 11.5% to 14.7% in 2010-2012 to compensate for part of the decline in the purchasing power per capita. This increase was accompanied by another increase in current spending as a ratio of GDP from 18.1% in 2010 to 18.5% in 2012. All of those elements have contributed to a rise in the budget deficiency from 3.8% of GDP in 2010 to 10.1% in 2012, while the debt amounted to 40% of GDP in 2012 compared with around 23% in 2010.

Impact on the Balance of Payments

Table (5) shows the alarming increase of the current account deficit from US\$367 million in 2010 to US\$7.329 billion in 2012. This increase was accompanied by a dramatic decline in the capital account, which suffers from a deficit of US\$3.589 billion, having been US\$1.539 billion in 2010. This means a decline in capital by US\$5.128 billion between 2010 and 2012. As for the total balance of the balance of payments, it reached a deficit of US\$10.918 billion in 2012 compared with a saving of US\$1.172 billion in 2010, a decline of US\$12.090 billion.

Table (5): Impacts of the crisis on the General Budget and the balance of payments (2010-2012) (US\$ million)

Indicator	2010	2011 (estimated)	2012 (estimated)
Current account balance	-367	-5,255	-7,329
Trade balance	-3,663	-4,688	-6,375
Exports	12,274	12,000	2,804
Oil	5,478	4,608	548
Non-oil	6,796	7,392	2,256
Imports (FOB)	-15,937	-16,688	-9,178
Services (net)	3,860	100	-2,123
Income (net)	-1,514	-1,917	-142
Transfers	949	1,250	1,311
Financial and capital account	1,539	202	-3,589
Capital transfers	287	190	24
Financial account	1,252	13	-3,613
Direct investments	1,469	735	-735
Investment portfolio	-193	-385	-771
Other investments	-24	-336	-2,107
Error and omission	897	0	0
Weighted exchange rate	56.5	48.4	75

Source: Report on the Syrian Crisis: Roots and Socio-Economic Impacts, 2013.

Crisis-Driven Economic Losses in a Nutshell

The crisis in Syria poses a grave challenge to the Syrian economy and makes it difficult to speculate on any way out in the short and medium terms, even once the crisis is over. The situation outlined above has led Syria's credit rating to be downgraded around three times since the beginning of the crisis. The Syrian pound had already lost a great portion of its value, reaching SYP68 against the US dollar in 2012 and suffering a major decline in 2013 to around SYP200 against the US dollar, a drop from SYP48-50 against the US dollar before the crisis. This decline affected inflation rates and increased consumer prices by up to 51% as the prices of many commodities soared. Household gas and electricity rose by 99% followed by foodstuff and dairy products (75%), non-alcoholic beverages (71%), sugar (61%), clothes and shoes (57%) and finally bread and cereals (54%). It also affected the quality of health care services and all other indicators relating to human resource development, including teaching. A broader overview can be seen in Tables (6) and (7):

Table (6): Overview of the economic impacts of the Syrian economic crisis

	2011	2012	Total
Economic Impacts			
Total economic losses	13.1	35.3	48.4
GDP losses (US\$ billion)	6.5	17.6	24.1
Losses caused by the sanctions			
Loss in capital stock (US\$ billion)	5.7	15.1	20.8
Increase in military spending (US\$ billion)	1	2.6	3.6
Government deficit	8.61%	10.09%	
Balance of payments (US\$ billion)	-5.05	-10.92	-15.97
Inflation from March 2011 through September 2012			151%
Unemployment	14.88%	34.87%	

Source: Report on the Syrian Crisis: Roots and Socio-Economic Impacts, 2013.

Table (7): Overview of the social impacts of the Syrian crisis

	2011	2012	Total
Human development index	0.613	0.554	-15%
Growth rates	1.51%	-2.51%	
Mortality rates	0.43%	0.66%	62%
Refugees (thousands)	30	512	542
Migrants (thousands)	160	688	848
IDPs (thousands)	0.2	1.8	2
Poverty increase (billion)			
Absolute poverty			1.55
Abject poverty			3.11
Directly caused by the sanctions			0.877
Health			
Mortality (thousands)	7	53	60
Injured (thousands)	28	211	239
Decrease in spending (2000 prices)			50%
Education			
Damaged schools (until 2012)			2,362
Decrease in spending (2000 prices)			48%

Source: Report on the Syrian Crisis: Roots and Socio-Economic Impacts, 2013.

Three years after the crisis, the national economy sustained huge financial losses; the ESCWA index shows that Syria's GDP decreased by 45% and that the number of unemployed and impoverished reached alarming levels. It also highlighted a decline in the performance of most sectors of the economy, particularly health, treatment and education. The socio-economic consequences are devastating, even before one considers the mothballing of a large number of factories and pharmaceutical plants and the decline in foreign trade.

In 2013, several crises had adverse effects on the wellbeing of people and economic sectors. These include the oil, diesel, household gas, bread and electricity shortages. In addition, the value of the Syrian pound plunged and the prices of basic commodities soared to alarming levels. The trade sector was severely shackled by the sanctions, leading to difficulties in importation and many other challenges in respect of funding, shipping, distribution and collection. In a similar manner, the industrial sector was challenged by the factories being put out of service after bombardment, not to mention the soaring of production input prices, the disruption of electricity and increases

of fuel prices. The agricultural production sector also saw an acute recession in view of a lack of local demand and difficulties in either exporting its products or reaching the farms to deliver necessary supplies of seeds, water, laborers and transport vegetables.

On the other hand, the government managed the crises and provided basic goods with the assistance of friendly countries and through lines of credit funding was granted for local imports. This contributed to meeting some of the basic needs of the population. The Central Bank of Syria (CBS) also managed to keep a reasonable control of the exchange rates of the local currency against other currencies and retained acceptable exchange levels, the Syrian pound's value having deteriorated for a period of time.

As for the private banking sector, the operational risks increased in view of the current situation of the country. Some banks were the victims of looting, robbery, embezzlement and fraud, forcing the CBS to pursue a more stringent approach to its monitoring role with the aim of preserving the assets of banks. The great bulk of these banks' activities, though, were restricted to funding and paying out the prices of imports (credits and policies), managing cash and liquidity and treating cases of credit default. Unrealized gains resulting from the change in exchange rates/ structural positions, which were accrued in the previous year and which covered most of the operational losses, are expected to disappear in 2013, given the improvement in the Syrian pound's exchange rates and its stabilization. As for provisions, there is a strong possibility that new regulations will be enacted for credit rating and provisioning to reduce the impact of such provisions on the profitability and capital adequacy of banks will be avoided.

Chapter III

Developments of the Syrian Refugee Crisis with Specific Reference to Jordan

This chapter discusses the development of the Syrian refugee crisis in Jordan, though it starts with a review of Jordan's long history of addressing refugee crises since 1948. It then provides some facts and figures particularly relating to the Syrian refugee issue in Jordan since the outbreak of the crisis in the first quarter of 2011. It also reviews, in summary, the international obligations of Jordan in dealing with refugees and highlights some key data about Syrian refugees in the region.

1. Jordan and Refugees: A Historical Review

Since its foundation, Jordan has always hosted Arab and non-Arab influxes of refugees and internally displaced persons (IDPs). The earliest recorded wave of refugees dates back to the 19th century with the coming of Muslim Circassians, who fled the Russian invasion of their homelands in Caucasus region. The same situation applied to Chechens and a small Armenian minority.⁽¹³⁾ In more recent times, particularly after the foundation of the Kingdom in 1921 and its independence in 1946, Jordan received several IDP and refugee waves, the latest of which is the Syrians. Two years after its independence, Jordan received a huge influx of Arab refugees in the wake of the 1948 war, the occupation of around 80% of Palestine and the creation of Israel as an internationally recognized state. In the aftermath, over 100,000 Palestinians were officially registered as refugees in Jordan. In the midst of the concomitant economic and political burdens, Jordan moved ahead in forming a confederation with the West Bank in 1950. However, before the country could begin its macroeconomic development in the new reality imposed by the confederation, the June 1967 war broke out, displacing into Jordan over 140,000 citizens fleeing a new occupation and seeking safety in the more stable part of the country. Today's statistics show that Jordan hosts the largest number of Palestinian refugees and IDPs, amounting in total to over 1.6 million.

It is an established historical fact that in 1948, around 100,000 refugees crossed the Jordan River seeking shelter in temporarily built tents, mosques, schools and villages. In response, international organizations, such as the International Committee of the Red Cross (ICRC), followed by the United Nations Relief and Work Agency for Palestinian Refugees in the Near East (UNRWA), offered emergency assistance and care to the refugees. The camps were afterwards replaced by housing units built by the UNRWA, but those units became overcrowded with the growth in the refugee population and the reunions of Palestinian families. This added to the financial burden on the Kingdom, which faced the need to spend more on the infrastructure and superstructure of the camps. The country was taken aback, however, two decades later by the 1967 war

13 For more details on Jordan's demographics, see http://en.wikipedia.org/wiki/Demographics_of_Jordan

that ended in the occupation of all West Bank territories, in addition to the Gaza Strip and some parts of Syria and Egypt. The immediate consequence was the influx of a new wave of 140,000 refugees and around 240,000 IDPs to Jordan. That reality required the building of new camps, entailing huge additional pressures on the infrastructure and increasing the financial burdens on Jordan's economy. Although UNRWA helped in improving the roads and associated infrastructure, Jordan still had to shoulder the largest portion of the burden by being the host country.¹⁴ Some studies of the 1967 war state that Jordan received around 400,000 displaced persons from the West Bank, accounting at that time for around a third of Jordan's population. The figure suggests the tremendous pressures on the infrastructure, not to mention the losses in resources sustained by Jordan in agriculture, tourism and industry as a direct result of the occupation of the West Bank.

Jordan's experience with refugees IDPs, however, was not limited to Palestinians. It received several flows of refugees and IDPs from its Arab neighbors as a result of the many incidents hammering the Arab region. In 1974, it received Lebanese refugees after the outbreak of the civil war in Lebanon. Some of those were businessmen, families and international organizations that used to be based in Lebanon, such as ESCWA and UNESCO. No accurate number is given for Lebanese refugees as the situation ended in either resettlement in third countries or the refugees remaining in the country, including some international organizations, as residents and not as refugees, in the technical sense. Jordan also received limited waves of Iraqi refugees or residents during the Iran-Iraq War between the late 1970s and early 1980s.

In August 1990, the Iraqi invasion of Kuwait displaced to Jordan another massive wave of over 300,000 Jordanian and Palestinian expatriates. That involuntary return, as shown in Table (1) below, caused a sudden and abnormal increase in the population by 10%. The economy had, once again, to accommodate for those returnees, with serious implications for the infrastructure of an economy unprepared to address such a huge abnormality. Though the Iraqi war ended with the liberation of Kuwait in February 1991, the socio-economic consequences could not be eased. Many returnees could not go back to Kuwait for various reasons. Meanwhile, economic sanctions were imposed on Iraq, resulting in waves of refugees and IDPs, culminating in 2003 with the American-NATO invasion of Iraq. Estimates vary for the consequences of the Iraq on Jordan. The available figures, however, show that Jordan dealt with not less than 750,000 refugees and foreign residents, which accounted at that time for around 15% of the total population. As a result, the infrastructure continued to be strained despite the arrival of several Iraqi businessmen, investors and wealthy people, who could do without assistance from the state. Indirect pressures began to be felt on the infrastructure, including roads, water supply, electricity, communications, education and health. There was also competition between Jordanians and other groups over public subsidies on basic commodities, fuel products and public services.

14 For more details, see <http://www.unrwa.org/atemplate.php?id=118>

Table (1): Development of the number of refugees and IDPs in Jordan (1948-2013)

Year	Overall Population	IDPs and Refugees	Ratio to Population (%)
1948	400,000	100,000	25%
1967	1,278,416	380,000	30%
1974	1,747,710	Not available	---
1990	3,170,000	300,000	9.5%
2003	5,164,000	750,000	14.5%
2011	6,508,271	1,500	0.023%
2012	6,508,887	230,000	3.1%
2013	7,300,000	952,000	13.0%

Source: Researcher's calculations in light of available official statistics.

The most recent wave of refugees is that of the Syrians, starting in 2011. The crisis in Syria generated large numbers of refugees officially registered with UNHCR in Jordan and exceeding 600,000. An equal number of refugees have crossed the official border entry points in successive waves without registration. They spread all over the country, benefiting from the strong social ties, kinship and business relations established between Jordanians and Syrians over a long period of time. A later chapter of this study will be specifically devoted to the analysis of this issue in broader scope after a brief discussion of Jordan's obligations before the international community in refugee-related matters.

2. The Present Problem of Syrian Refugees in Jordan: Facts and Figures

Figures (1-4) below show the development of the problem of flows of UNHCR-registered Syrian refugees since the outbreak of the crisis in March 2011 until 2014. Tables (2-4) also show the numbers of Syrian refugees and migrants according to official Jordanian figures. Statistics show that the total number of Syrian refugees, whether residing in the official camps or entering the country through the official border entry points, reached around 230,000 by the end of 2012.¹⁵ The numbers rose by the end of 2013 to over 550,000 officially registered refugees. According to UNHCR (Figure 1), officially registered Syrian refugees amounted to 11 persons in March 2011, rising to around 67,000 by the end of 2012. Figure (2) shows the increase in numbers in 2013 amounting in some months, such as April, to around 88,000, averaging 3,000 refugees a day. The trend then declined by the end of 2013 to over 600 refugees a day. In 2014, there has been some drop in the daily flows, to reach around 400 refugees a day. It is worth noting that the aforementioned UNHCR data (as in the figures below) mainly include Syrian refugees living in the official shelters, particularly in the bordering cities of Mafraq and Ramtha.

¹⁵ The number of officially registered refugees increased to around 600,000 by the end of February 2014; that is before one considers unregistered Syrians, who exceed that number, amounting, according to the PSD's statistics, to around 750,000.

Figure (1): Aggregate numbers of Syrian refugees since the outbreak of the crisis until the end of 2012 (UNHCR)

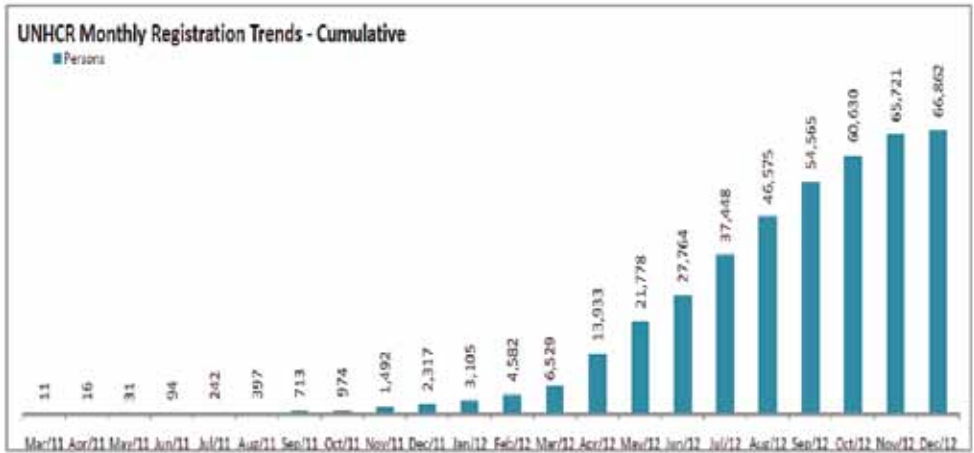


Figure (2): Aggregate numbers of Syrian refugees between 2013 and early 2014 (UNHCR)

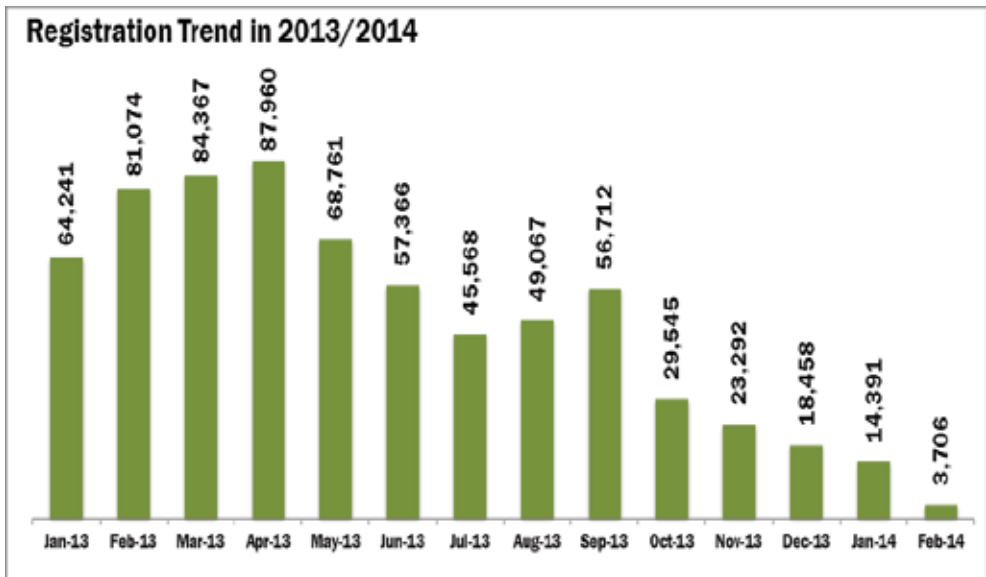


Table (2) above shows the quantity, distribution and locations of Syrian refugees as of early 2014. It is based on a review of the official figures obtained from PSD and Jordan Hashemite Charity Organization (JHCO) covers all persons entering the country, including those who came through the non-official entry points on the 375 km long borders and those who entered the country through the official entry points.

Getting the figures from PSD data ensures the accuracy of the findings of the study as this data shows the exact locations of the refugees and calculates their number by subtracting the number of persons who left for Syria or to a third country. As shown in Table (3) and Figure (3), around 81% of the total refugees live in Amman and the border governorates of Jordan, namely Mafraq (35%) and Irbid (21%), especially in Ramtha, bringing the total to 56%. On the family level, JHCO and official data on registered Syrian refugees show that the Syrian refugees are distributed in families composed of 5.8 persons per family.

Table (2): Numbers and distribution of Syrian refugees and residents in the Kingdom as of early 2014

Location of Refugees	Number (thousands)
Al Za'atari/ Mafraq	112,874
Sakan Al Hadeeqa/ Ramtha	810
Murejeb Al Fuhood Camp/ Mafraq	3,848
Sakan Camp/ Mafraq	1,260
Outside the camps	431,593
Total officially registered refugees	550,385
Refugees guaranteed through the governor	32,006
Departures to Syria	(54,000)
Non-refugee Syrian residents	750,000
Total Syrian residents in Jordan	1,302,717

Source: PSD-SRCD.

Table (3): Distribution of Syrian refugees in the Kingdom

City/Town	Number	Ratio (%)
Mafraq	65,0	10,5
Al Za'atari	126,3	24,4
Murejeb Al Fuhood	3,8	0,7
Irbid	130,1	21,1
Amman	143,5	23,7
Zarqa	46,5	8,3
Balqa	15,5	2,5
Jerash	10,7	1,8
Ajloun	10,0	1,7
Medaba	8,2	1,3
Karak	8,8	1,6
Ma'an	6,4	1,0
Aqaba	2,4	0,4
Tafilah	2,2	0,4
Others	3,4	0,7

Source: PSD-SRCD.

Figure (4) and Table (4) below show that over 51% of refugees are females. According to age, the largest segment falls in the 18-35 age group, which accounts for around 30% of total refugees. Children make up to a fifth of children below the age of four. The other fifth is in the range of 5-11 years of age. This means that about 40% of children are below 11, which increases the pressures on the state in catering for their wellbeing. Statistics also show that females and children below the age of 11 make up 70% of Syrian refugees, which also incurs considerable cost for the provision of social protection and welfare including health, education, social care, basic commodities such as household gas and bread. This also means that Syrian refugees are, eventually, benefiting from the subsidies given on those commodities and services. The UNHCR's statistics also show that the majority of refugees (around 63%) originally sought refuge from insecurity in their homeland while 34% sought asylum on political grounds. Whatever the reasons, those persons will not be likely return to their country before the end of the crisis and the restoration of peace and security in their country. This in turn links any additional costs to Jordan's economy with the solution of the Syrian crisis.

Figure (3): Geographical distribution of Syrian refugees in Jordan's governorates

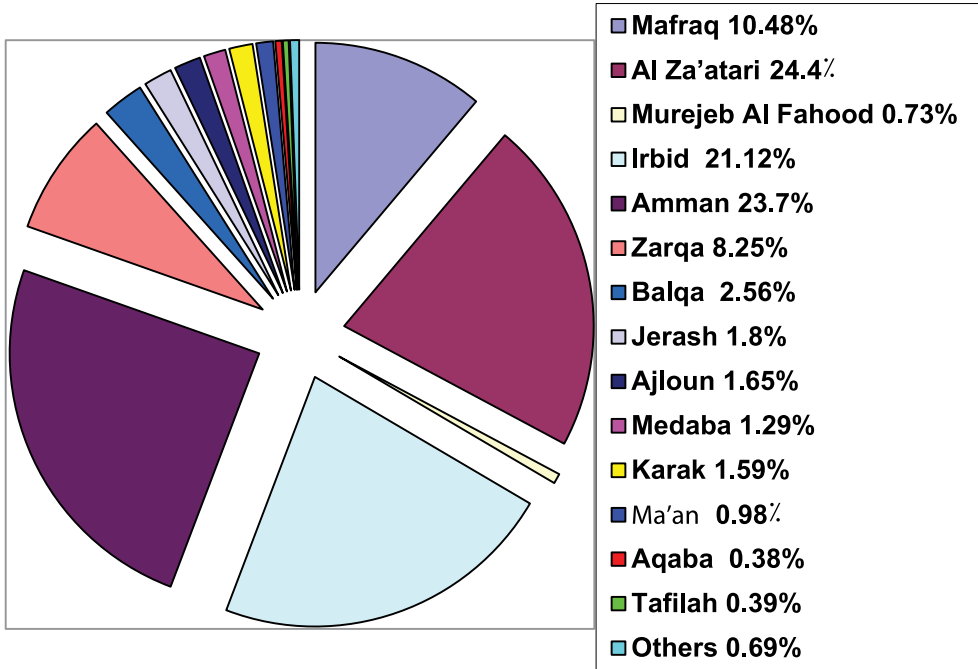


Figure (4): Demographics of Syrian refugees (UNHCR)

Age and Gender Breakdown

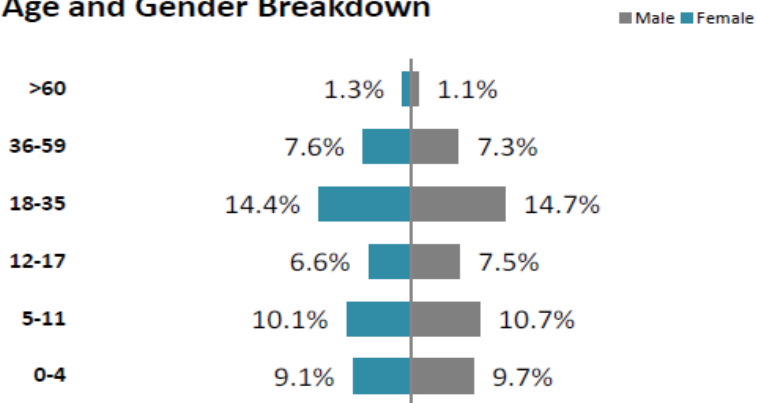


Table (4): Syrian refugees according to age and gender

Age	0-4	5-11	12-17	18-35	36-59	+60	Total
Females	49,551	59,263	40,621	90,596	50,013	11,727	301,771
Males	50,651	61,351	42,460	78,512	39,376	8,443	28,0972
Total	100,202	120,793	83,081	169,108	39,389	20,170	582,743
Ratio	17.2%	20.7%	14.3%	29.0%	15.3%	3.5%	100%

Source: PSD-SRCD

Since the outbreak of the crisis, Jordan coordinated with UNHCR to deal with the Syrian refugee situation, particularly in light of the incoming refugee families. The first waves of Syrian refugees began with some Syrian families seeking refuge with Jordanian families in bordering towns, especially Ramtha. Some Jordanian families hosted Syrian refugees. Afterwards, Syrian refugees were hosted in Al Bashabshe as a safe haven, but with the increase in the influxes, Syrians were seen squatting public parks and spaces. In the meantime, Al Za'atari Camp was established in Mafraq. The following points show how Jordan addressed the massive flows of Syrian refugees.

1- Syrian refugees were initially admitted to the country through non-official entry points across the borders. Then they were hosted in Ramtha shelters, public parks, industrial cities and public facilities. The government allowed the UNHCR to establish several offices in the shelters to facilitate the registration of those refugees. It also allowed for a guarantee system whereby a Syrian individual or family is allowed to personally host Syrian refugees if the requirements are met. Registration was also facilitated for those who live in and out of Amman and the government facilitated their travel to Amman for registration with the UNHCR.

2- Jordan's government created a high commission mandated with Syrian refugee affairs. It was chaired by the Prime Minister with the membership of ministers and competent authorities including PSD, the Armed Forces (JAF) and JHCO. The government appointed a spokesman on refugees to update the committee on matters pertaining to the Syrian refugees.

3- The government appointed JHCO as the sole agency authorized to deal with all local and foreign charities willing to make monetary and in-kind donations to the Syrian refugees inside and outside the camps.

4- Jordan's government issued a joint appeal on Syria with UNHCR and other international humanitarian agencies in August 2012. The appeal states that the total costs that need to be covered to host around 200,000 Syrian refugees exceeds US\$600 million. The United Nations and its humanitarian partners had already made an appeal in March 2012 for aid amounting to US\$84 million to help in covering the costs of hosting refugees for six months.

5- Al Za'atari Camp was established in July 2012 in Mafraq, which borders Syria, in cooperation with UNHCR; it has become the second largest refugee camp in the world. The size of the camp is over 8 km² and had an initial capacity for accommodating 80,000 refugees. In its early days, a part of the camp 1.2 km² in size was used, with a capacity for around 40,000 refugees. Today, the camp hosts over 120,000 refugees.

UNHCR is responsible for refugees in the camp, which is run by the PSD-SCRD. The camp was supplied with the best possible infrastructure and was developed in line with the increasing inflows of refugees, climate and physical and structural needs. Four field schools were established in cooperation with the Bahraini Royal Charity Organization in addition to four field hospitals, three of which were donated by Morocco, France and Italy, as well as one outside the camp provided by the United Arab Emirates.



Al Za'atari Camp located close to Mafraq

6- Al Za'atari Camp located close to Mafraq

6- The Council of Ministers has recently appointed a chairman for all executive bodies, committees and official agencies in charge of refugees. The chairman answers to the Prime Minister.

Figure (5): Distribution of Syrian refugees in Jordan up to 2012
Distribution of Syrians in Jordan

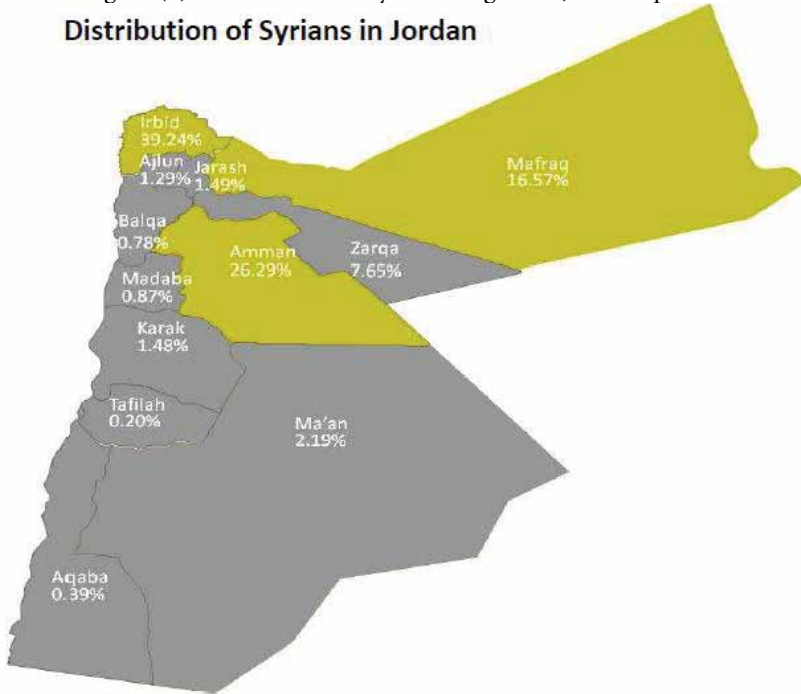
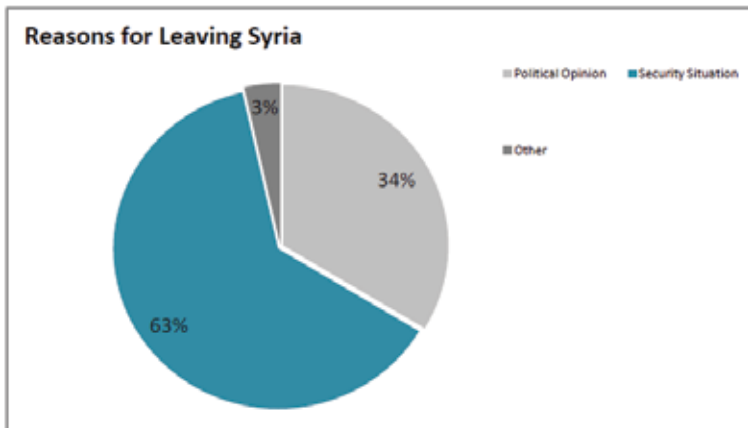


Figure (5): Distribution of Syrian refugees according to reasons for asylum as of November 7th, 2012 (UNHCR)



63% of Syrians registered expressed fear of return due to the general security situation, mainly fear of physical harm. 34% expressed fear of return due to their political opinion.

07-Nov-12

3. International Constraints on Refugees

The first constraint is the 1951 Convention relating to the Status of Refugees, which is the key legal document defining who is a refugee, their rights and the legal obligations of states towards them. It was adopted in July 1951 by Conference of Plenipotentiaries on the Status of Refugees and Stateless Persons. The aim was for the UN to affirm that “everyone is entitled to all rights and freedoms without any discrimination”. The preamble of the Convention, however, suggested that the granting of asylum may place unduly heavy burdens on certain countries and that the international scope and nature of its proposals could not, therefore, be achieved without international co-operation. As such, the Convention called upon the parties to support the UNHCR in dealing with refugee issues around the world. This underpins the second constraint on dealing with refugees around the world: the obligations of all countries towards supporting any international or national effort aimed at addressing the humanitarian, economic, political and social implications of refugees. Those countries that are unwillingly receiving influxes of refugees and which abide by relevant legal instruments, including the 1951 Convention and other human rights covenants, deserve without any doubt to be assisted by the international community. Otherwise, those same countries will not be able to handle such a humanitarian crisis as an issue of priority. This applies especially to those countries which are hampered by their poor resources in dealing with the worsening of existing domestic economic challenges. Jordan is a good example of such a country. The state budget has been so strained that it can no longer fulfill its social compact vis-à-vis impoverished and low-income citizens, even before facing such the unavoidable humanitarian situation on its borders with Syria.

The refugee issue has intensified around the world, with large waves of influxes of forced migrants crossing borders, particularly in the developing world. People in such influxes have been given refugee status in accordance with the 1951 Convention and the associated 1967 Protocol. Accordingly, refugees receive the rights recognized by international conventions and charters (16). This requires countries to provide full protection for refugees in large-scale inflows and to take all necessary measures for holding the international community, including the UNHCR, responsible for sharing the burden collectively and offering help to these countries. The United Nations, in addressing large-scale influxes of forced migrants, has defined a number of requirements. These require governments of the relevant host states to provide at least temporary shelter for refugees and call for the provision of immediate help from other countries in order to share the burden on a fair basis. The rationale is that observing human rights is a collective responsibility to be taken up by all countries. It is not the sole obligation of a given country.

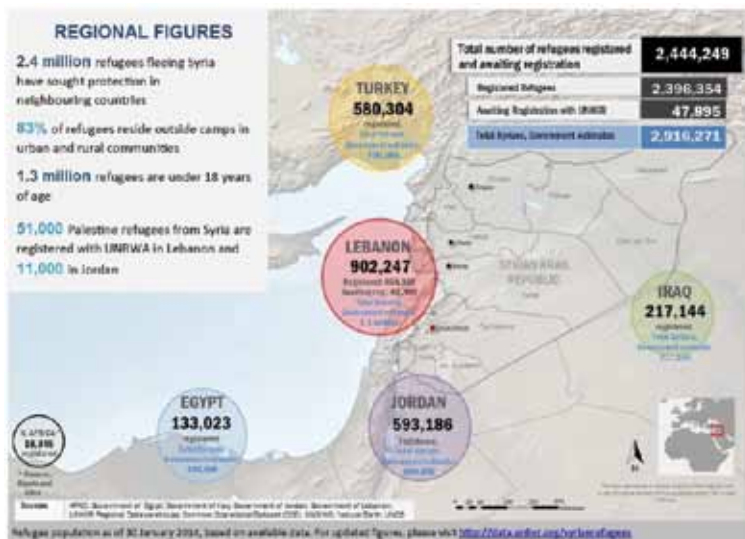
16 More information on defining refugee status, either for individuals or as groups, and their rights, duties and treatment can be found in the many topical papers and lectures delivered by Reyad Al Sulh.

Therefore, the 1951 Convention and the 1967 Protocol, in addition to the decisions of the UNHCR's Executive Committee, defined the manner in which to address all aspects of refugees. These include the procedures for defining the status of refugees and affording them adequate guarantees. Handbooks and conditions are also provided and state parties are permitted to participate in several ways in setting the criteria for defining the status of refugees. All of this is subject to fact-checking procedures and to the treatment of the various cases of refugees in terms of their social, physical, mental and gender status.

The 1951 Convention provides for the rights of refugees in addition to those guaranteed by international covenants relating to human rights. Such rights and privileges, according to the Convention, comprise three tiers. The first tier guarantees the refugee a legal status on an equal footing with foreigners residing in the host country; the second guarantees refugees a better position than that of a foreigner. The third guarantees refugees rights and privileges equal to those granted to the citizens of host countries. Obviously, those rights and privileges impose on host countries huge financial burdens, particularly in relation to education, health, labor rights, housing rights, welfare, water, protection, access to services and administrative assistance. Perhaps the only right that is guaranteed in international law yet not practiced in reality is the right to election and involvement in public affairs. In sum, hosting refugees incurs a heavy burden both on the macroeconomic and microeconomic levels which is worth discussing with reference to Jordan. This will be the subject of the last chapter of this study.

4. Facts and Figures for Syrian Refugees across the Region

Since the outbreak of the Syrian crisis in 2011, around two million Syrians have left the country, with 97% heading for the neighboring countries of Jordan, Lebanon and Turkey. The refugees have had a financial and demographic impact on those countries, particularly Lebanon and Jordan, both of which are poor in terms of resources. The following discussion highlights the impact of the refugee crisis on Lebanon and Turkey using the available relevant facts and figures. The figure below shows the distribution of Syrian refugees in Syria's neighbors as adopted from UNHCR .



Syrian Refugees in Lebanon ⁽¹⁷⁾

The number of Syrian refugees in Lebanon up until early 2014 is estimated at around 897,613, including 849,565 registered with the UNHCR in addition to a further 195,644 registered households. Official Lebanese figures indicate that there are around 1.5 million Syrian refugees, accounting for 25% of the total population and distributed among some 1,400 sites. The refugee crisis has had an impact on Lebanon with GDP for the years 2012-2014 declining by 2.9%, leading to further significant declines in wages, tax revenues, incomes, investment and public spending.

According to official statistics, the crisis has pushed approximately 170,000 Lebanese into poverty (over and above the one million currently living below the poverty line of US\$4 per day). The social security system is already fragile as Lebanon needs about US\$50 million of aid to achieve stability and improve the services provided to the poor and less privileged sections of the population.

17 For more information on the economic and social impact of the Syrian crisis on Lebanon, see the World Bank's study Lebanon Economic and Social Impact Assessment of the Syrian Conflict, September 2013.

The spillover into Lebanon has moved beyond the humanitarian to the social and economic spheres as unemployment rates rose to 20%, with the number of unemployed expected to range from 220,000 to 324,000, most of whom are unskilled. A World Bank study also estimates a need for around US\$166-242 million for short-term job creation in response to the impact of the Syrian crisis on the labor market.

On the revenue side, spillovers from the conflict are estimated to cut US\$1.5 billion in revenue collection and increase public spending by US\$1.1 billion, which means the total cost of Syrian refugees stands at US\$2.6 billion. All sectors have been affected, entailing a need for the government to receive US\$2.5 billion in aid to preserve its economic stability. Other catastrophic impacts on the economy are foreseen as GDP is expected to drop by 2.9%, causing major damage worth billions of dollars.

The Syrian crisis had huge social impacts in 2012, as around 40,000 Syrian students were enrolled in public schools at a cost of US\$29 million. The figure is set to rise to 170,000 in 2014, accounting for 57% of total enrollment rates at schools. The cost of this impact is estimated at US\$183 million in 2013 and around US\$434 in 2014.

The forecasted fiscal cost to the infrastructure for the years 2012-2013 and 2014 is shown in Table (5) below and ranges from US\$455 in the base influx scenario to US\$589 in the overflow scenario. Lebanon's electricity sector, for example, which is already facing numerous challenges, will be negatively impacted by the refugee crisis with aggregate losses amounting to around half a billion dollars. This brings the total fiscal impact on infrastructure services, including electricity, water and garbage disposal to over US\$1.1 billion for the same period, according to the World Bank's estimates.

Table (5): Impact of Syrian refugees on Lebanon's infrastructure (US\$ million)

Impacted areas	2012	2013	Base influx scenario 2014	Overflow scenario 2014	Total 2012-2014 (base influx of refugees)
Infrastructure	21	208	360	455	589
Electricity	16	170	314	393	500
Water and sanitation	5	5	8	10	18
Garbage disposal and municipal services	-	33	39	52	71

Source: World Bank's calculations and estimates.

The Problem of Syrian Refugees in Turkey

In the early period of the Syrian crisis in 2011, 252 Syrians fled to Turkey, but with the escalation of protests and violence in Syria, the figures dramatically increased. According to official statistics, over 80,000 Syrians had sought refuge in Turkey by the end of 2012 and 440,000 in 2013. By the start of 2014, the figure had risen to around 580,542 Syrian refugees and will continue to rise if the situation persists. The number of Syrian refugees in the camps in 2013 is estimated at around 200,000, in addition to 220,000 outside the camps. There are also around 15,000 refugees with official residence permits. According to UNHCR estimates, there are around 100,000 to 200,000 Syrian refugees who illegally reside in Turkey, which places the total number of refugees for 2014 between 680,000 and 780,000. Syrian residents account for around 0.8% of total population in Turkey, which is lower than the rates in Jordan or in Lebanon, where Syrians account for 20%-25% of the total population. The majority of registered Syrian refugees live in the southern parts of Turkey along the borders of their homeland. Refugee camps there host 21,000 in Kahramanmaraş, 13,000 in Adana, 10,000 in Adiyaman, 10,000 in Osmaniye and around 6,300 in Maltiye.

Losses sustained by Turkey because of the Syrian and refugee crises are estimated at around US\$1.5 billion for 2013. Those losses, however, are not as catastrophic and alarming as in Jordan or Lebanon because of the stronger economy in Turkey and its ability to absorb such crises. For example, although Turkish exports to Syria dropped in 2011 by 15%, a total increase of 18% was recorded in 2012. The most affected province was Gaziantep, which borders Syria. Its exports to Syria dropped by 44%; but in return the exports to Iraq rose by 30%, with total exports rising in value from US\$4.8 billion in 2011 to US\$5.6 billion in 2012. This was not the case in Sanliurfa, where the 18.8% rise in exports to Iraq could not make up for the 28.5% decline in exports to Syria, making such exports drop from US\$148.3 million in 2011 to US\$110 million in 2012. In Hatay, total exports slightly declined from US\$2.05 billion to US\$2.04, with exports to Syria dropping by 37.4% and exports to Iraq increasing by 28.9%.

Studies on Turkey indicate that the key social impact of the crisis was an imbalanced demography in the southern region, particularly in Hatay. The province suffered from political unrest caused by the presence of members of the pro-Syrian Alawite sect, who opposed the Turkish response to the Syrian crisis. Other social impacts include the rise of crime, extremism and the proliferation of extremist organizations. This, in effect, provoked Turkish public opinion as official statistics show that 12.49% of terrorist acts committed in Turkey had their roots in Syria. Other studies confirmed the widespread presence of Al-Qaeda in Turkey and the military recruitment of combatants, particularly in the southern region of the country.

Chapter IV

The Implications of the Crisis on Host Communities in Irbid and Mafraq – A Socio-Economic Perspective

With the beginning of the first quarter of 2011, Syrian refugees poured into Jordan, fleeing the instability of their country in the wake of the Arab Spring. Throughout the two years that followed, their numbers doubled and had a clear impact on the bordering governorates, namely Mafraq and Irbid, which share a border with Syria extending some 375 kilometers and which host the largest portion of refugees. Official statistics estimated that at the end of 2013 there were around 600,000 refugees, of whom 170,881 and 124,624 were hosted by the local communities of Mafraq and Irbid, respectively. This means that the two governorates are hosting around half of the UNHCR-registered refugees in Jordan.

The accompanying official financial burden on Jordan, as estimated by some international studies, stood at around US\$2.1 billion in 2013 and is expected to hit US\$3.2 billion in 2014. This chapter discusses the socio-economic impact of Syrian refugees on the host communities in both governorates. Relevant data has been derived from those studies conducted for the same purpose, in addition to field visits conducted by the research team and interviews conducted with those in charge, local community members and some refugees in these two governorates.

1. Overview of Mafraq and Irbid Governorates

It is relevant to give a brief account of the administrative structure, demographics and financial conditions of the two governorates.

Mafraq Governorate

Mafraq governorate is situated in the north-eastern part of the Kingdom and it borders Iraq (east and north), Syria (north) and Saudi Arabia (south and east). It has an area of 26,552 km² making up 29.6% of the total area of the country. The Northern Badiya region comprises the largest portion of the governorate. This makes it the second largest governorate after Ma'an. The population amounts to 287,000 with a population density of 9.5 per km². Mafraq has always maintained a strategic position as it is situated at the crossroads of international routes linking up the Kingdom of Jordan to the Republic of Iraq via the Karama entry point, located at a distance of 285 km from the governorate's center. It also has features the Jaber border crossings into the Arab Republic of Syria, located 20 km from the governorate's center.

Figure (1): Mafraq governorate and administrative divisions



Mafraq governorate is made up of four districts that are further divided into 18 municipalities, eight of which border Syria. These are:

- Al Za'tari
- Al Sarhan
- Hosha
- Um Al Jimal
- Sabha and Al Dafyana
- Prince Hussein bin Abdullah
- Deir Al Kahef
- Um Al Qateen

Table (1): Mafraq governorate's administrative divisions

Governorate	District	Municipality
Mafraq Governorate (18 Municipalities)	Al Qasaba	Al Manshiyya
		Rihab
		Bal'ama
	North-Western Badiyah	Al Za'tari
		Al Hussein bin Abdullah
		Hosha
		Bsilyah
		Al Sarhan
		Al Khalidiyyah
		Al Salhiyyah and Nayfah
	Northern Badiyah	Om Al Jimal
		Sabha and Al Dafyanah
		Om Al Qateen
		Deir Al Kahef
		Bani Hashem
		Al Sawafi
	Arruweshed	Arruweshed

Distribution of Syrian Refugees in Mafraq

Syrian refugees living in the abovementioned municipalities number around 134,000, making up 36% of the total population (Table 1). The figure, however, does not account for those who live outside the municipalities or in the camps, or for those who are unregistered. The Greater Mafraq Municipality hosts the largest number of Syrian refugees, who are equal in number to the Jordanian inhabitants (90,000). This figure shows a demographic imbalance in the city, which will eventually lead to a further demographic and economic imbalance if the situation persists. Table (2) below shows the distribution of Syrian refugees in the governorate.

Table (2): Distribution of Syrian refugees in Mafraq governorate's municipalities

Governorate	Municipality	Population	Syrians	Ratio of Syrians to Population
Mafraq (18 Municipalities)	Greater Mafraq	90,000	90,000	100
	Al Manshiyya	12,000	2,500	21
	Rihab	22,000	5,000	23
	Bal'ama	40,000	7,500	19
	Al Za'tari	15,000	3,500	23
	Al Hussein bin Abdullah	16,000	800	5
	Hosha	10,000	3,500	35
	Bsilyah	7,500	100	14
	Al Sarhan	22,000	9,000	41
	Al Khalidiyyah	30,000	3,500	12
	Al Salhiyyah and Nayfah	16,000	1,000	6
	Om Al Jimal	25,000	1,000	4
	Sabha and Al Dafyanah	20,000	3,000	15
	Om Al Qateen	15,000	850	6
	Deir Al Kahef	12,000	500	4
	Bani Hashem	6,000	1,000	17
	Al Sawafi	4,000	500	13
	Arruwshed	7,000	750	11
Total		369,500	134,000	36

The Financial Conditions of Mafraq Governorate

Just like other governorates and municipalities in the Kingdom, Mafraq governorate relies heavily in its budgeting and projects on the funds allocated to it in the national budget. Salaries and wages in Mafraq account for around 50-75% of total expenditure, a figure proportion attributed by some to maladministration and functional inefficiency. Mafraq's municipalities rely on the country's treasury and hence are unable to absorb the additional burdens imposed by the Syrian refugees. Tables (2) and (3) below show the degrees to which the municipalities are independent of the General Budget; these degrees should ideally not exceed 25% of total municipality budgeting.

Figure (2): Rates of independency of Mafraq's municipalities from the state budget (%)

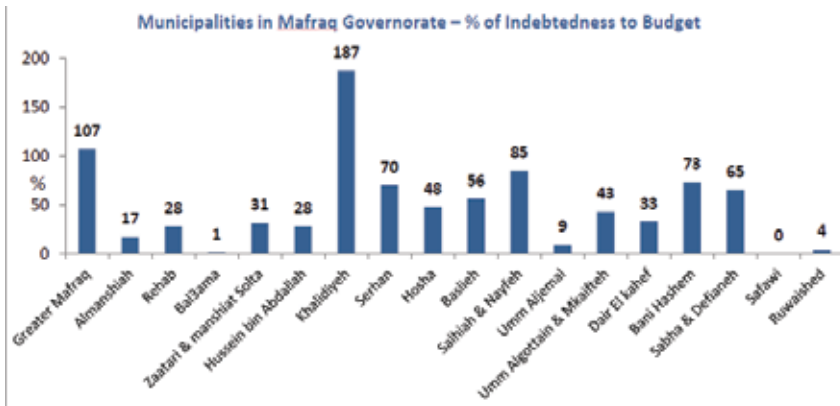
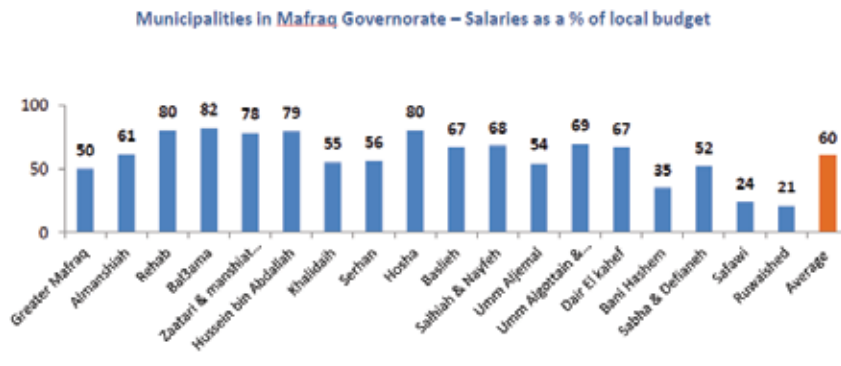


Figure (3): Ratios of salaries to municipal budgets (%)



Irbid Governorate

Irbid Governorate is located to the far north of the Kingdom. Its land extends from the Jordanian-Syrian borders to the Yarmouk River. The eastern regions of the governorate (Ramtha) are part of the Huran Plains that cross Syria and Jordan, while the northern parts overlook the Golan Heights. The western part is made up of medium-height plateau sloping gradually to below sea level in the Jordan Valley. The southern region (Al Mazar Al Shamali) has a high mountainous topography and a charming character as the region is adjacent to the Ajloun Mountains. It has around 1,112,300 inhabitants with a population density of 570 per km². It has an area of 1,621 km².

Figure (4): Irbid governorate and administrative divisions



Irbid governorate is made up of nine districts comprising 18 municipalities, six of which border Syria. They are:

- Ramtah
- Huran Plain
- Yarmouk Al Jadidah
- Al Saru
- Al Kafarat
- Al Shu'lah

Table (3): Administrative divisions of Irbid governorate

Governorate	District	Municipalities
Irbid Governorate (18 Municipalities)	Qasaba and Bani Obeid	Greater Irbid
	Qasaba	Irbid Al Gharbiyah
	Ramtha	Ramtha Al Jadidah
		Huran Plain
	Al Mazar Al Shamali	Al Mazar Al Jadeed
	Bani Kinanah	Al Yarmouk Al Jadeedah
		Al Shu'lahAl
		AlKafarat
		Al Saru
		Khalid bin Al Waleed
	Al Kura	Rabyat Al Kura
		Burqosh
		Deir Abi Sa'ed
	Northern Valley	Sharhabeel bin Hasna
		Muaz bin Jabal
		Tabaqat Fahil
Al Tayba	Al Tayba Al Jadeedah	
Al Wasatiya	Al Wasatiya	

Syrian Refugees in Irbid Governorate

According to official statistics, Syrian refugees living in Irbid governorate number around 239,750, making up 20% of the total population there. The figure, however, does not account for those who live outside the municipalities or in the camps, or those who are unregistered, suggesting that the real number is much higher. Al Tayba Al Jadeeda hosts the highest proportion of Syrians, accounting for nearly 57% of the total population there. Those figures imply a demographic imbalance, as in the case of Mafraq governorate. This heralds a future demographic and economic imbalance in both cities. Syrian refugees are distributed in Irbid's municipalities as shown in Table (4) below:

Table (4): Distribution of Syrian refugees in Irbid governorate's municipalities

Governorate	Municipality	Population	Syrians	Ratio of Syrians to Population (%)
Irbid Governorate (18 Municipalities)	Greater Irbid	520,000	120,000	23
	Irbid Al Gharbiyah	60,000	10,000	17
	Ramtha Al Jadidah	100,000	40,000	40
	Huran Plain	45,000	15,000	33
	Al Mazar Al Jadeed	55,000	6,000	11
	Al Yarmouk Al Jadeedah	16,000	4,000	25
	Al Shu'lah	18,000	4,000	22
	Al Kafarat	35,000	8,000	23
	Al Saru	15,000	4,000	27
	Khalid bin Al Waleed	30,000	1,500	5
	Rabyat Al Kura	45,000	2,000	11
	Burqosh	18,000	2,500	6
	Deir Abi Sa'ed	65,000	6,000	9
	Sharhabeel bin Hasna	40,000	5,000	13
	Muaz bin Jabal	45,000	1,500	4
	Tabaqat Fahil	42,000	1,250	3
	Al Tayba Al Jadeedah	7,000	4,000	57
	Al Wasatiya	29,450	5,000	16

The Financial Conditions of Irbid Governorate

The financial conditions of Irbid governorate and its municipalities are not very different from those of Mafraq governorate or those of other governorates and municipalities in the country. Its budget and projects rely heavily on the funds allocated to it in the national budget. Salaries and wages account for around 50- 75% of total expenditure, a figure some have attributed to maladministration and functional inefficiency. The situation is exacerbated by the additional burdens of Syrian refugees. Tables (5) and (6) below show the degrees to which the municipalities are independent from the public budget and the ratios of salaries to municipal budgets.

Figure (5): Rates of independency of Irbid's municipalities from the state budget (%)

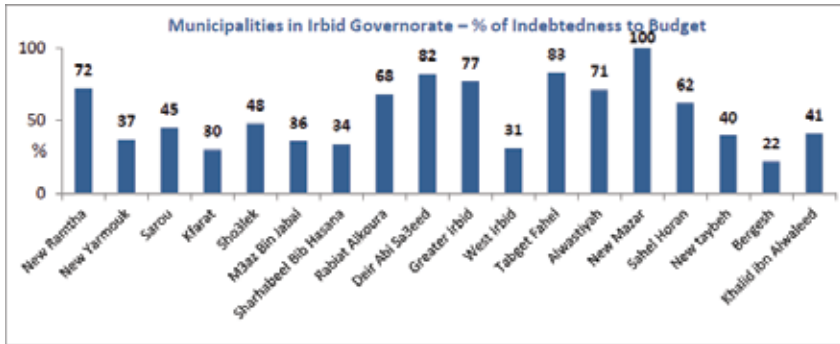
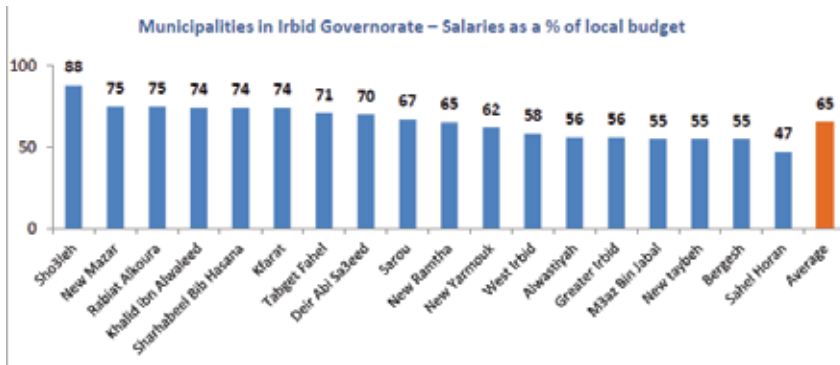


Figure (6): Ratios of salaries to municipal budgets (%)



2. Challenges Imposed by the Crisis on Host Communities in Mafraq and Irbid

The Syrian refugee issue has, no doubt, increased the challenges already faced by Mafraq and Irbid. Especially as a result of the increasing size and flow rates of refugees, the two governorates are suffering from great economic and institutional vulnerability. A direct reading of the current status shows beyond any reasonable doubt that the host municipalities are encountering abnormality, both in terms of numbers and the demographic characteristics of the newcomers. The municipalities were already unprepared to address such pressures, which overstrain the infrastructure and other public services, including health, education, transport, garbage management, sanitation, water and power. To manage such an abrupt crisis in terms of quantity and quality, there is a need for local and international institutional expertise and capacities, in addition to huge funds, which are not accessible to most municipalities; these municipalities are already short of the necessary mechanisms, expertise and funds to address humanitarian crises.

In the next part of this chapter, the study examines those challenges and highlights specific problems faced by the refugee-hosting municipalities. It then proposes a number of solutions to enable all institutions and the state to absorb as much of the impact of the refugee issue as possible.

Solid Waste management (33 out of 36 Municipalities Suffer from this Issue)

The interviews and field visits conducted by the research team show a clear gap in waste management provision. Authorities in Mafraq report that a municipality has to dispose of around 300 tons of solid waste daily. Irbid, however, has to deal with twice as much of that figure. This is ten times as much as used to be handled in those governorates before the Syrian refugees poured in. The following problems can be identified:

- The solid waste load is on the rise with the increasing population as a result of changes in lifestyle and inflows of Syrian refugees;
- There is a shortage of garbage trucks and compressors, either because they are defective or because they are out of service;
- Garbage containers are either inadequate or defective and unusable;
- There is a shortage of staff, particularly given the fact that most staff members in the municipalities are supervisors of a limited number of Egyptian foreign workers. For example, in Mafraq, there are 300 Egyptian cleaning workers supervised by 700 administrative local employees.
- Oil and maintenance prices are on the rise;
- Pollution, infestation of insects, rodents and stray dogs are becoming an issue.

Water (23 out of 36 Municipalities Suffer from this Issue)

The interviews and field visits conducted by the research team show a clear gap in the consumption of pumped and underground water. Statistics for Mafraq show local water consumption rising by over 4,000 cubic meters a day and by 1,800 meters an hour for underground water. Daily total water use per capita in Irbid was previously 100 meters, but has declined to 80 with the coming of refugees and the accompanying increase in water demand. In this respect, the following problems can be identified:

- Water demand is on the rise as a result of demographic growth, particularly the growing numbers of Syrians;
- The water distribution network is obsolete and worn out, leading to a high rate of leakage and rendering it unable to absorb the abnormal increase in the population;
- Surface water distribution networks are susceptible to a high degree of contamination
- Water networks need maintenance;
- More water networks need to be installed to reach new residential areas.
- Water supply is irregular as it is pumped once a week for only a few hours;
- Water supply is continuously disrupted;
- Weak water pumping necessitates the purchasing of new pumps at extra costs for the impoverished communities and also entails higher electricity costs;
- The quality of water is deteriorating as a result of the presence of salts and mud in it;
- Water intakes by schools, mosques and public facilities add to the water burdens;
- Military camps and security installations add to water scarcity;
- The water situation has worsened with the influx of Syrian refugees who habitually use water extravagantly because of the abundance of water in their country of origin.

Infrastructure (18 out of 36 Municipalities Suffer from this Issue)

The main infrastructure problems besetting the municipalities can be summarized as overstretched main roads and secondary roads, in addition to related maintenance and services. In this respect the following problems are identified:

- Roads leading to Al Badiya Al Shamaliya and Al Badiya Al Gharbiya are in serious need of maintenance, particularly those affected by the Za'tari Camp and the international roads leading to the camp;
- New roads need to be constructed to cope with geographical expansion;
- Roads leading to some farms need maintenance and rehabilitation to energize farming.

The next key infrastructure challenge is street lighting and electricity. This manifests itself, according to authorities in the governorates in question, in other challenges, as follows:

- Street lighting needs maintenance and defective parts need to be replaced;
- Lighting is needed for those roads that have been constructed to cope with geographical expansion;
- Several municipalities are indebted to the Electricity Distribution Company (EDCO), necessitating rational consumption of electricity. Many municipalities are switching off the road lights after midnight to save power, which raises the issue of insecurity;
- Financial burdens have increased as a result of the rise in electricity prices.

Sanitation (18 out of 36 Municipalities Suffer from this Issue)

Sanitation is a key challenge for the infrastructure as it is connected with the environmental and health aspects of life in the host governorates. More challenges arise in relation to access to optimum environmental and health conditions. In this regard, the following problems are identified:

- Increasing pressure is exerted on the available sanitation networks;
- Networks are in need of maintenance and expansion;
- With the exception of Irbid, there is no sewage system for Ramtha and Mafraq as such projects face typographical challenges;
- Septic tankers are scarce, meaning high costs for waste disposal;
- There is a risk of sewage water contaminating potable water in many municipalities, particularly in Za'tari Camp, which is set on a water basin that feeds four governorates.

Education (26 out of 36 Municipalities Suffer from this Issue)

The UNHCR reports that 83,232 Syrian children registered at public schools in Jordan up until the end of 2013. Several schools run evening shifts to provide schooling for these children. Despite all attempts to encourage Syrian children to go to school, however, the UNHCR says 60% of 250,000 are not registered at school. In the final analysis, the impact of Syrian refugees on education in the governorates is a key issue for the time present. But it also has implications for the future as schools compromise quality either by reducing the number of lessons or accepting huge numbers of students beyond their classroom capacities. The following problems are identified:

- Many schools need maintenance and expansion to meet the increasing numbers of students;
- The Syrian refugee issue causes schools to be crowded, though the local schools are already struggling to accommodate Jordanian students. A typical classroom in Irbid and Mafraq holds around 50 students;
- Many schools are now running two shifts, thus reducing the lesson time from 45 to 35 minutes, at the expense of quality. In addition, several teachers complain that they have not received their overtime dues as the government suspended employment in this sector.

- A good number of teachers and school principals complain of the low educational level of Syrian students and the difference between their curricula at home and in Jordan. They also complain that those students' habits are contrary to those observed in such conservative communities as Mafraq and Irbid.

Health (19 out of 36 Municipalities Suffer from this Issue)

The government has spent, according to the Ministry of Health's (MoH) reports, around US\$35 million on medical care for the Syrian refugees between January and April 2013, with only US\$5 million provided in direct foreign aid during that period. The field visits and interviews conducted by the research team engaged on this study show huge pressure being put on medical centers and hospitals, mainly Mafraq's hospitals, the King Abdullah University Hospital in Ramtha and Princess Basma Hospital in Irbid. The total complex surgeries performed on a daily basis average 5-20 and relate to war injuries sustained in Syria. The number of patients visiting medical centers also increased to between 200 and 300 on average. MoH's reports further estimate that the government, for example, needs to boost its total annual health expenditure by US\$135 million in 2013. They estimate too that it needs an additional US\$180 million to expand and upgrade 10 existing medical facilities in the northern governorates to cope with the massive demands on the health care system there.⁽¹⁸⁾ The refugee issue has had a direct impact on the quality of medical services in the hosting governorates, with the following problems identified:

- Medical centers in the north, especially in remote areas, suffer a shortage of personnel, equipment and facilities;
- Many medical centers suffer from shortages of staff because of high numbers of doctors relocating. The problem has been exacerbated by the increasing numbers of Syrian refugees, compromising the quality of services offered by those centers;
- Drug shortages have worsened, particularly those used to treat elderly patients with conditions such as heart disease and diabetes;
- The waiting times increased and so did the times between follow-up visits for the Jordanian patients, particularly in remote areas that suffer from destitution and other problems making travel to medical centers difficult;
- As in the case of schools, medical centers cannot refuse to treat Syrians, especially those suffering from conditions such as jaundice, skin diseases and malnutrition;
- Many members of the conservative communities require permanent female medics and nannies;
- There are almost no ambulances in the area. Though the Civil Defense Department (CDD) offers its vehicles for transporting patients, the scattered nature of the villages necessitates the availability of additional ambulances;
- Lack of medical services may be a key contributor to tensions in those communities.

(18) See the Oxford Business Group's Report on Syrian Refugee Crisis in Jordan, 2013.

Labor and Investment

The cities of Mafraq and Ramtha have long been a major point of trade between Jordan and Syria. The crisis in Syria weighed heavily on the two cities, the bulk of whose commercial activities (around 80%) was dependent on this cross-border trade. That trade came to a halt after the situation deteriorated in the Syrian border cities. Against this background, Jordanian workers started to face tough competition from Syrians for jobs, especially given that there was a rise in unemployment even before the crisis broke out, especially among women, estimated at 23.3%. According to official sources, no less than 30,000 Syrian refugees are employed in many occupations; nearly half of them work in Irbid and Mafraq. The main impacts of the Syrian refugee issue on workforce and investments can be summarized as follows:

- Syrians are competing with Jordanian workers for jobs. They are accepting lower wages and have advantages over Jordanians in crafts in which they are more skilful;
- Syrians do not have a problem with lower wages. They can adapt, either because of the financial aid that they receive from UNHCR or because of the simple need to work, which is misused by some employers;
- Some Syrians open up trade enterprises and pay Jordanians well, maintaining business and investment relations with them;
- 70% of overland trade to Jordan through Syria has stopped;
- Trade has been severely affected in the northern cities of Mafraq and Irbid, particularly in the informal sectors;
- The labor and trade problems may be a major driver of social tension. In July 2013, the government lifted fuel subsidies and raised tax on telecommunications, sparking tensions between Jordanians and Syrians as the government tried to adapt to the largest wave of refugees ever seen by the country. A study prepared by the University of Jordan's Center for Strategic Studies (CSS) in April 2013 shows that 71% of the study's population and 43% of the opinion leaders would refuse entry to any new waves of Syrian refugees to Jordan. In June 2013, the rate increased to 73.5% of the study population and 55% of opinion leaders wanting to refuse entry to new Syrian refugee waves to Jordan. Of these, 87% said it would be better to keep the Syrians in refugee camps and not allow them to move into the local communities, while 92% of the study population claimed the existence of Syrians in Jordan had compromised job opportunities for Jordanians.

The CSS performed a field survey in October 2013 and found that 72% of Jordanians stated that Syrians worked in commercial stores in the places they lived. That percentage rose by 11% from April in the same year. In the same context, 76% of Jordanians said the existence of Syrians in their areas has had adverse effects. Of these, 41% said the negative effect was Syrian competition for local jobs, while 30% said the effect was the rising prices. Still others said the effect was in the form of overstretched resources, such as water, transport, education and health.

In the labor market, there are some indications that the Syrian impact on Jordan's economy has not been all bad. The unemployment rates, for example, dropped from 12.9% to 12.2% in 2013, according to a report by the United Nations Economic and Social Commission for West Asia (ESCWA). Despite a common perception that Syrians have taken over the job opportunities of Jordanians, the Syrians in the country injected US\$1 billion of capital into Jordan's economy, with a growth of around 3% in 2013, according to Oxford Business Group (September 18th, 2013).

The Ministry of Industry and Trade (MoIT) also said that Syrian investments in the first nine months of 2013 accounted for 34% of total Arab investment distributed in industry (40%), trade (38%), agriculture (20%) and real estate (2.5%). In addition, 500 Syrian companies have been incorporated since early 2012 with an estimated gross capital of US\$42 million. Out of the 500 companies, 158 are industrial ones that employed around 2,157 workers.

Agriculture

The agricultural sector – which accounts for about 4% of Jordan’s GDP – has been among the affected areas. Some 60% of Syrian refugees are located in small towns or villages in the governorates of Irbid, Mafrq, Balqa and Ajloun, where farming is one of the main livelihoods, according to the Food and Agriculture Organization (FAO). Border communities in Irbid and Mafrq that had benefitted from Syrian government-subsidized seeds, fertilizers and other materials, or had earned income by trading or smuggling Syrian agricultural materials through informal trade networks, have seen the costs of production rise significantly after the outbreak of the crisis.

Shortages in poultry and livestock products imported from Syria, the increased price of animal feed and a spike in animal-borne diseases due to strained border controls have caused the price of eggs to increase four-fold, according to the FAO. Animal feed prices rose by 22-38% between 2009 and 2012, mostly due to increased transportation costs as a result of the change in the trading route from Tartous in Syria to the new ports of Aqaba and Haifa. Meanwhile, the illegal cross-border trade in Syrian livestock has pushed the price of sheep and goats down by 50% in some border areas. Competition between Syrian refugees and Jordanians in rural areas has depressed farm wages to as little as US\$150 for a month of work.

Agricultural commodities that were once trans-shipped through the ports of Latakia or Tartous are now transported by sea through ports in Palestine, Turkey or Egypt at higher costs. The impact on Jordan has been tremendous, with some farmers in the Jordan Valley having resorted to throwing away large amounts of vegetable produce due to be exported because transport costs have skyrocketed.

Concerns about an impending crisis in Jordan’s food supply are also mounting due to increased demand from refugees and a decline in Syrian food imports of at least 50%.

The FAO estimated that the government’s six-month supply of strategic food reserves would be depleted within four months if the number of refugees continued to grow at the existing rate and also questioned the government’s ability to maintain its food subsidy program, which costs the equivalent of 1% of GDP annually. Between 2011 and 2012, overall food prices in Jordan increased by 5%. The Jordan Food and Drug Administration reported that the Kingdom imported 87% of its food requirements in 2012 at a total annual cost of US\$3.1 billion, which represents 14% of GDP. In sum, the main challenges besetting the agricultural sector are as follows:

- Syrians are competing with Jordanians for agricultural jobs in the northern regions;
- In some cases, entire Syrian families live in tents on the farms they work at;
- Many farmers cannot access their lands in the winter because of the deterioration of roads leading there. It is recommended that those roads be maintained to revive agricultural lands there.

Housing and High Rents

Housing and rents pose the most fundamental challenge to the host communities for Syrian refugees, with the following problems identified:

- Syrians are competing with Jordanians for housing, taking into account the fact that the Syrians are entitled to a financial housing subsidy from the UNHCR and other local and international charitable organizations;
- It is not uncommon to see several Syrian families living together in homes composed of several breadwinners, so that they share the burden of high rent and water and electricity bills;
- Real estate prices soared with the coming of Syrians by up to 100%, making access to housing extremely difficult for Jordanians, especially newlywed couples.

Chapter V

A Matrix to Measure Socio-Economic Impacts of Syrian Refugees on Jordan's Economy

This chapter analyzes the findings of the cost-benefit quantity studies on hosting registered and unregistered Syrian refugees in Jordan. It starts with the quantitative findings in relation to the induced benefits of hosting refugees. It then considers the costs incurred by Jordan's economy at the macroeconomic and sectorial levels. After a discussion on the estimated key social impacts of the crisis, the chapter is concluded by the cost-benefit matrix, a tool devised by the researcher to serve as a trial balance for the ultimate impact of the refugee crisis on national economy. The study is based on estimates calculated for the period 2011-2013 in light of available official figures and researcher's estimates. Using appropriate cost-benefit proxies, the study has projected the costs and benefits for the year 2014 in light of two scenarios. The two scenarios contemplate firstly a continuous normal trend of refugee influxes (around 400 refugees a day) and secondly a high frequency of influxes of around 1,500 refugees a day.

Economies around the world are attempting to meet obligations imposed on their accession to international conventions on refugees, which has, undeniably, entailed huge socio-economic burdens on individual countries. Jordan is not an exception. It has been facing, since the outbreak of the Syrian crisis, the tremendous task of addressing the Syrian refugee issue, which, notwithstanding its humanitarian dimension, has posed a serious economic challenge for an already under-resourced country. Still under the influence of the 2008 global financial crisis, the country is experiencing, both locally and regionally, acute economic problems induced by the movements of people, with some studies estimating the financial burdens at over JD4 billion.⁽¹⁹⁾

With this background in mind, it is relevant to quantify the impacts of the Syrian refugee crisis on Jordan's economy by examining the consequences of that crisis on the various economic sectors. Any effort towards that end must be entirely free of exaggeration and error of method, requiring an objective study of the negative but also of the positive impacts of the crisis on the national macroeconomic indicators. The quantified estimates should observe the quantitative trends of the crisis, specifically in relation to the number of refugees entering Jordan with the explicit purpose of escaping the plight of their homeland through official and non-official entry points along the 375 kilometer borders. The following section elucidates the method used in this study for the calculation of costs and benefits of the Syrian refugee issue with an analytical and illustrative review of estimates.

(19) For more details, see Issnaad Consultancy (2012), *The Impact of Popular Movement in the Region and in Jordan on Macroeconomic Indicators in Jordan* (only available in Arabic).

1. Analysis and Estimation Method

There are some general facts that need to be mentioned here, which have been incorporated in the foundational assumptions of the study. These have been deduced from official local and international studies and can be summed up as follows:

- 593,000 Syrian refugees have registered with the UNHCR up to January 2014;
- Official figures from the Syrian Refugee Camp Affairs Department/Public Security Department (PSD) suggest that nearly half a million Syrian refugees have begun living in Jordan since the outbreak of the crisis, though they are not registered with the UNHCR. It is also estimated that nearly 350,000 Syrians had been ordinary residents in the country before the crisis (2006 through 2010);
- The United Nations estimate the cost of hosting over half a million Syrian refugees in Jordan at US\$5.3 billion for the period 2013-2014, the cost being divided into US\$2.1 billion and a projected US\$3.2 billion for 2013 and 2014, respectively;⁽²⁰⁾
- In Table (1) below, the UNHCR's official statistics show that the money pledged for refugee costs by the international community does not exceed 75% of total estimated costs.

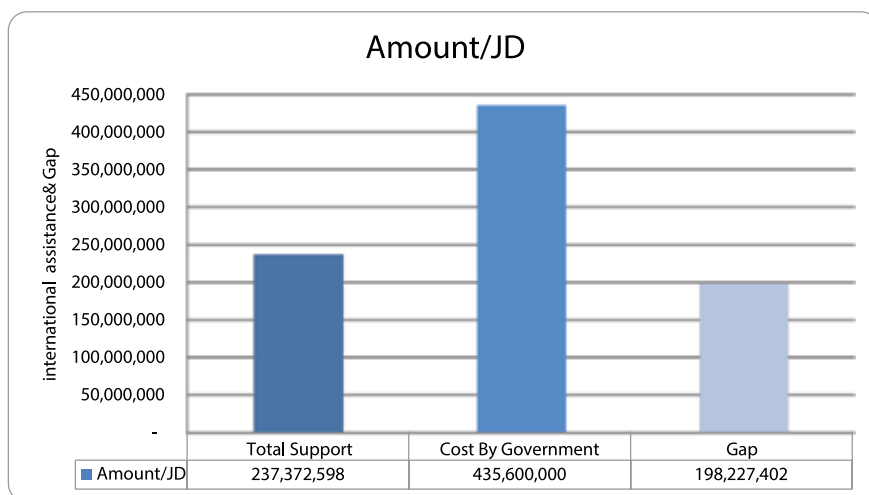
(20) For more details, see: UNDP, "Mitigating the impact of the Syrian refugee crisis", November 2013.

Table (1): Coverage of the costs incurred by hosting Syrian refugees in Jordan in 2013 (UNHCR's Figures)

Description	Needs (US\$ Million)	Received Aid (US\$ Million)	Assistance Gap (US\$ Million)	Coverage Rate
Estimated needs to cover refugees' expenses	976.577	736.664	239.913	75%

Source: Official UNHCR Website.

- Official figures from Jordan's Ministry of Planning (MoP) show a 46% deficit in costs, as estimated by MoP, for hosting Syrian refugees in Jordan (Figure 1).



- Jordan's government received around JD17 million in assistance in 2012, which was later on boosted by the international community to reach JD323.2 million in 2013, according to MoP's data (Figures 2 and 3).

Table (2): Assistance pledged to Jordan in 2012 for shouldering the burdens of hosting Syrian refugees

Sector	Total Funding (JD)	Total Funding (US\$)
Road construction and infrastructure	1,130,670	1,596,992
Water and sanitation services	7,793,522	11,007,799
Education	7,237,434	10,222,364
Medical care	648,680	916,215
Protection	45,000	63,559
Social services	7,440	10,508
Grand total	16,862,746	23,817,438

Source: Jordan's Ministry of Planning and International Cooperation.

Figure (3): Assistance pledged to Jordan in 2013 for shouldering the burdens of hosting Syrian refugees

Sector	Total Funding (JD)	Total Funding (US\$)
Medical care	70,917,017	100,165,278
Education	168,851,351	238,490,608
Water and sanitation	52,061,898	73,533,754
Municipalities	20,100,000	28,389,831
Energy	7,000,000	9,887,006
Protection	4,229,322	5,973,619
Grand total	323,159,587	456,440,095

Source: Jordan's Ministry of Planning and International Cooperation.

Study Assumptions Relating to the Cost-Benefit Calculation:

The study incorporated two approaches in order to come up with an accurate estimation of the costs and benefits incurred to the national economy by the Syrian refugee crisis. The first approach calculates the spillover costs by examining the subsidies of goods and services, opportunity costs and allocations spent on refugees. The second approach calculates the difference in expenses before and after the crisis. It then looks at the officially declared allocations after considering the allocations per capita, so the proper estimates are made.⁽²¹⁾ The study also used the impact in the years 2011 and 2012. This allowed the researchers to calculate the impact on a gradual basis, benefiting from the previous study conducted by a researcher for the Economic and Social Council at the end of 2012, though some amendments were introduced to that study, as will be explained in the ensuing parts of this section. In this connection, the refugee influxes apparently started to increase steadily after June 2011, assuming that by the end of 2011 the influxes reached around a third of the final number at the end of 2011. That previous study, however, used the first 10 months of 2012 to calculate the impact, assuming the total relative number of refugees to be 12,000 a month, which is in line with the influx likelihood.⁽²²⁾ This study, similarly, used the available official figures on the number of refugees at the end of 2012. It reviewed the estimates of that previous study so as to realistically report the impact for the year 2012 and the accumulation leading to the total number at the end of October 2012.

The present study also sought to estimate the direct and spillover benefits from the presence of Syrian refugees, for which aim it adopted an approach that considered the prospective positive benefits on the macroeconomic and sectorial levels. This approach would, therefore, make the present study the first of its kind in terms of addressing the socio-economic benefits accruing from the Syrian refugees in Jordan. All previous studies in the literature focused on the costs and totally ignored the socio-economic benefits, as will be explained in the ensuing parts of this section. The emphasis, here, is mainly on the positive impacts on GDP, the state's General Budget, foreign assistance, tax and non-tax revenues, foreign reserves and investments (macro-economy) and house rents, retail and wholesale trade, restaurant and foods, as well as other consumer and investment sectors (microeconomics).

The study, in the end, introduces two matrices for benefits and costs. Afterwards, it builds up a consolidated trial balance for net benefits and costs incurred on the national economy on an annual and aggregate basis throughout the period 2012-2014. For that purpose, it used the two scenarios mentioned earlier. The first one anticipates a normal trend involving 400 new refugees coming to the country on a daily basis in 2014, while the second anticipates the arrival of around 1,500 refugees daily throughout the same period.

(21) For more insights into different approaches to calculate refugee costs, including the allocation and expense difference approach, see David North (1997), "Estimates of the financial cost of refugee resettlement: the current system and alternative models", U.S. Commission on Immigration Reform.

(22) For more details, see Issnaad Consultancy (2012), *The Impact of Popular Movement in the Region and in Jordan on Macroeconomic Indicators in Jordan* (only available in Arabic).

Assumptions Relating to Estimated Financial Costs:

The estimation of costs incurred by Syrian refugees on the national economy was based on the following assumptions:

- The costs of refugees were calculated on the macroeconomic and sectorial microeconomic levels. The first tier involved governmental subsidies on foodstuffs, general state debts, balance of trades and most importantly importations. It also included the impacts on the labor markets, including the opportunity cost for the Syrians competing with Jordanians for available local jobs. The second tier incorporated a cost analysis of education, health, energy, water, security, defense, infrastructure and municipal services.
- The macroeconomic figures for the year 2013 were adopted as officially published in the Draft General Budget Law for the Year 2014 under the allocation item "Re-estimated for 2013". The data provided by the State General Budget Law for the Year 2014 were used for making the macro-microeconomic impact in that specific year.
- Impact estimates were devised for 2014 in light of two scenarios: the base influx scenario and the overflow scenario. The first assumes a flow of 400 refugees a day, while the second assumes the flowing of as many as 1,500 refugees a day, according to flow averages observed throughout 2012-2013.
- The study then calculated the number of residents and refugees in 2013 on the assumption that 350,000 of the Syrians have been normal residents in the country even before the crisis, according to official data from the PSD refugee camp management department. Accordingly, the total number of Syrians included in the impact study stands at 953,000 (both refugees and residents). Of this number, approximately 550,000 are registered as refugees while the rest are those who arrived during the crisis but elected not to register as refugees for their own reasons. As for the expectations for 2014, the study placed emphasis only on the increase of numbers of registered refugees in light of the abovementioned scenarios, without addressing the increase in the number of unregistered residents. The aim was to produce accurate findings and avoid overestimates.
- For 2014 forecasts, emphasis was placed only on the increase in the number of registered refugees in light of the aforementioned scenarios, but was not inclusive of the increase in the number of unregistered residents. This approach should increase the credibility of the study's findings by avoiding exaggerations that could otherwise undermine the accuracy of estimates.
- Costs were calculated on the macro and microeconomic levels in light of the number of refugees by the end of the respective year, using official public figures and statistics for the selected indicators at the end of the fiscal year.

Study's Assumptions Relating to Financial Estimated Costs:

The following assumptions were used in estimating the benefits associated with the presence of Syrian refugees for the national economy:

- The study estimated the macroeconomic and microeconomic (sectorial) benefits of Syrian refugees on the national economy. On the macroeconomic level, the benefits were identified in relation to the positive impact, if any, of the refugee crisis on the GDP growth, public revenues, foreign assistance, foreign reserves and flow of Syrian investments into Jordan. On the microeconomic level, the benefits were studied in relation to the housing sector, particularly rents, job opportunities created for Jordanians by the Syrian investors and retail trade revenues.
- The study used official Jordanian figures and those published by international institutions and commissions, particularly in respect of foreign assistance, Syrian investments and job opportunities created for Jordanians.
- The 2014 benefit forecasts also relied on the two aforementioned scenarios.
- The benefit estimates were based on the same estimated number of refugees as already cited in the cost estimates, with the exclusion of unregistered residents in the same manner as that used in estimating the costs.
- Just as with costs, the calculations of benefits on the macro and microeconomic levels were based on the number of refugees at the end of the respective year using officially published figures and statistics on the targeted indicators at the end of the fiscal year.

2. Estimates of the Benefits of the Syrian Crisis for Jordan's Economy on the Macroeconomic and Sectorial Levels

Following the above assumptions, Table (4) below presents the matrix of estimated benefits for Jordan's economy from the Syrian refugee crisis during the period 2012-2014. It should be noted that the 2012 figures are inclusive of 2012 estimates but not of the influxes of refugees in the same year, with the latter not being accounted for because of irrelevance of the total number of registered refugees until the end of 2012, who by all accounts did not exceed some 10,000 refugees. The table also breaks down benefits into two categories. The first relates to the benefits on the microeconomic level, while the second relates to those benefits of Syrian investments moving to Jordan from crisis-stricken Syria. Table (4) also shows that the estimated aggregate benefits that have either been attained or will be attained by the economy in 2012-2014 are in the range of JD7.2-7.9 billion, depending on the scenario used for that purpose.

Table (4): Cost-benefit matrix estimating the impact of Syrian refugees on Jordan's economy (2012-2014)

Item	2012	2013	2014		Grand Total	
			Base influx scenario	Overflow scenario	Base influx scenario	Overflow scenario
Estimated macroeconomic revenues:	838,3	2718,5	2652,9	3198,0	6219,0	6763,9
- Contribution to GDP	65,7	342,4	276,8	376,8	684,9	784,9
- Contribution to public revenues	208,8	779,8	980,0	1333,8	1968,6	2322,4
- Foreign aid	208,8	1163,9	1306,4	1395,1	2679,1	2767,7
- Contributions to foreign reserves	929,0	14322,2	1482,3	1525,3	3843,5	3886,4
- Estimated Syrian investments	355,0	441,7	89,7	92,3	886,4	888,9
Estimated microeconomic revenues:	161,1	400	459,1	602,5	1020,5	1164,1
- Housing (rents)	112,9	228,0	253,1	323,7	594,0	664,7
- Job opportunities	1,8	4,3	4,5	4,6	10,6	10,8
- Retail sector revenues investments	46,4	167,9	201,5	274,2	415,9	488,6
Total estimated revenues	999,4	3188,7	3112,0	3800,0	7239,5	7928,0

Source: Researcher's estimates based on the available official figures including those projected in the 2014 General Budget.

1. Impact on the Macroeconomic Level

This part of the study concerns itself with the benefits of the Syrian refugee crisis in Jordan for the macro-economy of the country. To quantify the benefits of the Syrian refugee crisis for Jordan's macro-economy, the total number of officially- registered refugees and residents was used for the period beginning with the crisis until the end of 2013. Syrian nationals resident in the country (estimated by authorities at 350,000) before the crisis were excluded. Emphasis is put, here, on the positive impact of the refugee crisis on the GDP growth, public revenues, foreign assistance, foreign reserves and the flow of Syrian investments to Jordan. Each of these items (as mentioned in Table (4) above) is explained individually below:

A. Impact on GDP

There is evidence in national income accounts that positive impacts have been generated by the influxes of Syrian refugees and residents alike for the national economy, given their role in increasing private spending, investment and public spending. In other words, the accrued increase in the above factors should be reflected in the GDP with an increase proportional to the relative increase of the population. This correlates with evidence in Table (1) of Chapter III, which shows a population increase of 3% in 2012, an aggregate increase of 13% in 2013 and aggregate increases of 17% and 23% in the base and overflow scenarios, respectively.

Accordingly, and in view of the data provided by Table (1) in Chapter I on macroeconomic indicators, the contribution of Syrians (both refugees and residents since the outbreak of the crisis) to Jordan's GDP was calculated. Table (4) above shows that the Syrians have indeed contributed to the GDP, based on the abovementioned methodology, by around JD408 million during the period 2012-2013. The figure is expected to increase by JD276 million and JD377 million in the base and overflow scenarios, respectively. The total aggregate impact of increased GDP as a result of the Syrian influxes for the period 2012-2014 is estimated at JD685 million in the base influx scenario and JD785 million in the overflow scenario; that is, around 11% and 10% of total expected benefits from the two scenarios, respectively. However, it is significant that those figures depend on the growth in GDP assumed to have been attained because of the presence of Syrians in the country. This assumption is supported by Table (2) in Chapter I, which adopted official statistics that reveal a positive GDP growth from 2.6% in 2011 to approximately 3.3% in 2013. The government also expects additional growth of up to 3.5% at the end of 2014. Other studies on similar cases, such as the World Bank's study on Lebanon, however, provide estimates for the difference between official and international growth figures and real figures during the years of the crisis. This has made the final estimated impact negative, showing the costs outweighing the benefits, rather than the opposite. Quite relevant to this discussion are the forecasts of the Economist Intelligence Unit (EIU), predicting in its December 2010

issue a growth trend in Jordan's GDP of 3.5% in 2011, 4.3% in 2012, 3.5% in 2013 and 4.7 in 2014.⁽²³⁾ The implication is that Jordan's economy would have lost 1.6 percentage point for the year 2012, which accounts for JD351 million of GDP as deduced from the official figures of 2012. Losses sustained by Jordan's economy in 2013, following the same methodology, amount to 1.2 percentage points of GDP calculated for 2013; that is, around JD291 million rising to around JD310 million in 2014. This means that, according to the adopted estimation methodology, the negative aggregate impact accounts for an aggregate GDP loss exceeding JD952 million. It is still fair, however, to say that this same methodology can be used when addressing the impacts of the Syrian economic crisis separately from any discussions of the impact of Syrian refugees and residents on Jordan's economy.

B. Impact on the State's Public Revenues:

Table (4) above shows that the benefits accrued from the presence of Syrians in Jordan have risen from around JD209 million in 2012 to nearly JD780 million in 2013. The impact on public revenues rose from JD209 million in 2012 to around JD780 million in 2013, calculated by using the same method for calculating the contribution of Syrian refugees and residents after the crisis to the GDP growth. The ratio of Syrians to the general population in each year was multiplied by the total public tax and non-tax revenues. The present study projects an increase in Syrians' contribution to public revenues by around JD200 million from 2013 in the base influx scenario and around JD554 million in the overflow scenario. According to the aggregate estimates of the present study, the total public revenues accruing from the presence of Syrians in Jordan will aggregately reach around JD2 billion in the base influx scenario and over JD2.3 billion in the overflow scenario in 2010-2014. Those same estimates show that the contributions of Syrians to public revenues account for around 32% of total benefits accruing from the presence of Syrians in Jordan in the base influx scenario, rising to 34% in the overflow scenario.

C. Impact on Foreign Assistance

The large influxes of Syrian refugees into Jordan's economy have, undoubtedly, generated relatively large amounts of assistance from abroad to help the economy in facing the negative impacts of such flows. As mentioned earlier in this study, the internationally-pledged assistance for meeting the needs of Syrian refugees did not exceed 75% of the actual needs, as indicated by official UN figures. It did not even exceed 46% in 2013, as per MoP's statistics. Nevertheless, Jordan has, at last, received through the United Nations a package of assistance to be spent within the framework of the national economy on the refugees. It has also received direct assistance to pass on to the refugees, as disclosed by MoP's data. The study, therefore, recognized this assistance as a form of positive flow, adding to the benefits attained by Jordan's economy, through the use of two sources: UNHCR and MoP. The figures shown in Table (4) above

(23) See the estimation table published in Country Report: Jordan, Economist Intelligence Unit, December 2010.

are the total of the figures declared by both sources in each year, though it is necessary to understand that the MoP's figures are related to the Syrian dimension (Tables (2) and (3) in this chapter) and thus do not include all foreign assistance that Jordan has received throughout the studied period. Although some may argue that the assistance given to Jordan, including that specified for the Syrians, is largely due to the sympathy of the international community with Jordan, the donating countries have not required such assistance to be paid solely for the Syrian refugees. According to some reports, Jordan has received around US\$1.5 billion in 2012, rising to US\$2.1 in 2013.

At any rate, Table (4) above shows that the total assistance received by Jordan through the abovementioned sources indicates a rise in Syrian refugee assistance by JD955 million in 2012-2013. The study, by relying on those sources, projects a rise of assistance to JD1.3 billion in 2014 in the base influx scenario and around JD1.4 billion in the overflow scenario, an increase of 8% and 16% respectively. The aggregate impact of foreign assistance throughout the period 2012-2014 amounts to around JD2.8 billion in the base influx scenario and JD2.8 billion in the overflow scenario; that is, 43% and 41%, respectively, of the total benefits accruing to the national economy as a result of the Syrian refugee crisis

D. Impact on Foreign Reserves

Table (4) above shows the impact of Syrian refugees and residents on the foreign reserves in the country, assuming that the flow of foreign assistance given for the Syrians is converted into local currency and hence directly affects the foreign reserves held with Jordan Central Bank (JCB). It also calculates a weighted proportion of income flows from abroad, assuming that they pertain to Syrians, by deducing a proportion concurrent with the ratio of Syrians to the population from the total annual income flows from abroad, according to JCB's official statistics. It also considers the annual increase of foreign reserves during the subject period and extracts the share that corresponds to the ratio of Syrians to the population, multiplied by the annual variance of foreign reserves, assuming that such an increase is due to the presence of Syrians in the country.

Using this method, the findings estimate that the Syrian presence had a aggregate increasing impact on foreign reserves during the period 2012-2014 of around JD3.8 billion in the base influx scenario and around JD3.9 billion in the overflow scenario, corresponding to 57% and 61%, respectively, of the total benefits accrued by Jordan's economy as a result of the influxes of Syrian refugees into the country. Table (4) also shows the estimated annual balance that such flows poured into the foreign reserves, with amounts ranging from less than a billion Jordanian dinars in 2012 to around JD1.4 in 2014 in the overflow scenario.

E. Impact on Investments (Estimated Syrian Investments)

Estimates of Syrian investments in Jordan varied during the period of the crisis, particularly in 2012. According to data obtained by the researcher from the Jordan Investment Board (JIB), the investment enterprises applying for investment exemptions in 2012 did not exceed JD74 million in value. It also shows that the investment enterprises applying for exemption during the first nine months of 2013 amounted to JD63.7 million. This means the total value of the investment enterprises applying for exemptions, in accordance with Jordanian investment law, did not exceed JD150 million for the period 2012-2013. Other statistics published by the Companies Control Department at the Ministry of Industry and Trade (MIT-CCD) suggest that the Syrian capital registered in 2012 amounted to around JD20 million, rising to JD37 million in 2013. The data further indicate that the number of Syrian investors amounted to 66 investments in early 2014, compared with 30 in 2013. By contrast, the figures corresponding to capital injected into the Jordanian economy exceed US\$1 billion and anticipate a rise of 3% in 2013. Another report by the United Nations Development Program (UNDP) refer to 500 new Syrian companies registered with MIT from the beginning of 2012 up to the middle of the first quarter of 2013, investing in the various industrial, agricultural and commercial activities with a total capital of JD42 million and employing 2,157 workers. (24) It should be noted, however, that the registered capital does not necessarily reflect the reality of investment, given the fact that several companies register with MIT at the minimum registrable capital even though their real capital may be several times that declared.

This explains why this study has chosen to use the Oxford Business Group's estimate, considering the investment estimate for the period 2012-2013 and its increase by 3%. Accordingly, the aggregate impact of the investment flows within the period of study, 2012-2014, as shown in Table (4) above, amounts to around JD900,000 in either scenario, accounting for around 13% of total benefits accruing to Jordan's economy from the Syrian influxes.

2. Impact on the Microeconomic (Sectorial) Level

This part of the study continues discussions of the benefits that the matrix shows should have been received by Jordan's economy as a result of the Syrian refugee crisis. Greater emphasis, however, will be placed on housing, particularly the rents that Syrian tenants are paying to Jordanian landlords. It will also address the impact of Syrian investments on the creation of job opportunities for Jordanians and calculate the estimated revenues generated from retail businesses. This latter sector has certainly been affected, with the largest number of Syrians living in local communities and hence increasing general demand on goods and services and boosting the trade and industrial activities in the country. What follows is a preview of the findings of the study in respect of each of those domains.

(24) See Oxford Business Group, Sept 18th and Muin A Khoury, UNDP, "Mitigating the impact of the Syrian refugee crisis on Jordanian vulnerable host communities", November 2013.

A. Impact on Housing

Several reports, in addition to personal interviews conducted by the researcher's team, indicated an increase in the demand for housing since Syrian refugees started to enter the country. According to official data, 80% of refugees live outside the official camps and account for the new demand for houses, taking into consideration that the average Syrian family has five members (See relevant findings in Chapter III), regardless of any distinction between registered and non-registered refugees. The Syrian demand for housing reached 44,000 families in 2012 with an increasing trend, influenced by the influxes of Syrians, rising to 448,000 families. The figures are on the rise as a result of the increase of family members both in the base and overflow scenarios until the end of 2014. The study also adopted a graduated approach in the aggregate calculation of the number of families through the year, assuming that the larger portion of them (50%) is present in the second half of the year, according to the size of influxes, while 30% is likely to arriving during the rest of the year. Personal interviews revealed that 20% share homes with other families, as the monthly rents of apartments less than 150 m² in size range from JD150 to JD250. As a result, the aggregate benefits of Jordanians resulting from leasing their apartments throughout the period 2012-2014 range from JD594 million to 665 million, accounting for around 57% of the benefits accruing at the macroeconomic level as a result of the Syrian refugees' presence in Jordan. In the final analysis, the aggregate benefits for Jordanian who lease their houses during the period 2012-2014 range from JD594 to JD665 million, accounting for around 57% of total sectorial benefits accruing from the Syrian refugee presence in Jordan and amounting to around JD1020.5 million in the base influx scenario and JD1164.1 million in the overflow scenario.

B. Impact on Job Creation

While freely conceding that Syrian workers are competing with Jordanians and other migrant workers, as the ensuing section will explain, studies have found that new jobs were created for Jordanians because of the introduction of some Syrian investments to the country. The present study, in this connection, used the UNDP's report, mentioned above, for the assumption that 50% of a total of 2100 jobs created by Syrian investments employ Jordanians. Such jobs were distributed into 30% and 70% in the years 2012 and 2013, respectively. That figure grows when taking into account the projected economic growth rate of 3.5% for 2014 in the base influx scenario and 6.5% for the overflow scenario, so as to reach the total expected job opportunities in both scenarios. The average monthly wage per worker stood at JD250, as estimated by the researcher but also as based on individual surveys and interviews conducted with some employers in the industrial sectors. For Jordanian workers, the aggregate benefits attained through such investments amounted to around JD11 million for both scenarios with a marginal difference not exceeding JD200,000. Those benefits, however, are dwarfed by the total benefits stated in Table (4) above as they account for as little as 1% of total sectorial benefits, as calculated in this study.

C. Impact on Retail Trade Revenues

The abnormal increase in Jordan's population throughout the period 2012-2013 directly increased demand on all types of retail and wholesale trade, particularly food, household utilities and other forms of retail trade. The study provides estimates for the benefits accrued by the retail trade sector using the ratio of Syrian refugees and residents after the outbreak of the crisis to determine their contribution to the growth of revenues in that sector. It has been found that the aggregate benefits for the sector throughout the period 2012-2014 stand at around JD416 million in the base influx scenario and around JD489 million in the overflow scenario. Those figures account for 42% and 41% of the total estimated sectorial benefits in the two scenarios.

3. Estimated Costs Incurred by the Syrian Refugee Crisis on Jordan's Macroeconomic and Sectorial Levels

In light of the assumptions mentioned above, Table (5) demonstrates the matrix of estimated costs for Jordan's economy as a result of the Syrian refugee crisis throughout the period 2012-2014. It should be noted that the 2012 figures are inclusive of 2011, based on the study's data prepared by the researcher for the Economic and Social Council. The costs incurred in 2011 are found to be insignificant compared with the total costs calculated or estimated in this study. The latter amounted to around JD140 billion out of the total costs estimated in this study to range from JD11 to JD13 billion.

Following the same approach as in the benefit analysis, the costs estimated were broken down into two categories, the macroeconomic and sectorial sectors, with the main focus placed on service sectors (education, health, energy, water, infrastructure, security and defense), which have been affected by the severe influxes of Syrian refugees and residents since the Syrian crisis erupted in 2011.

Table (5) below estimates the costs excluding the abovementioned period to be in the range of JD11.5 to JD13 billion, according to the scenarios envisaged as follows:

Table (5) below estimates the costs excluding the abovementioned period to be in the range of JD11.5 to JD13 billion, according to the scenarios envisaged as follows:

Table (5): Matrix of estimated costs as incurred by Jordan's economy due to the Syrian refugee crisis (2012-2014)

Item	Estimated Monetary Costs (JD Million)					
	2012	2013	2014		Grand Total	
			Base influx scenario	Overflow scenario	Base influx scenario	Overflow scenario
Impact on macro-economy	653.7	2211.7	2746.5	3719.3	5611.9	6584.7
- Foodstuff subsidies	13.1	33.8	38.3	51.8	85.1	98.6
- Public debt	84.4	240.0	374.0	506.0	698.4	830.4
- Trade account	440.9	1609.0	1957.1	2663.6	4007.1	4713.6
- Imports	378.7	1952.7	2609.4	3551.3	4940.8	5882.8
- Labor market	43.3	129.1	152.1	200.9	423.5	373.3
- Job opportunity costs	72.0	1998.8	225.0	297.0	496.8	568.8
Impact on sectors	464.8	2453.9	2954.1	3532.0	5859.7	6440.3
- Education	14.0	70.0	87.5	93.6	171.5	177.6
- Health	29.2	85.4	125.9	170.5	240.5	285.1
- Energy	61.7	79.9	95.9	130.5	237.4	272.0
- Water	2.8	14.4	16.6	22.6	33.9	39.9
- Security and defense	58.9	263.7	320.8	436.6	643.4	759.2
- Infrastructure	295.1	1916.4	2277.0	2641.1	4488.5	4852.6
- Municipal services	3.08	14.1	27.4	37.1	44.5	54.2
Total estimated costs	1118.5	4665.6	5697.6	7251.3	11471.6	13025.0

Source: Researcher's estimates based on available official figures, including projections in the 2014 General Budget.

1. Impact on the Macro-Economy

This part of the study addresses the estimated costs incurred on the macro-economy by the influxes of Syrian refugees, including those refugees who live in the official camps or in the local communities and those unregistered as refugees with the UNHCR even though they have been living in the country since 2011. It should be noted, however, that the methodology is limited to estimating the costs incurred by the presence of Syrian refugees and residents in Jordan since 2011 on the economic indicators. By no means is the study concerned with the impact of the Syrian crisis on national economy. Hence, on the macroeconomic level, the study estimated the costs associated with subsidies paid on foodstuffs, the General Budget and the trade balance, with specific reference to the impacts on the bills of importations and on the labor market. This includes the calculation of the opportunity cost wasted as a result of Syrians competing for jobs with Jordanians. The study estimated the total aggregate costs at around JD5.6 billion in the base influx scenario and JD6.6 billion in the overflow scenario, which corresponds to 49% and 50% of the total estimated costs in the each scenario, respectively. The sections below discuss those impacts in more details.

A. Impact on Food Subsidization

Financial deficit is a chronic distortion besetting Jordan's economy in view of failure to cover the country's public expenses through the use of local revenues. Jordan has pursued several corrective measures, particularly since the early 1990s, to address the financial situation of the country. The most recent measure was a complete lifting of subsidies on all petroleum products (except household gas). Nevertheless, the economy is still strained by the huge pressures of the global financial crisis followed by the popular movements in the region and in Jordan itself. Against this background, successive governments have been forced to subsidize foodstuffs at an annual cost exceeding JD200 million.

In studying the overall impact of the Syrian refugee crisis on the macro indicators, this present study has deemed it necessary to estimate costs incurred by subsidizing food, as this subsidy is a benefit for all residents, regardless of whether they are citizens or not. The impact on food can be estimated by calculating the subsidization costs per capita and then calculating the ratio of that subsidy to the number of Syrian refugees and residents in light of the food subsidy balance at the end of each year of the studied period. A previous study prepared for the Economic and Social Council estimated the food subsidy per capita to be around JD57 in 2011, rising to around JD75 in 2012. For the purposes of this study, which is seeking to estimate the impact of Syrian refugees and residents on the economy since the outbreak of crisis, the aggregate cost of that item ranged from JD85 million in the base influx scenario to JD99 million in the overflow scenario. Those costs account for over 1.5% of total estimated costs at the macro level.

B. Impact on Public Debt

According to official statistics, as shown in Table (1) in Chapter I, the overall net public debt rose in 2011-2012 by around JD3.4 billion owing to the total burdens placed on the budget in the aforementioned period. The trend continued through 2013, rising by around JD3 billion from 2012 at a rate of over 16% in one year. The figures in the 2014 General Budget projects a further increase in net public debt to JD21.4 billion, with a two billion increase from the previous year. By projecting the per capital increase in the state's budget on the influx of Syrians during the period 2012-2014, the aggregate cost of hosting Syrian refugees and residents ranges from JD698 million to over JD830 million. This accounts for around 13% of total costs estimated for the subject study period. It is necessary to emphasize that the per capita cost was calculated on the basis of the annual increase in the debt rather than on the outstanding debt balance at the end of the relevant year. This calculation is intended to seek accuracy and avoid blaming the refugee crisis for the consequences of the debt. The researcher's previous study conducted for the Economic and Social Council had already calculated the cost of hosting Syrian refugees following the same methodology for the year 2011 at around JD18.1 million. That figure has not been used in estimating the current cost for the period starting 2012.

C. Impact on the Foreign Sector: Trade Account and Imports

The gap in the foreign sector represented by the deficit in the trade balance, which accounts for the difference between imports and exports, is the greatest chronic distortion in Jordan's economy. Table (1) in Chapter I of this study shows that this gap has been significantly aggravated throughout the study period compared with its situation before the outbreak of the Syrian crisis. The trade deficit almost doubled between 2010 and projections for 2014 anticipate it rising from JD6.8 billion in 2010 to over JD11.6 billion according to budgetary forecasts for 2014. This is clearly attributed to the impact of the dense population on the total size of imports to Jordan, mainly dominated by foodstuff and oil products. This study has calculated the per capital cost from the trade deficit balance, which necessarily equates with the net per capita impact on variances in goods import and export items.

The cost estimates in Table (5) above shows that the aggregate impact of Syrian refugees and residents, after the outbreak of the crisis, on the trade balance deficit is above JD4 billion in the base influx scenario and over JD4.7 billion in the overflow scenario.

Those costs account for around 71% of total macroeconomic costs in the base influx scenario and up to 72% in the overflow scenario. The impact of the imports item alone aggregately amounts to around JD4.9 billion in the base influx scenario and around JD5.9 in the overflow scenario, which is a very large cost that significantly affects the GDP and puts yet more huge pressures on JCB's foreign reserves.

D. Impact on the Labor Market and Opportunity Cost for Competing with Jordanian Workers

Unemployment has been one of the most significant problems challenging the Jordanian economy since the 1980s. According to official statistics, the unemployment rates rose from 2011 to the end of 2013 by over two percentage points, hitting 14% of national manpower. In addressing this issue, Jordan adopted in recent years several initiatives, particularly the replacing of migrant workers with Jordanians in several sectors. In the same context, MoP and the Ministry of Agriculture (MoA) jointly launched in 2011 the National Employment Strategy (NES) with the aim of setting practical strategies for the development of Jordanian human resources to eventually create jobs for nationals. NES also deals with the structural imbalances plaguing the labor markets in view of those distortions created by failure to align supply to demand. It is common knowledge that Jordan needs to create more than 100,000 jobs annually to accommodate newcomers to the market, not to mention the need to provide additional jobs for currently unemployed nationals.

The youth prevail among the working age group of the Syrian population in Jordan, as is also the case for Jordanian nationals. In view of the official statistics, 80% of the Syrian refugees nationwide live outside the official camps, particularly in the main cities of Amman, Irbid and Mafraq. This can be fairly said to pose a great challenge to the state's public policy in creating jobs for Jordanians or replacing migrant workers with Jordanians. In a relative context, UNHC (See Figure (4) in Chapter III) says almost 58% of the Syrian refugees are in the 18-59 age group and that 22% of that group is made up of males. One implication is that members of this latter segment have entered the Jordanian labor market either as replacements for migrants or as occupiers of new jobs. In addition, a portion of the females, accounting in total for around 22% of the same segment, have entered the labor market. This presents another challenge to attempts to employ Jordanians or to empower Jordanian women through their effective involvement in the labor market. Statistics already show a decline in Jordanian women's participation in the labor market, with a rate not exceeding 16% of manpower compared with over 28% in the Arab world and 43% worldwide in countries with similar income levels to Jordan.

In view of the above facts, the present study used 25% as the percentage of total Syrian refugees entering the labor market, including those outside the camps and prior residents. It also assumed that 30% and 70% of those latter two groups compete with Jordanians and migrant workers, respectively. The estimated cost was calculated specifically in relation to only those competing with Jordanians, with the impact on the labor market calculated based on three lost opportunities. The first relates to work permits and associated fees, the second with lost social insurance deductions and the third with income that could have otherwise been generated for Jordanian replacements, noting that the average monthly wage for each worker does not exceed JD250.

The total Syrian manpower occupying local jobs ranges, according to the present study's estimations, from 110,000 to 140,000, though the study has not taken into account children below the age of 18, who exceed 30,000, according to the Ministry of Labor's (MoL) official figures. Female workers make up less than 3% of the manpower, which prompts the study to presume a conservative approach to estimating labor market-related costs and they are affected by the Syrian workers.

The researcher's previous study prepared for the Economic and Social Council found a significance presence of Syrian workers in several commercial and service stores. This phenomenon has been increasingly visible for nationals in their transactions with several private providers of goods and services, including gas stations, restaurants and all types of retail businesses.

The proliferation of Syrian workers was particularly notable in Amman and some other main cities like Irbid and Ramtha, but even extended as far as Ma'an and Karak in the south. Although many of them were a replacement of migrant workers of other nationalities, they still present a challenge to MoL in replacing migrant workers with Jordanians. Syrian labor is not only cheaper than that of other nationalities, but is also highly skilled in many occupations. Not all employers report to MoL about their migrant workers.

This deprives the ministry of a considerable source of revenues, a portion of which is channeled to national occupational programs intended to equip Jordanians with the skills needed to meet the demands of local market.

In estimation, the study finds that the failure by employers to secure work permits for their Syrian workers incurred a loss in revenues to both MoL and the Social Security Corporation (SSC) ranging from JD325 million in the base influx scenario to over JD373 million in the overflow scenario.

For the sake of accuracy, those amounts are based on the estimation by the study that 30% of Syrian workers are working under officially issued permits and paying their subscriptions to SSC. As for the opportunity costs, the study expects that the relevant aggregate costs will range from JD496 million in the base influx scenario to over JD568 million in the overflow scenario, with the total estimated costs in the labor market accounting for around 14% of the macroeconomic costs.

More important, however, is the social effect sustained because of the loss of over 100,000 jobs for Jordanians, which apart from financial considerations, deprives them of subscription to the SSC's social safety network, which guarantees insurers against death and disability, for example.

2. Sectorial Level

This part of the study discusses the matrix of costs that are assumed to have been borne by the Jordanian economy as a result of the Syrian refugee crisis. The focus is on costs incurred for education, health, energy, water, security and defense, infrastructure and municipal services. The study estimates the macroeconomic costs at around JD5.8 billion in the base influx scenario and over JD6.4 billion in the overflow scenario. This means macroeconomic costs range from 49% to 50% of estimated costs in the two scenarios. The following is a detailed discussion on those costs as associated with each individual sector.

A. Education

The previous study conducted by the researcher for the Economic and Social Council reveals that, according to official figures, schools had received around 14,000 school-age boys and girls by the end of October 2012, mostly enrolled in public schools. The private schools' intake amounted to 700 in the period from 2011, when the crisis broke out, to the beginning of the 2012 scholastic year. There are other students who have not moved outside the camps for educational purposes. At the beginning of the crisis, the Ministry of Education (MoE) set up tents as temporary schools until four school buildings were established to accommodate up to 5,000 students. Schools neighboring the camps were also opened in two shifts to accommodate as many Syrian students as possible. MoE also rented other buildings for the same purpose. In the meantime, MoE had adopted a strategy to abolish the two shift system, which burdened the ministry's resources and school infrastructure and caused inconvenience for the children, families and educational and administrative staff. The abovementioned numbers were accommodated, per MoE's data, by the schools of Ramtha, Mafraq, Irbid and Amman's first and fourth educational districts.

By the end of 2013, MoE's data showed the number of Syrian students at public schools rose above 110,000 with a projected increase to over 140,000.⁽²⁵⁾ A recent study has also shown that the number of students at Al Za'atari Camp reached 12,000, in addition to over 1,000 in the United Arab Emirates sponsored Marheeb Al Fuhood Camp. That study also found that out of 273,000 school-aged children, only 93,000 have been enrolled inside and outside camps. This indicates that around two thirds of those school-aged children are out of school, which presents the alarming prospect of their being illegally involved in the market without any permit or insurance. They could either be working for the own businesses or be engaged in internationally-banned child labor, which Jordan has strived for years to fight. These facts also affect the literacy position of Jordan in the Arab world. It has improved school enrolment to prestigious rates: as high as 91% in primary education and 94% in secondary education. Such achievements are at risk, given that the drop-out rates of Syrians are adding to the magnitude of social challenges including child labor, involvement in illegal activities and crime.

(25) Statements by the Minister of Education in Al Ghad Daily, January 14th, 2014.

The total number of Jordanian dropouts in primary and secondary schools, according to some statistics, was 150,000, a figure that will be doubled by 120% if the 180,000 Syrian dropouts are added.⁽²⁶⁾ In addition, the earlier figures do not account for those unregistered with the UNHCR, who number more than half a million with the same demographic distribution. Accordingly, not less than 250,000 of those unregistered Syrians are of school age, with drop-out rates expected to be no less than those of the registered refugees. In the most conservative scenarios, Jordan is facing an additional 100,000 dropouts, bringing the total Syrian dropouts to in excess of 280,000, almost double the Jordanian figures for all educational levels.

The cost of the 110,000 Syrian students (both refugees and residents), according to MoE's data, varies from JD450 in primary education, JD850 in secondary education and JD1,100 in vocational education. Almost 34% of UNHCR-registered Syrian refugees are in the 5-17 age group, half of whom are girls. This implies that the real educational burden of education and educational needs are distributed among the various educational stages. Accordingly, the study used an average figure to find out the real costs incurred by the educational sector to achieve accuracy and avoid exaggerated figures. This average figure was set at JD625 per student, regardless of educational level. Table (4) shows that the aggregate cost of education throughout the study period ranges from JD172 million in the base influx scenario to JD178 million in the overflow scenario. This means the average cost of education accounts for around 3% of total sectorial costs incurred for hosting Syrians in the period.

The researcher's previous study conducted for the Economic and Social Council estimated the cost of 850 Syrian students for the year 2011 at around JD3.257 million. For 2012, the estimated cost was around JD10.968 million, according to that study. So, in total, the costs of the crisis on education during the period 2011-2012 reach around JD14.225 million.⁽²⁷⁾ Those estimates are used by the present study in determining the costs of education in 2012, in addition to the costs carried forward from 2011.

(26) For more details on the analysis and figures, see Razan Nasser & Steven Symansky, "The fiscal impact of the Syrian refugee crisis on Jordan", USAID, January 2014.

27 For more details, see the study of the Economic and Social Council prepared by the researcher and published in the periodical reports of Isnaad Consulting under the title "The socio-economic impacts of the Syrian refugee crisis on Jordan's economy", 3rd Issue, Special Economic Report, February 2013 (only available in Arabic).

B. Health

The Ministry of Health's (MoH) data reveal that the cost of medical treatment per patient is around JD270, out of which JD132 is a subsidy for non-Jordanians.

Therefore, regardless of any amounts received by MoH from donors to cover the costs, the subsidy per patient is still a direct cost included in the real accounts paid by the state in respect of patients, regardless of nationality. Since the figure is the outcome of a division of total cost by number of residents, the study finds it appropriate for use in estimating the costs of medical operational (non-capital) services incurred by the state.

The assumption is that capital costs are already covered by donations or by the field hospital. Hence, the estimated medical care cost, considering that around 10% of Syrians go to hospitals to receive treatment, ranges from JD29 million in 2012 to over JD125 million in 2014 in the base influx scenario.

The figures go up in the overflow scenario to over JD29 million in 2012 and JD125 million in 2014. Accordingly, the aggregate impact on health exceeds JD240 million in the base influx scenario and JD285 million in the overflow scenario, accounting for around 4% of total sectorial costs.

According to USAID's aforementioned study, the largest portion of the cost borne by Jordan was in the health sector. That study showed that around 80,000 Syrian refugees were treated in Jordanian hospitals throughout the first eight months of 2013; that is, 10,000 patients a month. In addition, the local medical centers received 132,000 Syrian refugees throughout the same period; that is, 16,500 patients per month.

The figures still do not reflect an equal number of Syrian residents not registered with the UNHCR. The study also talked about Syrians competing with Jordanians for medical centers and hospitals, which burdened Jordanians and overstretched MoH facilities. Hence, the present study has been very realistic when assuming that the percentage of Syrian patients using MoH facilities stands at around 10% of the total Syrian population in the country.

The researcher's previous study conducted for the Economic and Social Council estimated the burdens of Syrian refugees on health for the year 2011 at around JD8.340 million. As for 2012, bearing in mind the graduated influxes of refugees throughout the first 10 months of the year, the study estimates the cost burden of Syrian refugees on health at around JD15.924 million.

C. Energy

Energy, particularly the electricity supply, tops the subsidized services in Jordan with the overall oil imports bill amounting to JD4 billion a year; that is, over 17% of GDP. Although Jordan completely lifted the subsidies on oil products, electric generation is still subsidized, incurring losses of over JD3 billion for the National Electric Power Company (NEPCO) by the end of 2013. The losses are largely because of the frequent and long disruptions (over 22 incidents) to the Egyptian gas supply, forcing the government to use the more expensive diesel and heavy fuel for electrical generation since 2011.²⁸ Nevertheless, oil subsidies continued until they were completely lifted in November 2012.

Based on official figures for the losses sustained by NEPCO, the study calculated the subsidy shared by Syrian residents per capita. Table (5) above shows that the aggregate cost of electricity resulting from the Syrian refugee crisis exceeded JD237 million in the base influx scenario and JD272 million in the overflow scenario, accounting for around 4% of total sectorial costs.

The aforementioned study by the Economic and Social Council estimated the cost of electricity subsidies incurred by Syrian refugees as 1% (JD12.571 million) in 2011 and 3% in 2012. The figure for 2012 is calculated by considering the gradual influxes of refugees throughout the 10 months, added to the number of Syrians already residing in the country in that year. This would give a more accurate estimate of JD38.807 million. The total benefits accrued by the Syrian refugees and residents throughout the period 2011-2012, according to that study, adds up to over JD51 million, which does not significantly differ from the present study's estimates.

D. Water

Jordan has one of the lowest levels of water resource availability per capita in the region, standing at 145 MCM compared with the regional average of +800 MCM, 1028 MCM in Syria and 2172 MCM in Iraq, according to the Department of Statistics (DoS).⁽²⁹⁾

The previous study conducted by the researcher for the Economic and Social Council shows that Jordan is among the top 10 poorest countries in water resources and that it falls below the world water poverty line of 500 MCM. The situation is worsened by any abnormal increases in the population. Water in Jordan is supplied to all users at subsidized prices. The Joint Jordan-UN Appeal states that the annual per capita share of subsidies spent on water is JD15.15. This figure has been used in this study to calculate the costs incurred by Syrian nationals (refugees and residents) in Jordan for water use. Notably, Al Za'atari Camp consumes a daily intake of around 4,000 cubic meters of water, which is over 1.4 million cubic meters a year.

(28) For more details, see Isnaad Consulting, "Electricity tariffs in Jordan: distortions and impacts of costs on demand", Special Economic Report, 4th Issue, August 2013.

(29) http://www.dos.gov.jo/sdb/dos_home/dos_home_a/water.htm

In any case, the water subsidy given to Syrian refugees and residents was estimated at 15.15 per capita a year, which makes the aggregate cost incurred by the Syrian refugee crisis for water throughout the study period amount to around JD34 million in the base influx scenario and JD39 million in the overflow scenario.

The figure does not even cover sanitation and environment-related costs, which have not been calculated in this study. However, according to USAID estimates, such costs incurred by Syrians living outside the camps stand at around JD166 million bringing the total cost of sanitation to JD67 million and JD106 million in 2013 and 2014, respectively. Those additional costs obviously exceed those of the water supply. What those figures imply is that the cost of water, as estimated in this study, will aggregately rise by JD182, leading to costs of JD216 million in the base influx scenario and JD221 million in the overflow scenario.

Another problem relates to adverse effects on the environment, with Al Za'atari Camp being established on a water basin that supplies Mafraq, Irbid and Zarqa with all their water needs in addition to meeting 30% of Amman's water demand. The interviews conducted by the researcher's team show outspoken concerns that the water basin may be polluted by the waste water in view of violations by large numbers of the camp's residents. The situation is alarming because of the foreseen destructive environmental effects in Jordan, for which reason this study prompts the concerned authorities to commence forthwith a study by specialists in this area. It also calls for relocating the camp as soon as possible, but in any case before mid-2014.

E. Protection, Security and Civil Defense Services⁽³⁰⁾

Jordan provides high-quality services for the security, protection and civil defense of its citizens. The same applies to the hosting of refugees, regardless of whether they are registered or unregistered. Throughout the history of Jordan, refugees have benefited from all services for security, protection and civil defense in official camps, public spaces and all other parts of the country.

The costs incurred by providing such services are estimated by the study in the same manner as in the previous study prepared for the Economic and Social Council, on a per capita basis throughout the period 2012-2013 and in light of the estimated cost in the budget for the year 2014.

The relevant aggregate cost throughout the study period exceeded JD643 million in the base influx scenario and JD759 million in the overflow scenario. Those account for nearly 12% of total microeconomic costs. The Economic and Social Council's study estimates the cost at around JD9.6 million in 2011 and JD40 million in 2012.

(30) This part used the methodology and texts used by the researcher in a previous study for the Economic and Social Council.

F. Infrastructure and Public Services

It was not easy to estimate the impact of such large numbers of refugees on the infrastructure. The highly abnormal increase in the population, as well as the demographic distribution of the Syrian refugees and residents per se, is an indication of the huge pressure put on all types of infrastructure, such as roads, telecommunications and transport. Therefore, the study opted to define an approximate coefficient (a proxy) that would allow for the best estimate of the costs of Syrian refugees in terms of infrastructure. In addition, technical experts were consulted for advice on the rates of depreciation and costs of renovating the infrastructure over the years. Using the available estimates, the study found that the costs of current infrastructure stands at approximately JD40 billion for the last two decades. A proxy coefficient was deduced at the value of JD0.15 per capita and then it was used as a proxy coefficient for the per capita impact on infrastructure depreciation on an annual basis. The derived coefficient was used to calculate the impact of Syrians on the infrastructure throughout the study period, taking into consideration the changes in their numbers from year to year. The study, in addition, calculated the per capita share of capital expenditure to calculate the annual cost of benefits to Syrian individuals in terms of capital expenditure in the public financial accounts and the General Budget. That was used as a proxy coefficient of the annual per capita cost of infrastructure and projecting the outcome of the changes in the number of Syrians coming to the country in the study period (2012-2014). As a result, the aggregate cost of the Syrian refugees and residents in Jordan during that period was estimated at over JD4.4 billion in the base influx scenario and JD4.8 in the overflow scenario; that is, nearly 75% of total sectorial costs.

G. Municipal Service Sector

Chapter III of this study examines the socio-economic impacts on those communities hosting Syrian refugees coming to the country since the outbreak of the crisis. The pressures on the municipalities were crystal clear, particularly in bordering regions, as in Mafraq and Irbid, necessitating an increase in funding for the services rendered by such municipalities. The budgetary funds allocated to municipalities were raised in response to the new burdens of the Syrian refugees. In order to calculate the per capita share of municipal expenditure, a proxy coefficient for the cost of the Syrian refugees and residents all over the country was obtained. Thus, the study arrived at an estimate of the cost of Syrian residents based on the changes in their residence status and concluded that the aggregate cost of the Syrian refugee crisis on municipalities throughout the study period was around JD45 million in the base influx scenario and over JD54 million in the overflow scenario. This accounts for not less than 1% of total sectorial expenses incurred by the Syrian refugee crisis, as shown in Table (5) above.

5. The Final Trial Balance: Benefit-Cost Matrix

The following table (6) sums up the estimated impacts of the Syrian refugee crisis on Jordan's economy. It shows the total benefits received and costs incurred by Jordan throughout the period 2012-2102 according to the base and overflow scenarios.

Table (6): Benefit-cost matrix for the estimated impacts on Jordan's economy (JD million)

Item	Years			
	2012	2013	2014	
			Base influx scenario	Overflow scenario
Total estimated benefits	999.4	3118.7	3112.0	3800.0
Total estimated costs	1118.5	4665.6	5697.6	7251.3
Grand total	-119.1	-1546.9	-2585.6	-3451.3
Aggregate outcome as estimated in the study			-4232.1	-5097.0

The above trial balance shows huge net losses sustained by Jordan throughout the previous years, rising from JD1.2 billion in 2012 to over JD1.5 billion in 2013. Furthermore, the study expects the losses (costs) to outweigh the benefits in 2014 by over JD2.5 billion in the base influx scenario and by up to JD3.5 billion in the overflow scenario. Estimates reached by this study show that hosting such large numbers of Syrian refugees and residents in Jordan ultimately amount to losses above JD4.2 during the period 2012-2014 in the base influx scenario and JD5.1 billion in the overflow scenario, accounting for 16% and 20% of expected 2014 GDP, respectively. It also accounts for at least 20% of Jordan's public debt and over 60% of estimated 2014 public spending.

In sum, the discussion about benefits and costs or, so to speak, gains and losses, has emerged in the context of Syrians seeking refuge in Jordan. The estimated trial balance in this study shows a large debit account reading around JD5 billion besetting a Jordanian economy that is already challenged by tremendous distortions in financial deficit (public debt, trade deficit, structural unemployment and other problems, as pointed out in Chapter I). This study has found that whatever benefits have accrued to Jordan as a result of the Syrian refugee crisis, the costs have dwarfed the benefits.

5. Key Social Impacts of the Crisis: Non-Quantity Estimates

There are implications in reality that the continuous flows of refugees for extended period of time necessarily have numerous socio-cultural impacts. These can be felt through the quality and size of the flow of refugees into any economy and defy an accurate quantity-based impact assessment, whether positive or negative. Refugees, by their nature, come with their own cultural and sociological diversities and perceptions of economic, social, cultural and political issues. The range of such perceptions and impacts are not restricted to a specific territorial space in the host country but rather spread out at the local community level. In the case of Jordan, it is evident that over 80% of Syrians live outside the official camps and spread nationwide, though most of them live in Mafraq and Irbid governorates. There are also Syrians who have been regular residents in the country before the crisis and are not registered as refugees, with a relatively high concentration in Mafraq, Irbid and Amman. Accordingly, the social impact that such groups have by virtue of their mobility moves across all governorates, without exception, though the highest concentration is in the three governorates of Mafraq, Irbid and Amman.

The Syrian refugee crisis, therefore, as seen by this study, has had four social non-quantity impacts, namely on poverty, education, marriage customs and the environment. In addition, there are other social impacts related to unemployment and competition with Jordanians for jobs. This results in the loss to some Jordanians of job opportunities and hence loss of coverage by the safety net provided by the Social Security Corporation to workers and their families.

Several Jordanian studies have cited poverty as a top social challenge facing Jordan's economy, with poverty pockets increasing from 22 in 2006 to over 36 by the end of 2012. It is believed that the presence of Syrians all over the country has posed an intrinsic challenge to efforts to combat poverty. There is competition for financial resources, which have been channeled to poor population sectors through the various donation mechanisms. Widespread popular sympathy with the Syrian issue led many to extend their support to the Syrians at the expense of the poor people of Jordan. Though it is not easy to be certain about the exact impact of such a phenomenon, it is strongly believed that it has had an impact on efforts made by civil society organizations and individuals in combating poverty.

On the social impacts on education and culture, all interviews conducted by the researcher and his team revealed, in many respects, huge adverse impacts on the quality of education at those schools hosting Syrian refugees. Overcrowded classes are one issue. They increase the ratio of students to teachers, decreasing attention for individual students, before one considers the fact that classrooms are not designed to accommodate such large numbers of students. The two-shift system is another problem with the schools concerned, which are forced to resort to such a system to deal with the increasing numbers of students. Another direct effect of this system is the reduction of each classroom lesson from 45 to 35 minutes, which impacts on the quality of content delivery and understanding. The third issue has been mentioned in Chapter IV of this study. It relates to complaints made by some parents, who request the separation of Jordanians from Syrians because of different cultural perceptions and because of fear that their children may be affected by undesirable socio-cultural impacts arising from the Syrian presence. This latter issue, however, did not seem to be an overwhelming concern by the respondents of the study.

On the issue of intermarriages, it seems that several local, regional and international media have been exaggerating the issue. This is not a concern for this study as official statistics in Jordan show that this is not even a notable phenomenon. The Supreme Judge's Department (SJD), which is the authority responsible, denied any abnormal increase in marriages with Syrians since the outbreak of the crisis. Statistics, for example, show that SJD issued less than 200 marriage contracts with Syrian women in 2012 compared with 270 in 2011. It is notable that intermarriages between Jordan and Syria are not new. It is a traditional practice that has occurred since the establishment of the two countries. For that reason, there is no reason to make a firm claim that the crisis has resulted in an abnormal trend of Syrian women marrying Jordanians. There are also other stories of Syrian women marrying non-Jordanians and other forms of undocumented marriages in the camps. Some people in positions of authority said they saw, though infrequently, some marriage documents inside the camps executed on detergent boxes. Others pointed to several social challenges imposed by the non-official marriage culture that results in an unofficial and non-documented marriage contract, even if it is vouched for by legally mandated witnesses. In many cases, this has resulted in the man abandoning his wife for good when the woman falls pregnant, for example.

The last non-quantity issue, in the researcher's opinion, relates to an important burden on the Jordanian economy and society. It is the environmental impact of the numbers of residents on the economy. From an economic perspective, every individual in a country serves as an important input to production. This individual uses agricultural, industrial, commercial and service resources and as such he or she produces a diversity of outputs that pollute the environment. It follows that any abrupt increase in the population in the range 3-16% which is diverse in age, demographic and geographic nature, as seen by Jordan, will necessarily pose a serious challenge to health and the environment. It is, therefore, recommended that specialists tackle this issue through an approach that helps to identify the estimated quantitative impact of such influxes on the Jordanian environment.

Also relevant to this discussion is the concern that pollution may affect the water basin underneath Al Za'atari Camp because of the large numbers of refugees. That basin is instrumental in supplying water for Mafraq, Irbid and Zarqa in addition to the eastern parts of Amman, which rely on the basin to meet around 30% of their needs. It is too risky to leave this issue unaddressed, having worsened over the past few years. The situation is exacerbated by the introduction into the camps of new refugees who find it difficult to use collective latrines and thus have established their own sanitation facilities. Such practices risk the leakage of waste water into the underground water reservoirs, which prompts the researcher to recommend moving the camp as soon as possible. There is no exaggeration in saying that this must happen before the end of the first half of 2014. Otherwise, the result will be devastating for the environment and people, an outcome Jordan cannot afford.

Concluding Remarks

This study has tried to elucidate in detail the impacts of Syrians living in Jordan, whether refugees or residents, on the socio-economic structure of Jordan. It has analyzed the challenges facing the country before and after the crisis and explored the various impacts of the crisis on the host communities in Irbid and Mafraq. The first of its kind, the study broached the issue by using a benefit-cost matrix, which addressed the benefits as well as the costs of the influxes of Syrians on Jordan's macro and micro-economy. It finally proposes the following concluding remarks and recommendations for Jordan's socio-economic policies:

- Hosting Syrians has cost the economy around JD5.8 billion up to the end of 2013 while aggregate benefits of some HD4.1 were received. The study suggests that the accrued aggregate losses in 2012-2014 exceed JD1.7 billion.
- The study presumed two scenarios for the Syrian refugee influxes to Jordan. The first, the base influx scenario, assumes the daily introduction of 400 refugees, while the second, the overflow scenario, presumes a total of no less than 1,500 refugees a day. In light of these two scenarios, the study calculated a range of losses from JD2.6 billion in the base influx scenario to JD3.5 billion in the overflow scenario.
- The aggregate costs estimated by the study for the period 2012-2014 range from JD4.2 billion in the base influx scenario to JD5.1 billion in the overflow scenario. At any rate, the aggregate costs account for not less than 20% of GDP.
- It has been found that international pledges, estimated separately from the UNHCR's figures, are falling substantially short of meeting needs. The assistance so far provided has covered less than 75% of the required amount, with the remaining 25% left to Jordan and the United Nations.
- The persistence of the Syrian crisis shows that it will not be solved in the short term, with continuing impacts on the socio-economic situation of the country projected in the medium and long terms for at least, the researcher believes, the next five to 10 years.
- Some facts revealed by this study show that the crisis in Syria has destroyed over 1.5 million housing units over the last three years. The same resources show that the productive capacity of those units in Syria does not exceed 90,000 a year. In sum, reconstruction efforts will take between 10 to 15 years, which in turn suggests that restoring stability in Syria will take more than 10 years, even after the crisis ends. This implies a long stay for the refugees in Jordan before they can return to their country.

- There is no doubt that military security agencies in Jordan have been highly effective and professional in dealing with the influxes of Syrian refugees across the official and non-official entry points. This is a fact ascertained by the respondents and sensed by the researcher's team in its field visits.

- The study finds that the relative increases in the costs of hosting Syrian refugees require that the government assigns independent authorities, including those liaising with key donors, to create an integrated model matrix. The aim is to calculate the real cost items and present them to the donors so they can be covered by them. The matrix would help in boosting transparency in respect to the ways in which donations are spent.

- The local, regional and international private sector should shoulder responsibility by covering some of the costs incurred by the Syrian refugees in Jordan. This should invoke the social and corporate responsibilities of companies. It is also necessary to encourage the creation of an official or independent body to promote that endeavor, to collect the contributions and to spend them meeting the required costs, particularly in education, health and infrastructure.

- No other study has so far proposed genuine non-quantitative estimates of the impact on Jordan's economy and society, including in particular:

- The costs of a drop in educational quality as a result of the pressures on schools, particularly in border cities, as classes become overcrowded and lesson times are reduced in those schools that had to move to the two-shift system to absorb Syrian students;
- The erosion of the quality of infrastructure and the size of investment needed to maintain it after it has been overstretched by the abnormal and unplanned increase in population;
- Impacts on society and the family in the host communities, particularly in Mafraq and Irbid.

- Some studies suggest that the cost of environmental pollution per capita is dangerously high. It is, therefore, necessary to conduct a specialized environmental study to calculate the real environmental cost of Syrians hosted in Jordan. Another study is needed to calculate the impact of pollution on the Al Za'atari water basin, which feeds Irbid, Mafraq, Zarqa and some parts of Amman. It is strongly recommended to relocate Al Za'atari camp to another place to preserve that basin and avoid any future problem.

- The bordering cities in the north (namely Mafraq and Irbid) are suffering from the socio-economic losses incurred by hosting refugees. Clearly, those governorates have not so far received adequate help to cope with the challenges and costs of hosting Syrian refugees.

- Apart from the refugee issue, the Syrian crisis has in general had several huge impacts on Jordan's macro-economy, manifested in foreign trade, tourism, Jordanian investments in Syria, the financial deficit, debt and overall growth. Accordingly, a specialized study is needed to calculate accurate related costs.

- Last but not least, the financial benefits gained by Jordan as a result of the influxes of Syrian refugees are still dwarfed by the costs and burdens shouldered by Jordan. The study, therefore, raises the concern that such financial and non-financial burdens will continue to trouble Jordan in the future.

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31 For more convenience, those references are left in the same Alphabetical order that they took in the Arabic version of this book.

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