

## **ECONOMIC MODELLING OF THE EFFECTS OF SYRIAN REFUGEES ON THE LEBANESE ECONOMY**

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## **Abstract**

*The socio-economic effects of the Syrian refugee crisis are imposing a heavy burden on Lebanon through the social, economic, and communal tensions, which the country's system cannot handle. However, dealing with this problem has not been effective, due to the lack of credible and reliable information on the Syrian refugees and their current standard of living, and due to the absence of sound economic policies to deal with the refugees' presence in Lebanon and mitigate its impact on the economy. The objective of this paper is to provide a comprehensive discussion of the Syrian refugees and their impact on the Lebanese economy, society, and the overall Lebanese population. A random survey comprised of 400 respondents who are affected by the Syrian refugees' presence, was formulated to indicate the impact of the refugees on the economy of Lebanon. The results indicated that 50% of the respondents strongly believed in the negative economic impact of the refugees on the country's economy. Finally, this paper adopts the formation of Special Economic Zones (SEZs). SEZs are introduced to mitigate the negative impacts of the Syrian refugees' problem in Lebanon. 'Special Economic Zones' are multi-stakeholder zones that provide economic and educational opportunities near refugee camps to turn the burden of the refugees' into an opportunity.*

*Keywords: Lebanese economy, Syrian refugees, economic modelling, economic opportunity, Special Economic Zone*

## **INTRODUCTION**

Before the war, Syria was a country with political stability, social stability, and economic stability, and was even experiencing economic growth. However, the economic sanctions that were imposed on it, besides the instability which it experienced ever since 2010 reversed previous growth in the Syrian economy to a state of decline for the years 2011 and 2012. According to the UN, total economic damages of the Syrian civil war are estimated at \$143 billion as of late 2013. Its public debt has reached more than 50 percent of its GDP, and its expenses are as high as six billion dollars and revenues are about one billion dollars. Syria was able to export oil and petroleum products at a value of nine billion dollars before the war; however, today it only exports oil and gas products at approximately one billion US dollars.

### **Impact of Syrian Refugees on Lebanon**

With the Syrian refugees 'ongoing inflow into the country, they have had a significant impact on the country's social and economic standards. The government was unable to handle the huge

numbers of refugees and unready to support them, in addition, the Lebanese communities already had economic and social difficulties to start with (Ramesh, and Khan, 2015). Therefore, dealing with the Syrian refugee problem has become a daily challenge for Lebanese people, the politicians, and the international agencies working in Beirut.

The inflow of Syrian refugees into Lebanon has led to economic, humanitarian and social pressures on the country's society, infrastructure, security, and state systems. According to estimates of the United Nations High Commissioner for Refugees (UNHCR), there are about 1.3 million Syrian refugees in Lebanon. Of those, 1 million are officially registered and the rest are awaiting registration.

The Syrian refugee crisis places a serious pressure on the country's population and their economy. Moreover, the increasing presence of the Syrian refugees is adding pressure and creating tensions (Syrian Refugee Flows, 2015). Abou Zeid (2013) explains that huge numbers of Syrian cars are clogging the roads of Beirut, increasing the pressure on the city's streets. There are between 11, 0900 and 15,000 Syrian refugees entering Lebanon per week (Romano, 2013), making it very difficult for the country's communities to accommodate the large influx of families crossing into the Lebanese border. As a result, the refugees often end up living in abandoned buildings or unfinished tent settlements. UNHCR recognizes that the Lebanese government is unable to accommodate the Syrian refugees in terms of medicine, water, and education. (Romano, 2013). Furthermore, an increasing number of Lebanese are becoming resentful towards the situation they are living in. Communal tensions are resulting from the sad reality which Lebanese are observing i.e., having to work for low wages, facing an increasing cost of services and food, and noticing that international aid being delivered to the Syrians but not to Lebanese people (Zoghby, 2013).

## LITERATURE REVIEW

Lebanon is a country of 4 million people, the 1.3 million Syrian refugees are driving prices of two bed-room apartments sharply high, while Syrians who are intending to reside in Lebanon for a long time are also driving the prices of new apartments even higher (Duncombe, 2013). Another important part of the economy that is being affected is the healthcare system (Al Rifai, 2015). Increasing numbers of wounded people are streaming into hospitals in Lebanon, due to tensions created by the Syrian crisis between rival Lebanese parties that are leading to gun battles, especially in Tripoli north of Lebanon (Kelley, 2013). Moreover, there are many refugees living in the villages, towns and cities around Lebanon, scattered over around 1,400 locations which are mostly socially and economically depressed (Kelley, 2013). What has made the economic pressure even worse is the current situation of the Lebanese government. The

current government is effectively paralyzed and is not keeping up with the high level of demand coming from the needs of the Syrian refugees. According to Ibish (2013), Lebanon is a fractured state that is also disintegrated and dysfunctional which is often unstable. There can be little doubt that the Lebanese state is fracturing more than ever, both in terms of its institutions and political structures. This has led the Lebanese government and the United Nations to appeal for \$1.7 billion in aid to fund community-level projects, which include improvement of waste and water systems, fragile health services, and crumbling schools. Kelley (2013) stated that without more international support, the patience and hospitality of host communities in Lebanon may wear thin. This shows how economic and social tensions are very much interrelated and are considered serious problem resulting from the Syrian refugee crisis.

Thus, it can be said that the effects of the Syrian refugee crisis are serious, and are imposing a heavy burden on the country's economy and its people. This manifests itself particularly through social and ethnic tensions, increased traffic, overcrowding, decreased wages and many other issues which the country's system cannot handle. In addition, Syrians who are relatively wealthier have either deposited their money abroad or have relocated their businesses outside Lebanon, which has made the already existing tensions from the Syrian crisis even worse (Samaha, 2015).

### **The Lebanese case**

The effects of the Syrian refugees on Lebanon are well reflected by the social and communal problems, the increasing number of Syrians in Lebanon have created worries that are very much justified, due to the fact that a few car bombs exploded in the Hezbollah stronghold areas of the southern suburbs of Beirut, wounding scores of innocent civilians and claiming innocent lives (Ibish, 2013). Moreover, there is a great chance that groups of the Syrian refugees might resort to weapons and become militant. This will worsen the current situation and might also result in more tensions.

Abou Zeid (2013) explains how Syrian camps function as a safe haven for anti-Assad resistance. Moreover; Ibish (2013) explains how the left-wing and Palestinian alliance faced the right-wing Maronite Christian alliance forces during the Lebanese civil war of 1975, bringing both Syria and Israel to fight battles in Lebanon. The current situation creates a possibility for the Syrian refugees to receive weapons that would ignite another civil war in Lebanon, which will not improve the position of the political parties on the ground but, will destroy Lebanon once more. Additionally, Syrian refugees will negatively impact the Lebanese economy and increase the poverty level of the country (Holodny, 2015). Knowing that, Lebanon already suffers from a

recession, a sluggish economy, and increasing poverty levels which will make the Syrian refugees' impact on the economy even worse.

Holmes (2013), stated that demand for electricity in the country increased by 27% in just one year, which placed a serious pressure on the government's budget and the government's financial reserves, since electricity is heavily subsidized in Lebanon. An increased demand was also noticed for food commodities and everyday living products, as more and more Syrians were buying bread, food, and renting apartments. This has led to an increase in the prices of almost all food and daily life products, which in turn affected negatively the living standards of Lebanese citizens. Financially, the burden of the refugees is reflected by the slow growth, which was less than 2% in 2012 -13, after climbing high 8% in 2007-2010.

### **Unemployment in Lebanon**

Kelly (2013) explains that Lebanese workers are protesting about the lack of jobs created by the employment of Syrians who accept very low pay. Furthermore, Syrian businesses have been opening in Lebanon, such as the Al-Farouk restaurant, from Damascus, which relocated in Beirut, competing with other Lebanese restaurants in the area (Abou Zeid, 2013). This has also led to a decrease in wages for many Lebanese and specifically, the country's lower income citizens.

On the other hand, there are some who argue that the effects of the Syrian refugee crisis can also be a sort of opportunity for Lebanon. Holmes, 2013 stated that farmers in Lebanon are benefiting from the refugees as a source of cheap labor, which makes the Lebanese agricultural products very competitive. Moreover, most refugees are settling in the rural areas, where they buy all their necessities and help in easing the economic stress of farmers.

### **RESEARCH METHODOLOGY**

This paper utilizes a descriptive research methodology. However, the descriptive part will gather data from a survey using a questionnaire as a main instrument. The survey will target people who are affected by the Syrian refugee problem in Lebanon. Data is solicited via 400 questionnaires based on a survey that targeted the affected people by the Syrian refugee problem in Lebanon selected randomly. However, to eliminate bias, the researchers ensured that this instrument does not contain any measure that would be used as a lead for desired responses. Another method of data collection that was followed included secondary sources data solicited from published reports and other external sources of information. Collected data was subject to descriptive statistics.

## ANALYSIS AND FINDINGS

With regards to the profile of the respondents, most of the 400 respondents (figure, 1) i.e., 200 were employees, 80 were business owners, and 120 were students. The majority of the respondents have been affected by the Syrian refugees for 5-7 years, with only 12 percent of them were affected for less than a year (figure, 2). With regards to the negative effect on social stability (figure, 3), half of the respondents (200) strongly agreed that the refugees have a negative effect, while; only 120 of the respondents either strongly disagreed or disagreed. Similarly, 250 of the respondents agreed or strongly agreed that the refugees have a negative effect on the economy, while only 50 of them disagreed (figure, 4). The question on whether the refugees can be an economic opportunity or a burden, 37 percent of the respondents were neutral in their response, and 25 percent agreed, while 13 percent strongly disagreed (figures, 5 and 7). When the respondents were asked if the government is meeting its responsibilities towards the refugees, 41 percent of the respondents strongly disagreed, and only 19 percent strongly agreed (figure, 6). The people who are known to be affected by the refugees are 250 respondents, who said that they knew the refugees from the workplace or from Lebanese universities and colleges, while 100 of the respondents said that the refugees were family members (figure, 8).

Figure 1: Profile of Respondents

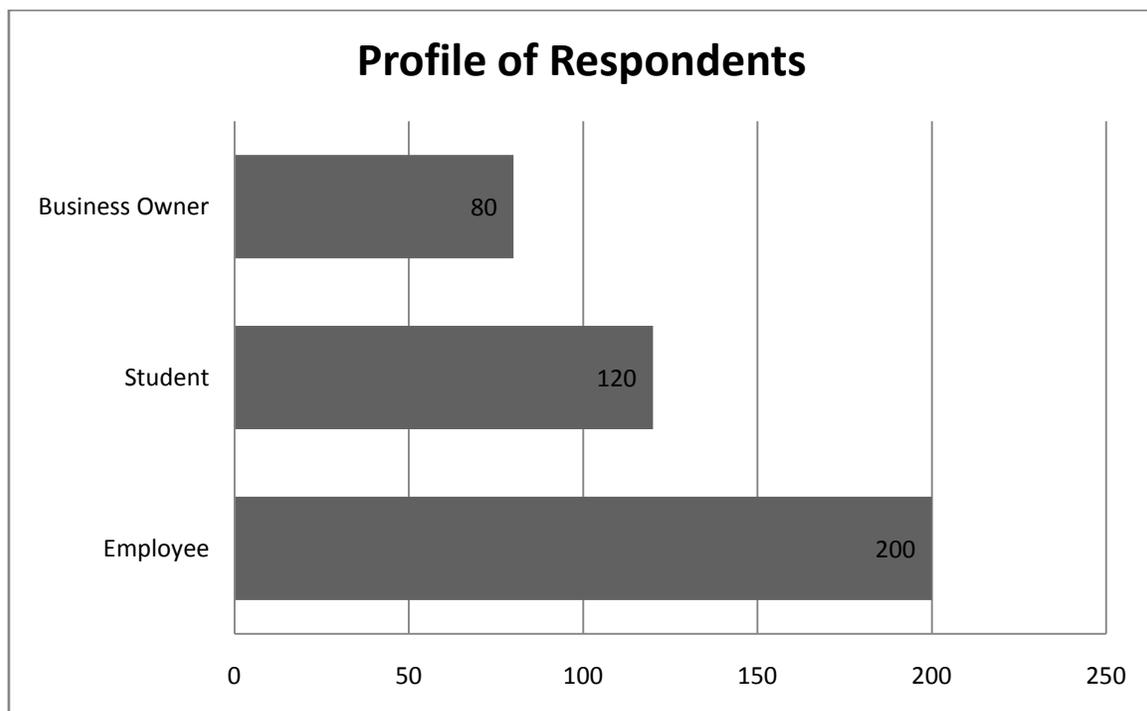


Figure 2: Individuals Affected by Syrian Refugees

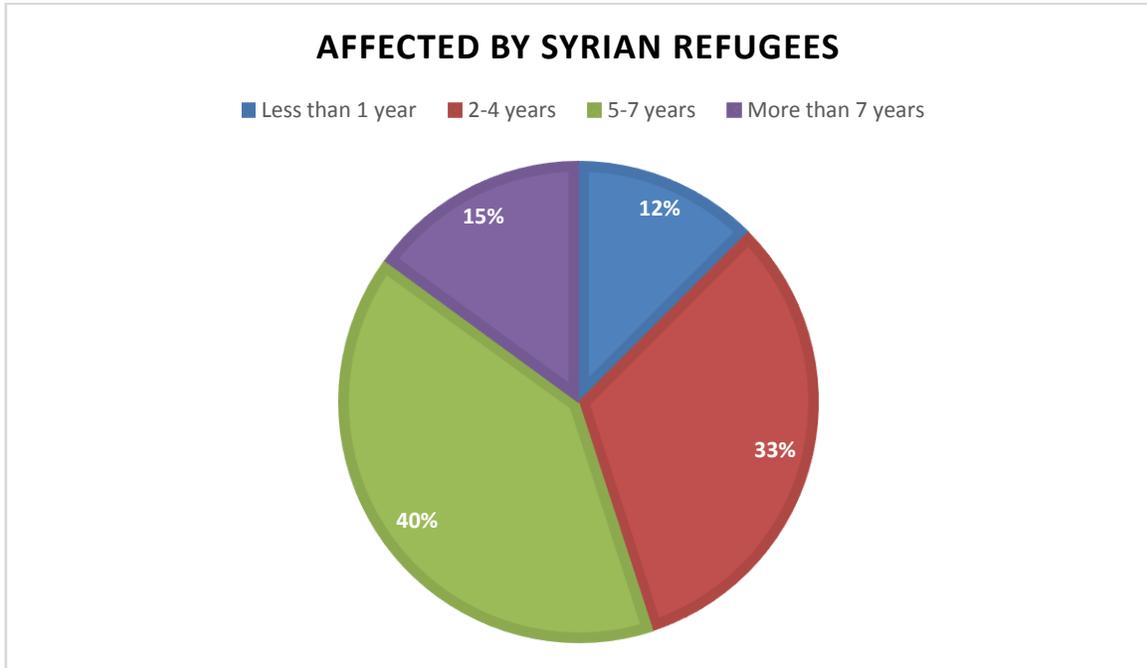


Figure 3: Negative Effect on Social Stability

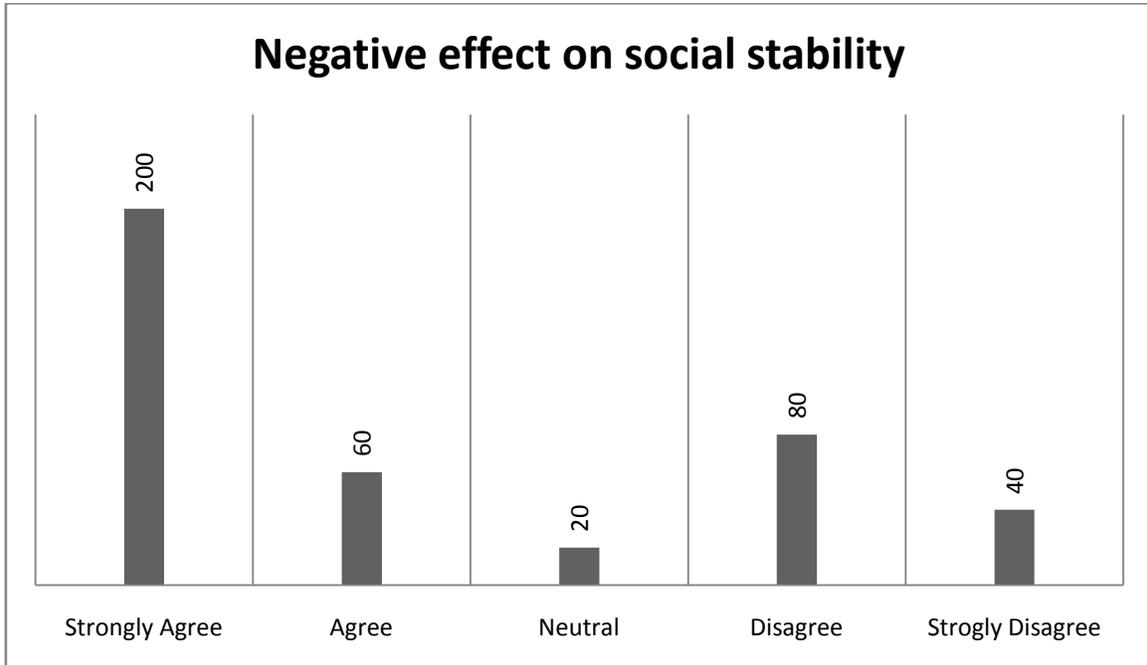


Figure 4: Negative Effect on the Economy

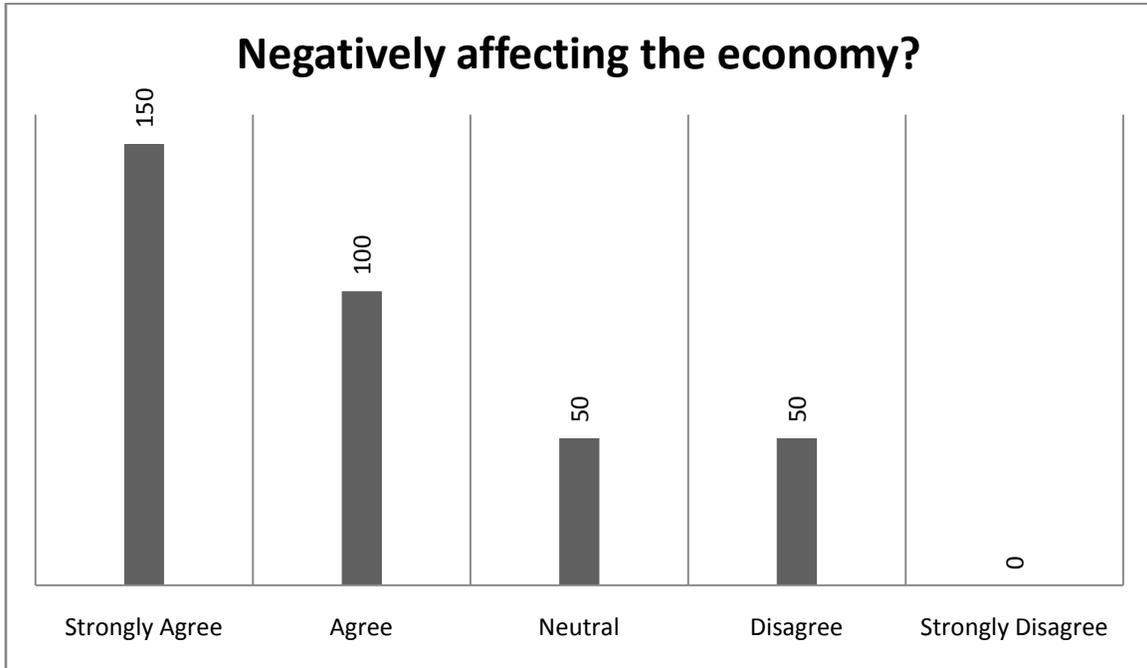


Figure 5: How can refugees support the economy

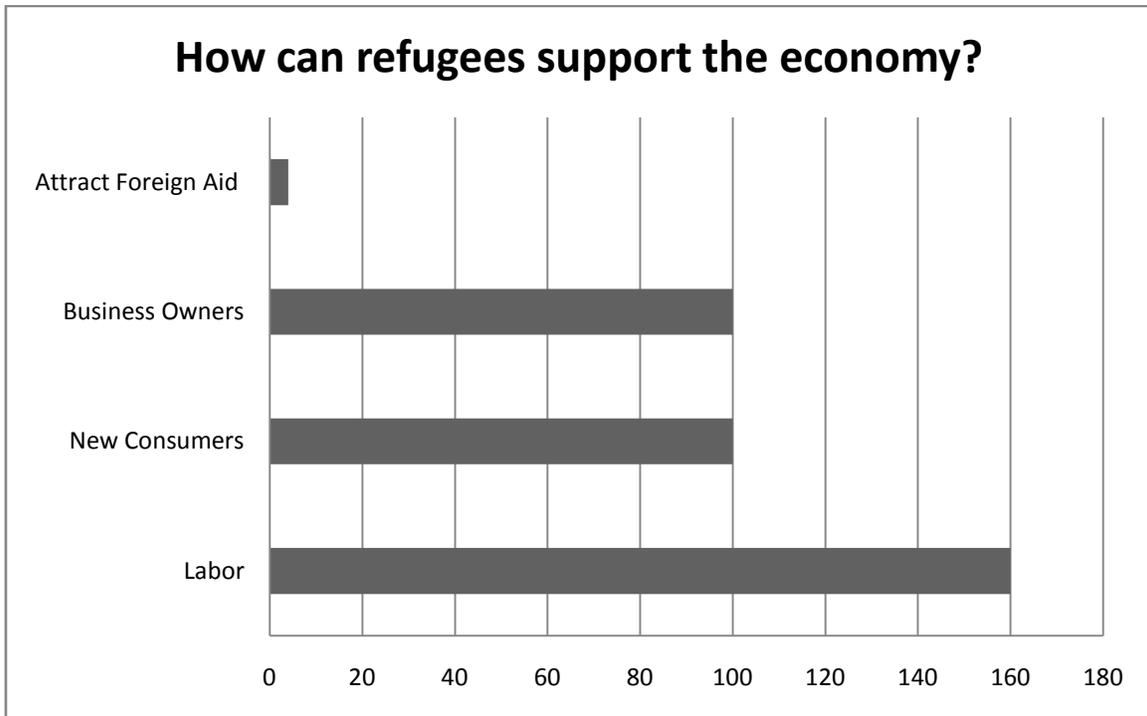


Figure 6: Is the Government Doing Its Responsibilities?

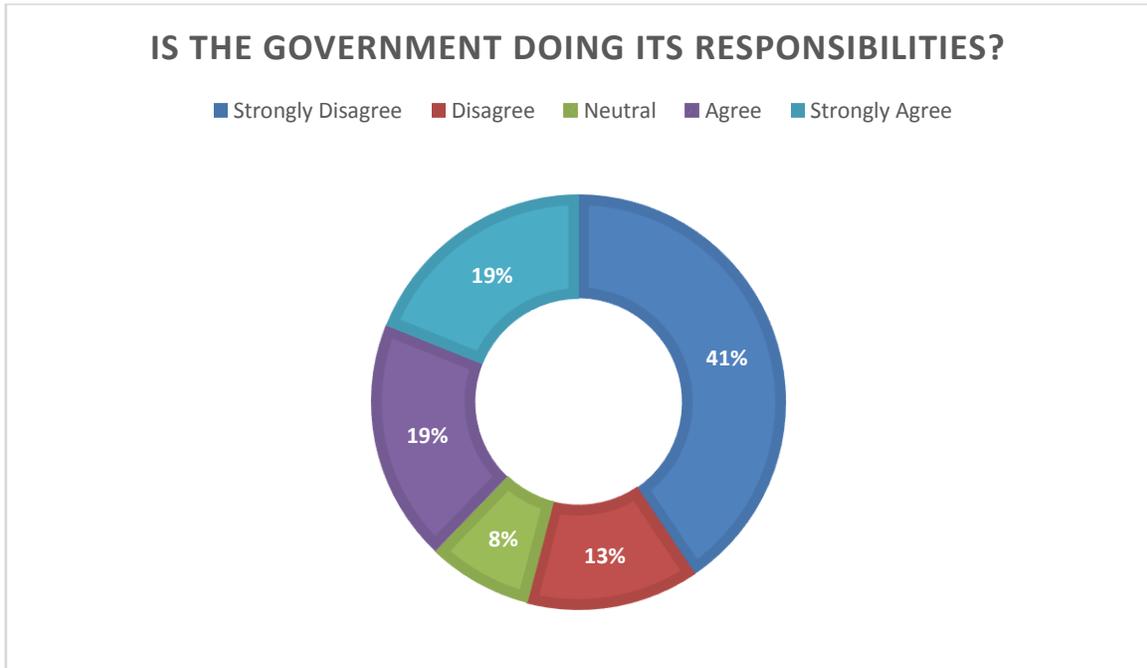


Figure 7: Can refugees be an economic opportunity?

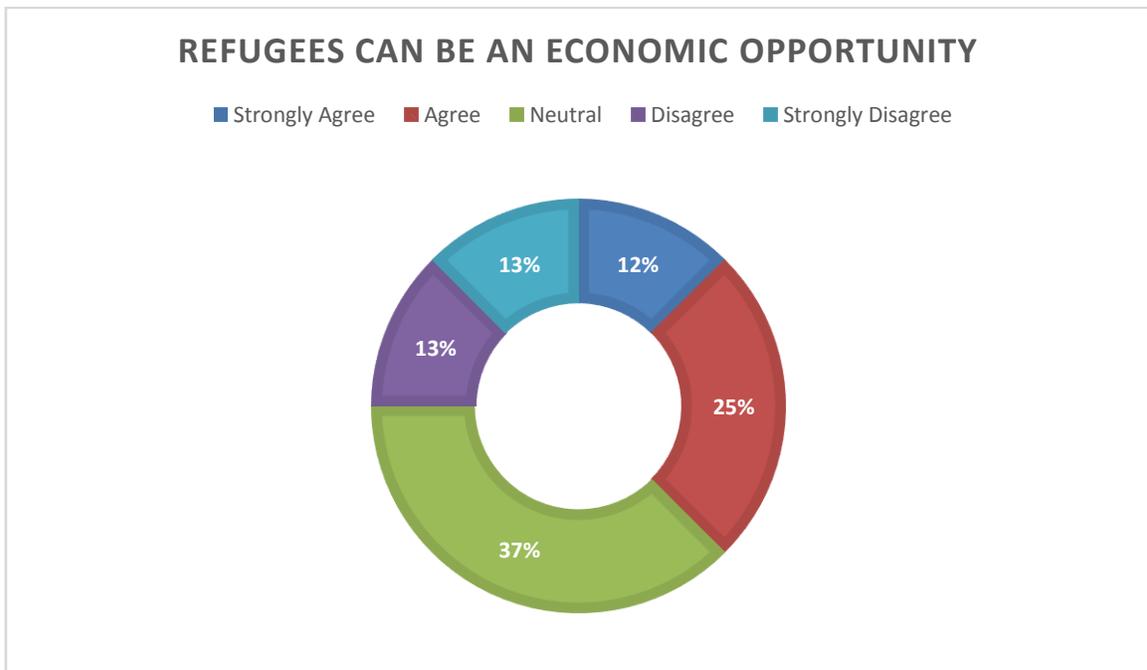
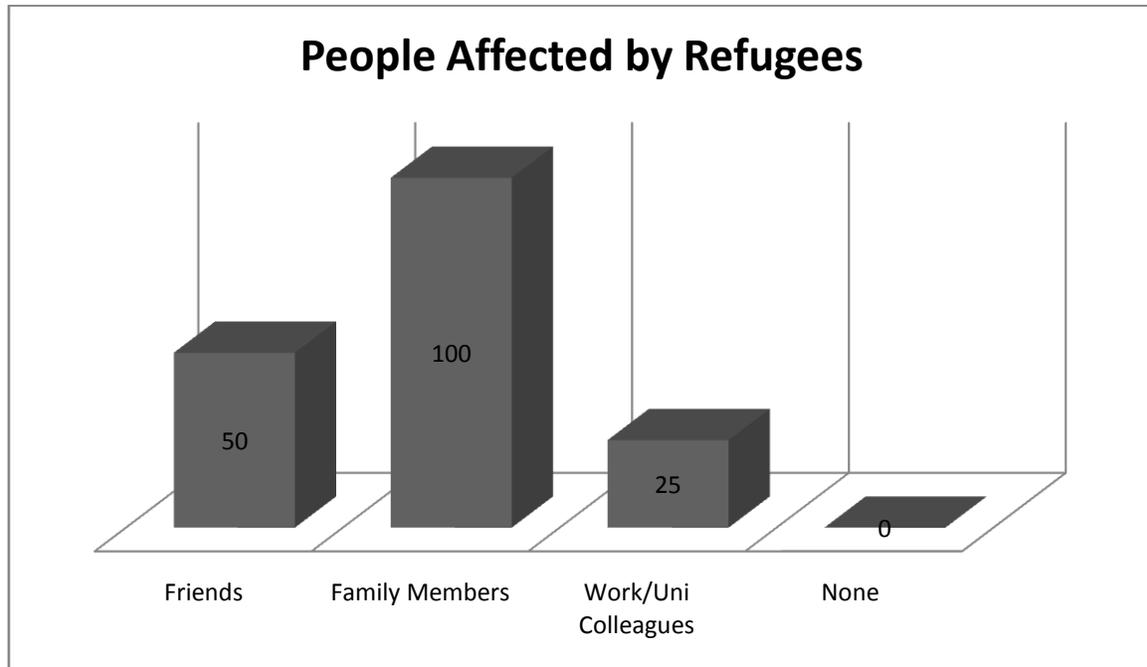


Figure 8: Who is affected by refugees?



### Profile of Refugees

According to the Vulnerability Assessment for Syrian Refugees in Lebanon (2016) which was conducted jointly by the United Nations Children's Fund (UNICEF), United Nations High Commissioner for Refugees (UNHCR), and Vulnerability Assessment for Syrian Refugees in Lebanon, 2016), the average refugee household was comprised of 5.1 members: 2.2 adults (18-59), 1.5 children aged 6 to 17, 1.1 children aged five years and below, and 0.1 older people (60 and above). The female to male ratio was 1.05 with no significant geographical differences.

Less than half of the households consisted of four members or less, in the majority of cases two parents and two children, while around one third of households included five to six members and 23% of households consisted of seven members or more (Vulnerability Assessment for Syrian Refugees in Lebanon, 2016)

At the governorate level, the highest average household size was reported in Baalbek-Hermeleat of Lebanon, and Nabatieh south of Lebanon (5.36), and the lowest in Beirut (3.75). The percentage of 25 to 34-year-old individuals varied significantly across governorates, indicating a probable movement toward regions with higher job opportunities. The share of 25 to 34-year-old individuals was highest in the central coastal districts of Beirut (21%), Jbeil (21%) and Kesrwane- *Mount Lebanon* (20%), and lowest in the Bekaa districts of Baalbek-east Lebanon (13%) and Zahle east of Lebanon (14%). (Vulnerability Assessment for Syrian Refugees in Lebanon, 2016)

There were significantly more single-member households reported in Beirut (34%) as compared to rural areas such as Baalbek-Hermel east of Lebanon (3%). More than three quarters (78%) of these single-member households consisted of males. This data seems to indicate that young men move to the central coastal districts to find work. Beirut is the only governorate where the share of males exceeded that of females: 52% males compared to the national average of 49%. (Vulnerability Assessment for Syrian Refugees in Lebanon, 2016).

Seventeen per cent of Syrian refugees' households were headed by females, compared to 19% in 2015. The share of female headed households was lowest in Mount Lebanon (10%), and highest in the Bekaa east of Lebanon (27%). A significant share of female-headed households (20%) was also reported in Beirut. In the vast majority of female-headed households (85%), the head was married but without her spouse, while 3% were headed by a divorced / separated woman and another 3% headed by a widow

## **CONCLUSION**

This paper has shown that the refugee problem in Lebanon is an increasing problem because it is being mismanaged by the state authorities, and not being economically utilized. Formal settlements isolate refugees from markets and community. Informal and border settlements lock refugees in a suspended status quo. Refugees who resettle illegally are unable to establish legal rights. Refugees who achieve temporary status live in uncertainty.

This paper found that the current systems and infrastructures in Lebanon are not sufficient to support the growing needs of the refugees and their impact on the Lebanese economy. First, there aren't enough permanent resettlement options. Also, the political climate has made things worse; policy decisions have made the effects more costly. Then, aid and traditional nonprofits are unable to generate sustainable economic activity and finally, the age-old policy of 'hand outs' is barely a temporary support.

## **Suggested Comprehensive Economic Response**

This paper adopts the formation of Special Economic Zones (SEZs) as the main recommendation to mitigate the negative impacts of the Syrian refugees' problem in Lebanon. 'Special Economic Zones' are multi-stakeholder zones that provide economic and educational opportunities near refugee camps. The formation of SEZs consists of the following steps:

The first step is creating the 'Special Economic Zones'. These zones are special zones that offer job opportunities for refugees only, and should be located near the locations of the refugee camps, and should support the economy of these camps (provide salaries, products and services to the camps). The main aim is to support the residents living in the regions around

the camps. These zones are a multi-stakeholder approach to engage the refugees in their host societies and allow them to generate their own income: private and public sector institutions take part in managing them, funding them and building them.

With regards to funding the economic zones: the setup of these special economic zones and their funding should be supported by the hosting country. Money is available, since, according to the BBC, the EU has allocated \$6 billion this year in charitable aid to meet the basic needs of displaced people both within, and outside of, its borders. Thus, instead of giving the refugees 'hand outs' and limited amounts of money, the economic zones would provide them with monthly salaries in return for work and a market for to buy and sell products.

The second step is an important step in ensuring a dynamic economic cycle i.e., every qualified and skilled refugee should be given special work permits: Work permits that allow them to work in the 'special economic zones' only. This should happen by categorizing every refugee based on his / her skill or ability to work: construction workers, traders, janitors, security guards, school students, and teachers. In this way, the special economic zones will allow the refugees to fund themselves to a great extent

Connecting the refugees: After documenting the refugee's skills and specializations, private sector stakeholders would then include them in online databases for skills, such as: Upwork, Task Rabbit, Nabbesh, and EasyShift, among others. This would help in bringing micro-work opportunities to refugees beyond the SEZs. In this way the refugees would be connected to a wider system that recognizes their skills.

### **Integration Centers**

In the Special Economic Zones (SEZs), there will be centers for integration, teaching the refugees new languages which can be used at work. This would also include centers to increase the awareness on their rights, and what to expect from their host society. The centers are managed by local teachers and community representatives, who would also receive a salary for their services

### **What do the SEZs require?**

The SEZs require: 1) Main policy changes, 2) Work permits and access to employment, 3) skills recognition and training, and 4) access to education and public health services. These requirements will pay back to the host society, because refugees with jobs pay taxes and contribute to social security.

The SEZs' success also requires perception change, because not all the displaced people are poor, lack education, skills, or have no potential to be productive. It is important to

start highlighting the opportunities that the Syrian refugees can have to live decently and with dignity. This is because refugees have a potential that is untapped and abundant time that is not properly utilized.

### **Social Effect of the SEZs**

On the social level, the Special Economic Zones will help in decreasing the population and congestion pressure in various Lebanese cities, and especially, in the regions nearby the location of the camps. Consequently, this will decrease the rate of crime and murder.

As for the social effect on the level of the refugee camps, increased levels of social stability, and a slight improvement in the standards of living are expected. For example, decreased levels of divorce, domestic violence and crime within the camps, are expected as a result of increased income levels for the Syrian refugees.

### **Business Implications and the Proposed Economic Model**

The SEZs provide an earned quality through income and growth. The SEZs would be an income-based solution to social and economic challenges. The SEZs are a multi-stakeholder approach (government, private sector, community representatives). Finally; the SEZs create a sense of place: Community, learning, ownership, and economic opportunity.

### **LIMITATIONS OF THE STUDY**

1. The focus on some areas of Lebanon narrowed the scope of the sample geographically to may possibly be interpreted as a convenience sampling plan.
2. The results of this study are meant to represent the economic hardships that Lebanon's economy is experiencing due to the presence of 1.3 million Syrian refugees in the country. Hence, results may not be applicable to other countries where Syrian refugees are present, because each country has its own policy style, political culture, levels of public and social acceptance of refugees, and economic aid programs.
3. The study does not take into consideration any unpredictable internal or external factors, such as local political difficulties, global financial difficulties, and international political difficulties.

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