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# Reducing Vulnerability through Reintegration: The Case of the Syrian Refugees in Jordan.

Key Words: *Refugees, Reintegration, Vulnerability, Restoration.*

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Abstract: The Syrian Civil War has claimed at least two hundred thousand lives, with over four million people having now fled Syria. Of those, about six hundred thousand have registered with the UNHCR in Jordan, with an estimated eighty thousand others living in Jordan's Zaatari Camp. In view of the foregoing, this research attempts to analyze the vulnerability of Syrian Refugees living in Jordan in two very different environments: the Zaatari Camp and non-camp communities. We conduct a covariate matching analysis to compare the differences in socioeconomic conditions and well-being among the heads of Syrian households. Our results suggest that notwithstanding the limited labor opportunities for Syrian families within Zaatari Camp, the variety and quality of attentions within the camp environment provides a platform that helps them cope with some of the uncertainties and challenges caused by the displacement from their country of origin, while they seek full reintegration in Jordan.

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## 1. Introduction

Since the Syrian Civil War started in 2011, nearly six and a half million Syrians have fled from their cities of origin seeking refuge in the neighboring countries and within Syria itself. Approximately six million Syrians have been internally displaced, and about five million have fled to Turkey, Lebanon, Iraq, Egypt and Jordan (Regional Refugee & Resilience Plan, 2016). Even though the end of the Syrian civil war is the only true solution to the Syrian Refugee Crisis, the difficulties that the host communities and the refugee communities face, require solutions that help, to both, mitigate the impact of the increasing waves of Syrian refugees into the region, and prevent a further deterioration in the living conditions of the refugee and host community.

### *Regional Response*

In December of 2012, the governments of the aforementioned neighboring countries partnered with more than 200 agencies to launch the first Regional Response Plan. The plan was aimed at designing and implementing programs to prevent large numbers of Syrian families from falling into poverty and alleviating the suffering of the most vulnerable families (Regional Refugee & Resilience Plan, 2016). Jordan is one of the few countries in the middle east that do not have any major internal conflict since the eruption of the Arab Spring (Carrion, 2015). Jordan's political stability, coupled with its proximity to Syria has made it one of the countries most populated by Syrian refugees since the breakout of the Syrian Civil War. By 2015, more than six thousand Syrians registered with the UNHCR in Jordan. However, there is evidence that there are hundreds of thousands of Syrians living in Jordan that have not yet registered with the UNHCR. In fact, the Syrian population in Jordan accounts for ten percent of the total population of this country before the breakout of the Syrian Civil War (Amnesty International, 2013).

### *Jordan*

Within Jordan, Syrian families live in two different environments, the Refugee Camp communities and the non-camp communities. The main difference between these two

environments is that the non-camp communities offer access to Jordan's labor markets, thereby granting them direct contact with the host community. The Refugee Camps in contrast, offer treatments and programs to reduce the vulnerability of Syrian families in a precluded environment where only Syrians are allowed to live. As of today, most of the Syrian families in Jordan live in non-camp communities, facing a situation of instability caused by both, the variation in the humanitarian stance of the Jordanian Government and the increase in the demand for development opportunities by the continuous waves of Syrian families (Achilli, 2015).

In Jordan, there are five refugee camps for Syrians: Zaatari, Azraq, King Abdullah Park, Cyber City and Zarqa. The Zaatari Refugee Camp, which opened in July of 2012 is the largest and most well-known refugee camp and has turned into the second largest refugee camp in the world (Ledwith, Zaatari: The Instant City , 2014). Zaatari Camp is managed by both the Jordanian Government and the UNHCR. The NGOs that work in conjunction with the UNCHR provide aid programs for the Syrian families, defining five strategic priorities: protection, health, basic needs and livelihoods, education and sanitation. The Jordanian Government in contrast, oversees security provision services in the camp, while also monitors access to the camp (UNCHR, 2017). Since the Zaatari Camp was established, at least four-hundred thousand refugees have lived there at some point. At the moment, around eight thousand refugees reside within the twelve districts of the camp. The Zaatari Camp stopped accepting new arrivals in April 2014 when Azraq Camp was established, allowing the organizations to diagnose the most urgent needs on the existing population, define priorities and design interventions according to these needs (REGIONAL REFUGEE & RESILIENCE PLAN, 2016).

### *Zaatari Camp*

The organizations that work in the Zaatari Camp registers all refugees upon arrival in the camp, with the documents paving way for the refugees to access assistance from these organizations. In September of 2013, they started to provide a voucher of U.S \$8.50 that have been distributed twice a week, while other agencies such as the World Food Program provide free food on a weekly basis. In terms of education opportunities, the NGO's are responsible

for the construction of schools, while classes are taught by Jordanian teachers that are sometimes assisted by Syrian teachers (Ledwith, Zaatari: *The Instant City*, 2014).

In terms of employment opportunities, the UNHCR's 2014 report estimated an employment rate of sixty-five percent in the camp, with most of the employment opportunities in the camps being created by business initiatives of the Syrian families. Furthermore, the working group of organizations have been able to employ just fifteen-hundred refugees at an hourly wage of U.S. \$1.40.

Syrian families that were living in the camp had the opportunity to move to urban areas in Jordan through a bailout permit that was granted, conditional on the refugee receiving a sponsorship from a Jordanian citizen and subsequent payment of the corresponding fee. After November of 2014, the Jordanian Government started to reinforce this policy by denying these documents to those refugees that left the camp illegally, with some of the refugees sent back to the camps, thus restricting the possibility to move to non-camp communities (Francis, 2015). Additionally, the situation in non-camp communities does not necessarily represent a better environment for Syrian families. The Syrian Refugee Crisis aggravates the ongoing refugee crisis that Jordan has faced for more than seventy years, hosting the second largest share of refugees in the world (Francis, 2015). With the protracted conflict in Syria and a persistent underfunded humanitarian assistance, the Jordanian Government had continued to implement restrictions to those policies that were intended to provide protection to Syrian families in non-camp communities (Francis, 2015).

### *Non-camp Communities*

The Jordanian Government has maintained a humanitarian stance towards Syrian refugees, however, this stance started to weaken in 2014 due to several reasons, such as, meager resources, lack of employment and the large increase of the population of refugees in the urban areas since 2013 due to the aggravation of the war. As of 2015, all non-Jordanian with legal residency need to have a work permit that can only be issued if the employer pays a fee and proves that the prospective job requires skills that cannot be found in the Jordanian labor markets. According to the UNHCR's 2014 surveys, only 1% of Syrian households visited had

a member who possessed a work permit in Jordan, as a consequence, 47% of Syrian households' paid employment come from children and 45% of Syrian refugees living in Jordan have faced protracted displacement lasting more than five years (Achilli, 2015).

Jordan is a relatively young country and even though it is not a signatory country of the 1951 Refugee Convention or its 1967 Protocol (International Labor Organization, 2015), it has been hosting refugees since 1950, after the creation of the Israeli State. It has faced two refugee crises in the last decade and its constitution prohibits the refoulement of political refugees (Chatelard, 2010). As a matter of fact, the only directive in Jordan in regards of refugees, is the 1998 Memorandum of Understanding (MOU), which allows the UNHCR to determine refugee status of asylum seekers. However, Jordanian labor laws do not protect workers that are going through a vulnerable situation such as refugees and asylum seekers (International Labor Organization, 2015). In practice, due to the fact that most of the Syrians that are living in Jordan came from rural areas, most of them have skill sets that are more useful in farming related jobs. Therefore, they often compete with the low-skilled Jordanian workers in the labor markets, thus increasing the probability of their work permits being frequently denied, and consequently leaving them with a solitary choice of working in the informal sector without protection (International Labor Organization, 2015).

More so, the refugees are mandated to obtain a UNHCR asylum seeker certificate and a Ministry of Interior card to access assistance and public services in non-camp communities. For instance, the Jordanian Government allows the Syrian children to receive public education. However, there has been an increase in the enforcement of restrictions to obtain these legal documents. As matter of fact, post November 2014 witnessed the emergence of Syrian families losing access to subsidized public health services. Due to consequence of the lack of obligations under the international law, the refugee communities in Jordan may be susceptible to some legally vulnerable conditions. (Francis, 2015).

The stance of Jordan towards the numerous refugee crises in the region are tightly intertwined with its political and economic goals as an upper-middle income country that is poorly endowed with natural resources in the context of the Arab World (Chatelard, 2010). Before the breakout of the Syrian Civil War, Jordan was already facing an economic crisis due

to the uprising in different Arabic countries. The Jordanian economy has always been dependent of on economies in the Middle East, with the uprisings in different Arabic countries considerably affecting the levels of importable goods to Jordan (Francis, 2015). Generally, the past six years has been conspicuous for significantly decreased levels of humanitarian aid and an increasing burden of the Refugee Crisis on the Jordanian Government. Additionally, the very few resources that the Syrian families were able to bring to Jordan have been totally depleted or substantially reduced. As result, Syrian families are increasingly reliant on more daily assistance or negative coping mechanism.

It is then in our interest to determine which environment is best suited for Syrian families to reduce their vulnerability and if it is even possible to restore their previous socioeconomic conditions. We conducted a comparative analysis of Syrian families living in non-camp communities and the Zaatari Camp. Through matching techniques, we were able to match Syrian families based on their previous socioeconomic conditions to control for the effect they may have on their current socioeconomic conditions and leaving their place of residence in Jordan as main factor that affects their ability to reduce their vulnerability and restore their livelihoods. Therefore, the main question we are attempting to answer in this research is: Are Syrian families living in non-camp communities less vulnerable than those living in camp communities? Our results suggest that even though Syrian families living in non-camp communities are less likely to experience an income shock, when they face an income shock they would be less likely to fall under negative coping mechanisms.

Even though there is not an actual policy that leads to the reintegration of the Syrian Refugees, the closest status to reintegration has been the option of living in non-camp communities. Through matching techniques, we attempt to measure the effect of living in non-camp communities as a proxy for reintegration. In view of the foregoing, we employ non-camp communities as a proxy for reintegration. It is also important to mention that our results are applied only to Syrian refugees living in Zaatari Camp and cannot be used to draw any conclusions about the situation of the Syrian refugees that live in the rest of the Jordanian refugee camps.

## **2. Literature Review**

### **2.1 Refugees, displacement and migration**

According to the United Nations Organization, International Migrants are all those who are living outside of their country of origin, regardless of their motives to move. In that sense, international migrants are those who have voluntarily moved across international borders. Displacement refers to that situation in which people are forced to move from their places of origin, due to armed conflict or natural disasters. Refugees, according to the 1951 United Nations Refugee Convention and the 1967 protocol, are all those people who escape from their country of origin, due to a legitimate fear of persecution driven by causes such as, race, religion, nationality, cultural identity or political opinion. In addition, refugee conventions, such as the 1969 Organizations of the African Unity Convention and 1984 Cartagena Declaration, define refugees as those people who have left their countries of origin for reasons of external aggression and foreign occupation (International Labor Organization, 2015).

It is important to mention, that although there are different motives for moving out of one's country of origin, often times people face the same risk, whether they emigrated from countries of dire situations or for economic opportunity. In some situations, they might be equally vulnerable to particular difficulties in their pursuit of improving upon their previous living conditions. Moreover, (Cernea, 2000) argue that there are two types of policies in regards to reintegration. For agencies such as the World Bank, a successful reintegration is one that not only restores the previous living conditions of migrants, but also, if possible, improves their previous situation. In contrast, the UNHCR, argues that reintegration is not successful in improving the situation of migrants until they are successfully repatriated in their countries of origin.

In this regard, we consider appropriate to cover to some extent literature related to migration; and even more, because in our interviews we identify some Syrian families that had a situation more similar to a labor migrant than a refugee. Those families decided to move to Jordan in the very beginning of the Syrian conflict, but their main intentions were to preserve and protect the well-established business partnerships they had in Jordan. Some of these families,



in fact noted that their socioeconomic conditions improved or did not change at all following the breakout of the Syrian Civil War.

## **2.2 Migration Theories**

International migration theories have tried to explain migration by putting different relevance on the factors that are taken into account by migrants at a micro-level and those that govern the international dynamics of migration. The Neoclassic economic theory argues that families are income maximizing units that compare wages and employment conditions between countries and their corresponding migration costs. The New Economics of Migration goes further by expanding the analysis of the conditions outside the labor markets and conceptualizing migration as the decision to minimize risk and overcome capital constraints for production activities. In contrast, the Dual Labor Market Theory and the World System Theory do not consider microeconomic dynamics, but instead focus their attention on macro-level behaviors. The Dual Labor Market Theory establishes a strong causal relationship of migration with the current structural demands of the industrial economies, while the World System Theory uses a conceptualization of migration that is a result of the penetration of markets at an international level.

Even though these theories have differences in their identification of factors that influence the patterns of migration, they are not necessarily mutually exclusive to each other. Rather, these theories together can explain the decision taken on a micro-level within the household, and the structural forces that governs the labor markets at a national and international level (Douglas S. Massey, 1993).

### *Micro-theory of Migration*

In the micro-level theory proposed by (Todaro, 1969) and (Sjaastad, 1962), the decision of migrating is driven by a cost-benefit calculation, based on their estimation of the expected discount net returns.

The expected net return to migration is estimated at the moment before the departure, and it depends on the probability of not being deported, the probability of finding a job, the income earned if the migrant finds a job, the probability of having a job in the country of origin, the income earned if the migrant has a job in the country of origin, and the total amount of costs of migration.

In this model, migrants will actually migrate if the expected net returns are greater in the potential destination, contrasted with those from the place of origin. Human capital characteristics determine the probability of having greater expected return in the potential destination, technologies can reduce the cost of migration and, again, other markets do not influence the decision of migrating.

Migration in the context of the Syrian Refugee Crisis is a privilege, however as mentioned before, some of the Syrian families from our sample made their decision to move to Jordan based on a cost-benefit calculation. Further, evidence suggests that some of the refugees have migrated multiple times within the Jordanian borders six years after their original migration to the country. Thus, some refugees migrated from the urban areas to the refugee camps and vice versa, despite the restrictions implemented by the Jordanian Government, with their decisions to migrate being highly influenced by cost-benefit calculations.

### *The New Economics of Migration*

The New Economics of Migration, proposed by (Stark, 1984) and (Bloom, 1985), looks at a comparative novel concept of migration, since it suggest that migration decisions are not decisions taken by individuals, but by groups of people that are in some way related to each other. In this way, migrants are able to minimize even more of the expected risks and break the constraints they have to face because of market discrepancies. In this model, differences in wages between countries do not influence the decision of migrating. Governments can promote migration by implementing restrictions in the capital and insurance markets and not only through changes in the labor markets, but also by making changes in the income distribution.

For instance, most of the people in our sample came from the Governorate of Daraa, this is because of two things. First, Daraa is considered one of the first places where the Syrian Civil War started. Second, Daraa is very close to the Jordanian borders. However, we also found people from northern Governorates of Syria in our sample. Most of the families from these places, however, decided to move because they already had existing social networks in Jordan.

### **2.3 Refugee Theories**

As opposed to migrants, refugees are not living in a foreign country by choice. This fact affects their well-being and should be considered by policy makers in host communities. In this section, we will go over the literature focused on the general characteristics of refugees to identify those aspects that affect their well-being in the host communities. Furthermore, as our goal is to analyze the situation of the Syrian refugees, we attempt to develop an understanding of refugee camps in host countries.

#### *Refugees: before and after their journey*

As stated by (Kunz, 1973), there are two types of mobility of refugees, anticipatory refugee movement and acute refugee movement. An anticipatory refugee is one who perceives the start of a new period with an increase of danger at an early stage, maybe even before a potential crisis occurs. For this type of refugee, the process of departure from their place of origin is similar to the process that a voluntary migrant has to go through. Since they are able to prepare for the departure, they are also able to bring resources and travel with the entire family unit. In contrast, acute refugee movement is produced by a sudden shock that pushes people to flee. This shock can be the start of a war, new policies and also the propagation of panic. In this kind of situation, refugees do not have any plan or strategy to leave their place of origin. In other words, the urgency to escape is greater, and the decision to flee is mainly based on an attempt to prevent any harm and not exactly the pursuit of a better future.

In this context, it is imperative to note that these two types of refugees differ in more ways than their mere socioeconomic and demographic conditions. Anticipatory refugees are often well educated and have better socioeconomic conditions than those with acute movements.

Psychological characteristics, age and the changes in the environment of the place of origin also play a key role on the timeframe under which refugees decide to leave their country. As mentioned before, within our sample, we find refugees that were able to anticipate the breakout of the Syrian Civil War and their decision to migrate to Jordan was according to a labor migrant. In the same way, these refugees had on average better socioeconomic conditions than those who did not anticipate the sudden shock of the war.

Hence, refugees should not be considered as a homogenous group, there is certainly heterogeneity present within and between these groups. Over time, refugees that migrated in the early stages might be very different from those that migrated later. (Kunz, 1973), argues that hosting societies should be aware of the heterogeneity of these groups, especially on their perception of threat and danger. Thus, there is an obvious difference between anticipatory and acute refugees. While anticipatory are able to perceive and respond earlier to danger, some acute refugees may have been less risk averse and be reluctant to leave at an early stage. (Keller, 1975), also shows evidence that those who leave in the later stages are more likely to have feelings of guilt, vulnerability and aggressiveness.

Furthermore, regardless of the type of refugee, (Kunz, 1973) identifies four stages of the process of adjustment for a refugee: the initial arrival period of the first few months, the first and second years, the next four to five years and a decade or more. In the first stage, refugees will have to get used to a new reality and their living conditions will decrease noticeably. During the second stage, refugees tend to exhibit improvements and even the restoration of their previous living conditions. Refugees are often able to change jobs, continue with their education and move to an area that is more densely populated by fellow refugees. In the third stage, refugees have accomplished most of the possible restoration, which can result in an increase of feelings of resignation, since at this stage they are more aware of the potential success that they have at the hosting community. By the fourth stage, the family unit has achieved certain stability, however, most of the time the final outcome for refugees within the community is a lower status compared to the local population.

Because the Syrian Civil War has lasted six years, we were only able to observe the effects of the first three stages in the conditions of the refugees. In general, we observed that the date

of arrival to Jordan is an important factor to take into account in our analysis. Those families that have lived in Jordan the longest have achieved most of the possible restoration. Furthermore, as shown by (Azevedo, 2016), most of the Syrian Refugees reintegrated in Turkey have been able to improve their socioeconomic conditions over the span of four years without significant impact on the poverty rates of the hosting country, notwithstanding the high poverty rates that was hitherto prevalent among the refugees. Analogous to their Turkish counterparts, most of the Syrian Refugees' heads of household in our sample were employed in the informal sector, in this scenario the impact that the refugee communities can have on the labor markets may not be negative or at best, it would not be significant.

(Verwimp, 2015) on the other hand, argues that it is important and imperative to put more emphasis on the situation of the country of origin of the refugees. Since many of the challenges faced by the host country are intrinsically related with conditions faced by those refugees that were able to go back to their countries of origin. In other words, the increase or decrease of the refugee population in the neighboring countries is highly related with the intensity of the crisis or conflict in their country of origin. For instance, the Syrian Refugee Crisis in Jordan is not only a result of the Syrian Civil War, but also a consequence of the uprisings in different Arab countries and their corresponding refugee crisis. The humanitarian stance in Jordan not only respond to the urgent needs of developing opportunities for the Syrian Refugees, but also to maintain in some way the stability in the region.

### *Refugee camps*

In some of the hosting countries such as Jordan, there are two types of environment for refugees, non-camp and camp communities. In the refugee camps as defined by (Murphy, 1955), refugees tend to realize what they have lost, even though the isolation of this environment from the hosting society gives them a feeling of independence and allow for the provision of treatments and interventions that are specially designed to ameliorate their traumas and facilitate basic goods and services. As mentioned before, Zaatari Camp is an environment design to reduce the vulnerability of Syrian Refugees through the access to the programs of the organizations and institutions that work in the camp.

Some of the refugee camps can have internal goods and labor markets as posited by (Werker, 2007), who identified the main characteristics of the markets in the camps. Most of the markets allocated inside the refugee camps tend to have access to the commercial networks of the host country, the production is mainly agricultural, there are several businesses, but they are of small size. There is a commercial area where most of the business are concentrated and the only source of restriction for these markets are the policies implemented by the host country. In the case of the Zaatari Camp, there are two main sources of employment, the business started by the refugees and the jobs offered by the NGOs to those refugees with better labor skills.

(Werker, 2007), also emphasizes the importance of the humanitarian assistance from international organization in fulfilling the basic need of refugees. He also highlights that in the context where the host country and the international organizations are not able to provide basic needs for refugees in an isolated environment, refugees tend to seek for development alternatives outside the refugee camps, regardless of the risks that this might imply. In Zaatari Camp, the limited labor opportunities offered by the camp can offer means that many heads of households escape every day from the camp to seek jobs in the neighboring towns despite, notwithstanding the risk of being caught by the Jordanian authorities.

### *Reintegration through Resettlement*

After their experience in the refugee camps, the refugees discover a new land with mixed feelings of hope and trauma. As stated by (Stein, 1981), refugees have great expectations of the opportunities offered by the hosting society, chief among them being the recovery of their previous socio-economic condition. However, the reality is that developing countries are hosting most of the refugee population in the world, hence, the governments of the host countries are most often unable to cover the needs of the refugee population and rely on the support of international organizations to provide the required assistance. Refugees also face difficulties to adapt their patterns of behavior, and sometime fail to allocate his resources in a new economic structure.

(Stein, 1981) also argues that there are three basic elements in the analysis of reintegration: the first is the model of reintegration; the second is the refugee community and its ethnic characteristics; and the third is the nature of the reintegration process. Furthermore, (Gordon, 1964), defines three models of assimilation: First, the host-conformity model which states that refugees must adapt their behavior in order to behave just like the native citizens. Second, the “melting pot” model, which defines reintegration as a process in which native and refugee population merge into a new and better community. Finally, the cultural pluralism, in which refugees adopt certain patterns of behavior but also preserve the mainly aspects of their culture.

Lastly, reintegration as defined by (Eisenstadt, 1953), consists in four stages: first, the adoption of language, norms and customs; second, the learning process of knowing how to behave in the environment; third the creation of a new identity; and fourth the increase in the participation in the institutions of the hosting society.

#### **2.4 Vulnerability as the risk to be poor**

As stated by (Cernea, 2000), a successful experience of reintegration is one that allow the targeted population to not only restore their previous socioeconomic conditions, but also, if possible, to improve them in the host society. Jordan, as an upper-middle income country (where refugees represents more than 20% of the population), has increasing limitations to guarantee the restoration of the previous socioeconomic conditions of Syrian Refugees. In fact, most of the Syrian refugees do not have enough economic resources to cover their basic needs. In this section, we attempt to provide an overview of multidimensional concepts of poverty and vulnerability.

##### *Poverty*

In general, poverty is considered as a deficit in the physical and mental well-being of individual produced by a lack of resources (Peña, In press). This basic and general understanding of poverty implies that there must be a certain threshold that determines what levels of material resources assure physical and mental well-being. One of the first efforts to measure poverty

using a certain threshold was conducted by (Booth, 1889), where he classified poor and non-poor people depending on whether or not their income surpassed a certain threshold. Nowadays, poverty is generally classified as having less than a certain threshold, having less than others and the feeling of lacking enough material resources to live (Hagenaars, 1988). But these general concepts of poverty have been criticized because they do not take into account the multidimensional nature of poverty. For instance, (Sen, 1981), argues that these conceptualizations do not take into account the presence of heterogeneity among people. In addition, there is evidence of the difficulties that come from determining a minimum of material resources and an adequate basket that guarantees a proper level of well-being.

### *Vulnerability*

Vulnerability, defined within the framework of poverty alleviation proposed by (Chaudhuri, 2002), is considered as the risk that a non-poor household will fall under the poverty line, or the risk that a poor household will remain poor. (Cunningham, 2000), on the other hand, define vulnerability as the level of exposure to adverse shocks that reduce welfare taking into account the initial distribution of welfare. Furthermore, (Deaton, 1992 ), argues that vulnerability depends on factors such as, wealth, current income, expected income and the ability to maintain the same levels of consumption in the occurrence of income shocks.

In general, in the models described above it is necessary to know the expected levels of consumption in different time periods of the same population. However, as pointed out by (Chaudhuri, 2002), it is difficult to compile data of such quality. In contrast, cross-sectional household surveys are more common. Therefore, (Chaudhuri, 2002), proposes a modification of the general concept of vulnerability that can be analyze with cross-sectional data allowing for analysis and estimations that are equally accurate, this modification makes assumptions related to the unobservable heterogeneity in the future levels of consumption for households that are essentially identical. These assumptions are summarized in the following equation:

(1)

$$\ln C_h = X_h B + E_h$$



Where  $C_h$  is per capita consumption expenditure,  $X_h$  is a set of observable household characteristics,  $B$  is a vector of parameters and  $E_h$  is a disturbance terms with a mean zero that captures shocks that determine the difference in the consumptions levels for households that are essentially identical. Therefore, this equation assumes that there are not unexpected structural changes in the economy and that the change in the levels of consumption depends solely on the unpredictable idiosyncratic shocks at a household level.

### **3. Methodology**

#### **3.1 The Data**

The data collection was executed through a firsthand survey (Appendix 41), that was administered from May to July of 2016 using heads of households from Syrian families living in Jordan. We ran a pilot over a period of three weeks to adapt our survey to the specific situation of the Syrian refugees and interviewed refugee families from Iraq and The Palestine living in non-camp and camp communities for comparison.

In the first phase of the data collection process, we conducted surveys in the Jordanian cities with higher presence of Syrian families, such as, Amman, Irbid, Zarqa and Al-Mafraq. In the second phase, we conducted surveys in Zaatari Refugee Camp. In the latter phase, we were able to make our sample selection through stratified random sampling. With the support of the UNHCR, we had access to a list of the families that live in the camp, including their identification number and the district in which they lived. From this list, we randomly selected 25 families from each of the 12 districts of Zaatari Refugee Camp.

The survey used in this research is divided into eight sections. The first section captures the demographic characteristics of the family unit in Jordan. The second section captures the composition of the family unit in Jordan. The third section contains information about the different environments where the Syrian families have lived, with keen interest in knowing their main dwellings dating back to their arrival. The fourth section captures the level of

wealth that the Syrian families used to have in Syria and the level of wealth they have in Jordan. The fifth section contains questions about the levels of income, expenses, employment status and labor conditions in both Jordan and Syria. The sixth section captures their psychological well-being in terms of happiness and optimism. The seventh section captures the perceived situation of security of the heads of household in both Jordan and Syria. The eighth section captures the presence of income shocks and the adoption of vulnerable coping behaviors by the family in the last month.

### **3.2 Selection into non-camp and camp communities**

Since the start of the civil war in 2011, those Syrian families that attempted to access Jordan through formal borders were registered with the UNHCR and then transferred to one of the refugee camps in Jordan. In contrast, those families that attempted to access Jordan through non-formal borders we are able to resettle in those places where their social networks were numerous. This suggest that the main differences between families living in Zaatari Camp and non-camp communities were the route they chose to access Jordan, therefore, selection into non-camp communities is mainly influenced by the route to access Jordan and by their socioeconomic and demographic characteristics in a lower degree (Achilli, 2015).

The reintegration of Syrian families in non-camp communities is not a process that is conducted through random selection. This process is influenced by factors, such as, proximity to Jordanian borders, social networks and socioeconomic conditions. There is no actual policy that has been administered to randomly determine whether refugees must live in Zaatari Camp or non-camp communities. Therefore, our research uses observational data rather than experimental data to make a comparative analysis of the families that are currently living in the Zaatari Camp and those that live in the Jordanian communities.

The particular features of the Syrian families required a close examination of the differences in their previous characteristics between families that are living in both environments. In order to be able to use matching techniques, we need to make the assumption that the factors that influence the process by which Syrian families end up being reintegrated in Jordanian

communities are orthogonal to the potential outcomes obtained as a result of being reintegrated (non-camp communities). This is the ignorability assumption required for matching estimations to identify and measure the result that are strictly a consequence of the treatment. At this point, it is imperative to note that in the absence of a formal policy to ensure complete reintegration of the Syrian refugees, we employ non-camp communities as a proxy for formal reintegration. Due to fact that there are families that have undergone transition from non-camp communities to camp communities and vice-versa, we are careful to constrain our population to those families that have been living under their current status for at least one more year than the previous status, in order to analyze more accurately the impact of reintegration in Jordanian communities.

For methodology purposes our main population was divided into control and treatment groups. The control group correspond to Zaatari Camp refugees, whereas the treatment group is presented in terms of the non-camp refugees as a proxy for formally reintegrated refugees. The total observations obtained for the control group were 134, and for the treatment groups we obtained a total of 250 observations. Our final data is a cross-section of both information about the previous living conditions of the Syrian families prior to their departure from Syria and their current living conditions in Jordan.

### **3.3 Identification Strategy**

The evaluation of the impact of reintegration requires the identification of a control group that works as good as a randomly selected group. This allow us to make a comparative analysis with the Syrian families that are reintegrated and those that live in Zaatari Camp.

In this research, we use the Covariate Matching Method (CVM), and Propensity Score Matching (PSM), with Probit estimations employed as further robustness checks. Covariate matching identifies the nearest Euclidean distance between an observation in the treatment and control. Propensity score matching identifies the probability of an observation being part of the treatment group, resulting from a probit estimation that measures the propensity to be

part of the treatment group, creating matches between one observation of the treatment group and one observation in the control group with a similar propensity score (Imbens, 2004).

In order to measure the effect of reintegration for those that have been reintegrated without any potential source of bias, we need to make two assumptions. First, the conditional independence assumption (ignorability) which suggests in this case, that the previous socioeconomic conditions do not have any effect on the final outcomes. And second, that there is an overlap between the treatment and control groups (assumption of common support) (Imbens, 2004).

### **3.4 The Model**

Matching covariates (independent variables) are presented in Table 1. We use education level of the head of household, place of origin, total time under current status, type of job, age and gender of the head of the household and family size. Furthermore, we analyze outcomes (dependent variables) that are divided in seven sets.

These dependent variables are summarized in Table 2. With the first set, we analyze the levels of income and expenses in Jordan. With the second set, we explore the quality of labor opportunities. While the third set estimates the restoration of wealth based on the possession of durables assets. With the fourth section investigating the likelihood of experiencing shocks in Jordan. The fifth set presents estimate of the coping behaviors that Syrian families use as strategy to face shocks. With the sixth section assessing the perception of security and integration by the head of households. While the last set presents a gauge of the levels of happiness and optimism of the household head.

**Table 1**  
**Matching Variables**

Name of the variable	Description	Categories
<b>Education Level</b>	Dummy variable	High School or College: takes value of one (1)
		Below High School or College: takes value of zero (0)
<b>Place of Origin</b>	Dummy variable	Daraa: takes value of one (1)
		Other places in Syria: take the value of zero (0)
<b>Time Under Reintegration Status</b>	Time variable	Takes the values of the number of years under the main status
<b>Job Type</b>	Dummy variable	White collar and business: takes the value of one (1)
		Blue collar, agriculture, student and retired: take the value of zero (0)
<b>Age</b>	Numerical variable	Takes the values of the ages of each head of household
<b>Gender</b>	Dummy variable	Female: takes the value of one (1)
		Male: takes the value of zero (0)
<b>Family Size</b>	Numerical variable	Takes the number of members in the family

**Table 2**  
**Dependent Variables**

<b>Income</b>	Income (USD)	Log of income levels in Jordan
	Expenses (USD)	Log of expenses levels in Jordan
	Restoration of Expenses to Income Ratio	Takes the value of one (1) if the family has lower expenses to income ratio, relative to the one they used to have in Syria
<b>Employment</b>	Employment Status	Presence: takes the value of one (1) Absence: takes the value of zero (0)
	Satisfaction with Job	
	Informal Sector	Takes the value of one (1) if the family unit has the ability to have employment as the main source of income
	Restoration of Employment as the Main Source of Income	
<b>Wealth</b>	Same Number of Cars	Presence: takes the value of one (1). Absence: takes the value of zero (0)
	Presence of Savings	
<b>Shocks</b>	Decrease in Income	
	Theft	
	Sickness	
<b>Coping Strategies</b>	Child Labor	
	Reduction of Food Consumption	
	Sell Assets	
	Reduction of Educational Expenses	
<b>Security</b>	Personal Integration	Starting from one (1) for not at all integrated, to ten (10) to completely integrated
	Personal Security	Bad: takes the value of one (1). Regular: takes the value of two (2). Good: takes the value of three (3)
<b>Psychological well-being</b>	Happiness	Starting from one (1) for not at all happy, to ten (10) for very happy
	Optimism	Starting from one (1) for not at all optimistic, to ten (10) for very optimistic

Our main objective in the analysis is to measure the average treatment effect on the treated (ATT):

$$(2)$$

$$ATT = E(Y_1 | T=1) - E(Y_0 | T=1)$$

Where  $Y_1$  represents the outcome under treatment status (reintegration),  $Y_0$  represents the outcomes under non-treatment status (Zaatari Camp),  $T$  represents treatment and ATT accounts for the Average Treatment Effect of the Treated. The ATT represents the mean difference between treatment and non-treatment status for those families that are reintegrated. The last term of equation 2 is the counterfactual and represents the average outcome for those families that are not reintegrated, had they been integrated. Due to the circumstances of our population, it is impossible for us to observe one family been both reintegrated and non-reintegrated, what we are able to observe presented in terms of equation (3) (Khandker, 2010):

$$(3)$$

$$E(Y_1 | T = 1) - E(Y_0 | T = 0)$$

Which represents the differences in means of the outcomes under reintegration of the families that are reintegrated and the outcomes under non-reintegration for the families that are not reintegrated. Therefore, if we add and subtract the counterfactual we can have an equation like the following:

$$(4)$$

$$[E(Y_1 | T = 1) - E(Y_0 | T = 1)] + [E(Y_0 | T = 1) - E(Y_0 | T = 0)]$$

In equation 4, we have the ATT on the left-hand side and the selection bias on the right-hand side (Khandker, 2010). In our research, one potential source of selection bias is the social networks that the Syrian families might have in Jordan before and after the start of the Syrian Civil War. This might also be related to the previous socioeconomic conditions of the Syrian families, as is the case of some of the families that we interviewed that were able to anticipate

an increase of the intensity of the conflict in Syria and prepare for the departure. The literature about refugees and our result suggest that those that were able to anticipate the shock tend to have higher levels of education and income (Kunz, 1973).

The matching techniques used in this research solve the problem of not having a randomly selected control and treatment groups, assuming that those factors that influenced the resettlement process in Jordan are observable and available to be used to match Syrian families from both sample groups, allowing us to make a comparative analysis of the outcomes between our synthetic control (reintegrated families) and treatment (families living in Zaatari Camp) groups.

#### **4. Data Analysis**

We present our covariates divided by our two main groups of analysis, treatment (reintegrated families) and control group (Zaatari Camp). Our covariates consist of seven variables that represent socioeconomic and demographic characteristics of our entire sample when they were living in Syria. We have explored the characteristics of both sample groups through probit estimations and robustness checks looking for variables that are not affected by the treatment and that provide an area of common support between the sample groups.

The variables employed includes: education levels of the head of household, place of origin, total time under current status, type of jobs, age and gender of the head of the household, and family size. For education levels, we are matching observations that have at minimum a high school diploma. In place of origin, we matched Syrian families that used to live in Daraa, since most of our population came from that Governorate in Syria. Additionally, we explored the possibility of using urban or rural area as matching variables, but our results suggested that most of the people from Daraa also used to live in a rural area.

Furthermore, for total time under current migration status, we have constrained our original population to only those families that have lived for more than one year under the current status compared to the other (either reintegrated or in Zaatari Camp), if they have lived under both status in Jordan. For job type we attempted to group based on their average income in



Syria. This led to the discovery that due to the characteristic of the labor markets in Syria, business owners have the same or higher average income levels than people with white-collar jobs. We also discovered that agriculture and blue-collar jobs have similar levels of income, therefore, we decided to match families on whether or not the head of household used to have businesses or a white-collar job.

Moreover, for gender, we matched families based on the gender of the head of household interviewed. For age, we matched families based on the age of the head of household interviewed. And finally, for family size we matched families based on the number of members in the family.

We present the summary statistics of our covariates in Table 3 and the summary statistics of our outcomes in Table 4, to show that our sample groups are similar and large enough to have an area on common support and visualize the main differences in our variables of interest between both sample groups.

According to our summary statistics, most of our population did go to high school or achieved a higher degree of education. As earlier noted, most of our population comes from the same governorate in Syria, Daraa. Also, most Syrian families have lived under their current situation for a little more than three years. The majority of the heads of Syrian families in our population did not have a job that allow them to have high levels of income. Furthermore, the average age of the heads of household is thirty-eight years old. Most of the heads of household interviewed were men and the average family has five members. The main differences between our sample groups are the levels of education, job types and gender of the person interviewed.

Refugees that are living in non-camp communities have higher levels of education. The difference in the type of job in Syria is due to the fact that most of the people in the Zaatari Camp comes from Daraa or rural areas, therefore a good number of them used to work as farmers. The difference in the gender of the person interview in the sample groups, is due to the fact, that during the day the fathers of the non-camp families are out of their homes either working or looking for work. Matching estimations were used to control for the heterogeneity between both sample groups.

The summary statistics of the outcomes provides a first glance of the differences in the socioeconomic conditions between both sample groups. In general, refugees living in non-camp communities have higher levels of income but also higher levels of expenses. They have more labor opportunities but these opportunities come from the informal sector. They are less likely to experience a shock but more likely to use negative coping strategies if they experience a shock. And finally, they have lower levels of happiness and optimism and perceived themselves as less secured or integrated compared to Zaatari refugees.

#### **4.1 Covariate Matching**

In this section, we estimate the Average Treatment Effect through the covariate matching estimator. Figure 1 presents a summary of our main findings.

##### *Net Income*

Our estimations suggest that with reintegration there is an increase in the levels of income by 69%, however there is also an increase in the levels of expenses by 86%. Furthermore, with reintegration there is an increase in the likelihood of having a lower percentage of expenses to income than the one they used to have in Syria by 10%. This means that even though expenses such as rent are higher in the Jordanian communities relative to Zaatari Camp, with reintegration there were some families that were able to increase the net income in Jordan compared to the net income they used to have in Syria (Table 5).

##### *Labor Opportunities*

With reintegration, there is an increase in the likelihood of being employed by 13%. There is also an increase in the probability of having employment as the main source of income by 30%. However, there is an increase in the likelihood of being employed in the informal sector by 47%. Overall, there is a decrease in the probability of being satisfied with the labor opportunities by 18% (Table 6). The lower levels in satisfaction with the labor opportunities may be a result of the restrictions to receive a work permit. In fact, many Syrian refugees are

driven to look for jobs in the informal sector due to these restrictions. Just from our sample 60% of the non-camp refugees were working in the informal sector.

### *Restoration of Wealth*

For the restoration of wealth our results suggest that with reintegration there is a general decrease in the ability of restoring wealth. We restrained our variables related to the restoration of durable assets because in the context of the Zaatari Refugee Camp, much of the restoration of the durable assets is accomplished through donations. For instance, accommodations, TV's, stoves, and refrigerators are commonly donated in the Camp. The ability to have the same number of cars or more and the ability to have savings are in this context more accurate indicators of wealth. The covariate matching estimation suggests that with reintegration there is a decrease of 24% in the probability of having the same number of cars or more as they had in Syria. In addition, and possibly more concerning, there is a 30% decrease in the likelihood of having savings (Table 7).

### *Shocks*

In terms of shocks, we are analyzing the probability of experiencing an income shock or a shock that may negatively impact the well-being of the family. Our estimations suggest that with reintegration, refugees are less likely to experience a shock of this kind. With reintegration, non-camp refugees are 13% less likely to experience an income shock. Furthermore, there is a decrease of 16% in the likelihood of experiencing theft, with evidence estimating 11% decrease in the probability of falling sick in the last month (Table 8).

### *Coping Strategies*

Our results suggest that even though non-camp refugees are in general less likely to experience shocks, those families that did experience a shock within reintegration were more likely to reduce their levels of consumption that are key for the development of the family, as a strategy to cope with the sudden shock. In fact, with reintegration, there is a decrease of 7% in the probability of reducing the educational expenses. However, non-camp refugees are 23%

more likely to reduce the levels of food consumption in the family if they experience a shock (Table 9). Within Zaatari Camp, refugees have access to programs that are strictly designed to ensure proper levels of food intake. In other words, Zaatari refugees are less likely to use coping mechanism that may affect the levels of food intake.

#### *Perceived security and integration*

The covariate estimators of the average treatment effect suggest that with reintegration, there is a decrease in the score of perceived integration of the heads of household by 2.7 points. However, there is an increase in the score of perceived security of 0.23 points (Table 10). Even though Zaatari camp is officially managed by the UNCHR and the Jordanian Government, most of the management activities in the camp are carried out by the Syrian community that resides there. This implies the existence of a very strong community in which each member is able to feel integrated. In non-camp communities, refugees live more spread out and are trying to adapt to a host environment as a minority. However, non-camp communities might be at least subjectively an environment that offer more alternatives, in the sense that refugees are able to move more freely, notwithstanding the restrictions implemented by the Jordanian Government. Within the Zaatari Camp, refugees in contrast may experience feelings of captivity. The fear of refoulement may be higher in an enclosed environment such as the Zaatari Camp. Nevertheless, the decrease in the levels of security is very low, even though our results are significant, the actual impact of reintegration of the perceived security might not be high enough to be noticed.

#### *Happiness and Optimism*

Overall, our estimations suggest that with reintegration there is decrease in the score of optimism about the future of 1.1 points and a decrease of 0.4 points for the score of happiness of the head of Syrian families (Table 11). This may be a result of the different development opportunities that the refugees have in non-camp communities compared to the refugee camp. The Zaatari Camp offers protection; however, non-camp communities offer, subjectively, an environment in which the refugees have their highest hopes to improve their socioeconomic

conditions. The reality in the non-camp communities may be, however, more severe than expected.

### *Stages of adaptation*

This section proceeds to show estimations based on the four stages of adaptation (Kunz, 1973), mentioned in our literature review. However, the characteristics of the population makes it impossible for us to analyze the four stages individually. Here, we have combined the first and second stage, having a new single first stage for those families that have lived for less than four years in Jordan. The new second stage represents the situation in which the families have lived for more than four years in Jordan. The literature suggests that the second stage of our design is conspicuous by accomplishing the restoration of the living conditions, this restoration is in generally not strong enough to match the living conditions that the refugee families used to have in their countries of origin, before the increase of the intensity of the conflict that led to their forced displacement. The literature also suggests that in the same line, there should be an increase in the levels of resignation, or in other words a decrease in the levels of optimism.

Our results (Table 12), suggest that during the second stage, there is no strong evidence that reintegration has any effect on the likelihood of being employed, being satisfied with the labor opportunities, experiencing an income shock or the probability of reducing educational expenses. This suggest that after four years, there is no a significant difference between families that live in the Zaatari Camp or the ones that live in Jordanian communities in terms of the key preceding parameters. The results also suggest that both the probability of sickness and the score of optimism with reintegration decreases in the second stage.

Overall, these results suggest that there is no significant improvement in the development of Syrian families being reintegrated, at least not other than the decrease in the probability of being sick, with the results also estimating a decrease in the optimism only during the second stage. We can conclude that the decrease in optimism might be the result of the protracted situation of vulnerability of Syrian families and the very few differences in terms of the sources

for labor opportunities between the non-camp communities and the Zaatari Camp after they have lived for more than three years in Jordan.

#### **4.2 Propensity score matching**

This section presents the Propensity Score Matching estimation as a robustness check using the same matching variables and analyzing the same outcomes. Propensity Score Matching estimate a score that measures the propensity to be selected into treatment based on a probit estimation. The propensity score is then used to match those individuals that have similar propensity to be selected into treatment.

##### *Net Income*

Our estimations (Table 13), suggest that with reintegration, there is an increase in the levels of income by 76%, however there is also an 84% increase in levels of expenses. Furthermore, reintegration is associated with 12% increase in the likelihood of having a lower percentage of expenses to income to the one they used to have in Syria.

##### *Labor Opportunities*

Likewise, reintegration is associated with 20% decrease in the probability of being unemployed. More so, there is an increase in the likelihood of having employment as the main source of income by 32%. The probability of being employed in the informal sector increases by 46% (Table 14). In contrast to what we found with Covariate Matching, the Propensity Score Matching estimation presents no strong evidence that reintegration has any effect on the likelihood of being satisfied with the labor opportunities.

##### *Restoration of Wealth*

For the restoration of wealth, our results suggest that reintegration is correlated with a general decrease in the ability of restoring wealth (Table 15). There is decrease of 25% in the

probability of having the same number of cars or a higher more number of cars as they had in Syria, as well as a 38% decrease in the likelihood of being able to have savings again.

### *Shocks*

Our estimations suggest that there is a general decrease in the likelihood of having a shock with reintegration, as evidenced in the probability of experiencing a decline in income and theft decreasing by 10% and 15% respectively. More so, the probability being sick in the last month decreases by 13% (Table 16).

### *Coping Behaviors*

Our results (Table 17), suggest that the likelihood of reducing educational expenses is a decrease by 7%. Contrarily, the probability of reducing food consumption in the family unit increases by 24%.

### *Perceived Security and Integration*

The covariate estimators of the average treatment effect suggest that with reintegration, there is a decrease in the score of perceived integration for the heads of household of 3 points. However, there is an increase in the score of perceived security of 0.16 points (Table 18).

### *Happiness and Optimism*

Overall, our estimations (Tables 19) suggest that with reintegration, there is a 0.874-point decrease in the score of optimism about the future for the head of Syrian families. Even though our results are significant, the actual impact on the levels of optimism with reintegration are less than the 10% of the total, meaning that actual effect is very low. In general, the results obtained through the Propensity Score Matching estimation are consistent with that of the Covariate Matching estimation.

### 4.3 Rosenbaum Bound Test

After running the PSM estimation, we use the estimation of the Rosenbaum Bound Test to measure the presence of endogeneity we would need to have in order to make our matching estimations invalid. This test addresses the problem of self-selection based on unobservable variables that would potentially affect the impact of the treatment and make the results statistically insignificant. The RBT (Rosenbaum Bound Test) suggested that in general, the unobserved endogeneity would need to make the Syrian families at least one-hundred percent more likely to be reintegrated for the estimations of the PSM to become invalid at a 99% significance level (Tables 20-36).

We found that for the likelihoods of experiencing an income shock (Table 29), or sickness (Table 31), and for the score of perceived personal security (Table 35), the unobserved endogeneity would have to have an effect strong enough to select into reintegration increase by less than one-hundred percent and thereby discard the significant results obtained in the PSM. Even though these results are not entirely problematic, they suggest that there is a higher presence of unobserved explanatory variables for these outcomes.

The probability of experiencing an income shock may be influenced by several factors that may also influence the selection into the treatment and its potential outcomes. In this sense, to prevent the presence of endogeneity requires the use of different variables for the various kinds of income shocks. In other words, a decrease in income may be caused by factors related to the particular characteristics of the individual or the family unit, therefore it would be preferable to include different sources of income shocks in the model.

Similarly, the likelihood of being sick may be related to certain characteristics of the family members, that may not be well captured by the matching variables used in our model. Furthermore, the perceived personal security may be also influenced by certain characteristics of the families, those that were more affected by the war or facing a very vulnerable situation such as elderly people or people with disabilities may seek to live in the camp to ensure their own protection. Their own characteristics may influence the decision of where they will attempt to live and may cause a persistent feeling of insecurity as well.



## **5. Probit Estimation**

This section presents the last robustness check of this paper. We employed a probit estimation using the same matching variables as independent variables to measure their effect on our main outcomes of interest. In general, result of the probit estimation is consistent with those of the CVM and PSM in terms of the effects of reintegration. However, the probit estimation also provides some interesting findings, regardless of the place where the Syrian families reside in Jordan.

The probit estimation (Table 39), suggest an inverse relationship between the duration of residence in Jordan and the probability of job satisfaction, whereby an increase in the former is associated with a decrease in the probability of the latter. The results also suggest that women are less likely to be employed. Additionally, more years of education decreases the likelihood of restoring previous levels of wealth, an indication of a threshold in the extent to which refugees are able to restore their previous socioeconomic conditions, especially for those with higher previous levels of wealth or education.

Finally, both age of the head of the household and family size increase the probability of child labor. This may be because older parents with larger families may have more older children. For these kind of families, it is certainly easier to request one of the oldest children to contribute to the support of the family.

## **6. Summary and Conclusion**

Are non-camp refugees less vulnerable than Zaatari Camp refugees? The Results from our matching techniques suggest that the Zaatari Camp is more suitable for the most vulnerable families. Moreover, the situation in the Zaatari Camp is to some extent more stable, since the management of the camp is also a responsibility of the UNCHR and the NGOs that work there. Within non-camp communities, refugees must face the challenges that come from the host government and community, as well as the humanitarian assistance and the aggravation of refugee crisis as the intensity of the war increases. In terms of our variables of interest, the following inferences are drawn:

1. There are more labor opportunities for refugees in non-camp communities. However, the work permit restrictions imposed on the refugees by the Jordanian government limits most of them to labor activities in the informal sector. However, we do not find evidence of significant difference in their satisfaction with labor opportunities after three years living in Jordan.
2. The levels of both income and expenses are higher in non-camp communities, with rent identified as one of the most significant burdens. The UNHCR provides housing within the Zaatari Camp, with the quality of accommodation being mainly rudimentary. Furthermore, only refugees in non-camp communities are able to maintain the same levels of net income comparable to their previous levels of earnings in Syria.
3. It is harder for refugees to restore their previous levels of wealth in non-camp communities. However, there is a threshold for the level of restoration of the previous levels of wealth, and in that sense, those who used to have better socioeconomic conditions are on average less likely to restore these levels, regardless of their place of abode in Jordan.
4. Refugees living in non-camp communities are less likely to experience any kind of shock. However, after years of living under the same status, refugees that live in non-camp communities are less likely to suffer from ailments.
5. Under a family shock, refugees who resides in non-camp communities are more likely to reduce the levels of food consumption as a coping mechanism.
6. Those refugees that live in non-camp communities perceived themselves to be less integrated in the non-camp communities but more secured. The strong Syrian community in Zaatari Camp and the fear of refoulement play a key role in this matter.
7. Levels of optimism are higher in the refugees that are living in Zaatari Camp. However, this do not mean that the situation in Zaatari is actually better. The truth is that refugees put very high hopes on the potential opportunities that the non-camp communities can provide, their lower levels of optimism are influenced by a very strong feeling of resignation, which are intensified in non-camp communities after the third year living under that status.

Six years have passed since the breakout of the Syrian Civil War. In the context of the Syrian Refugee Crisis in Jordan, much of the resources that were available to support the Syrian refugees have already been depleted. An environment such as the Zaatari Camp still offers a safe space for the most vulnerable families. However, real opportunities for reintegration of the Syrian families outside the refugee camps are highly limited. Those laws that were in a first place to protect Syrian families are now being restricted, making them in some instances obsolete. Overtime, the level of support that the Jordanian Government is able to provide to the Syrian refugee community is on a consistent decline. The fewer levels of international aid and the discontent of the Jordanian society are increasing the pressure of a country that has already faced refugee crisis for almost seventy years.

To mobilize resources and implement policies aimed at restoring and improving the previous socioeconomic conditions of the refugees, one of the first steps would be to entail providing work permits to Syrian refugees, thus enabling them cope effectively with the prevailing economic environment. Access to public services and the possibility of being formally integrated through citizenship are further steps that would benefit the Syrian Refugee community. In this sense, policies that can integrate the development of both the host and refugee community are imperative. In other words, international humanitarian aid and the resources from the Jordanian Government should be effectively harnessed to ensure sustainable development of both communities. Currently, only a meager 8% of the required funding have been collected to cover the needs of those refugees that were registered in Jordan. Thus, the magnitude of the resource deficit cannot be under-emphasized, with concerted global collaboration and efforts now required to solve the Syrian Refugee Crisis in Jordan.

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## Appendix

**Table 3: Summary Statistics of the Matching Variables**

Means and p-values

<b>Variables</b>	<b>Zaatari Camp</b>	<b>Reintegration</b>	<b>p-value</b>
High School or Higher	0.179	0.398	0.000
Daraa	0.831	0.656	0.000
Years Under Main Status	3.435	3.374	0.463
Good Quality of Jobs	0.271	0.547	0.000
Age	38.344	39.672	0.363
Female	0.206	0.633	0.000
Family size	5.050	4.969	0.759

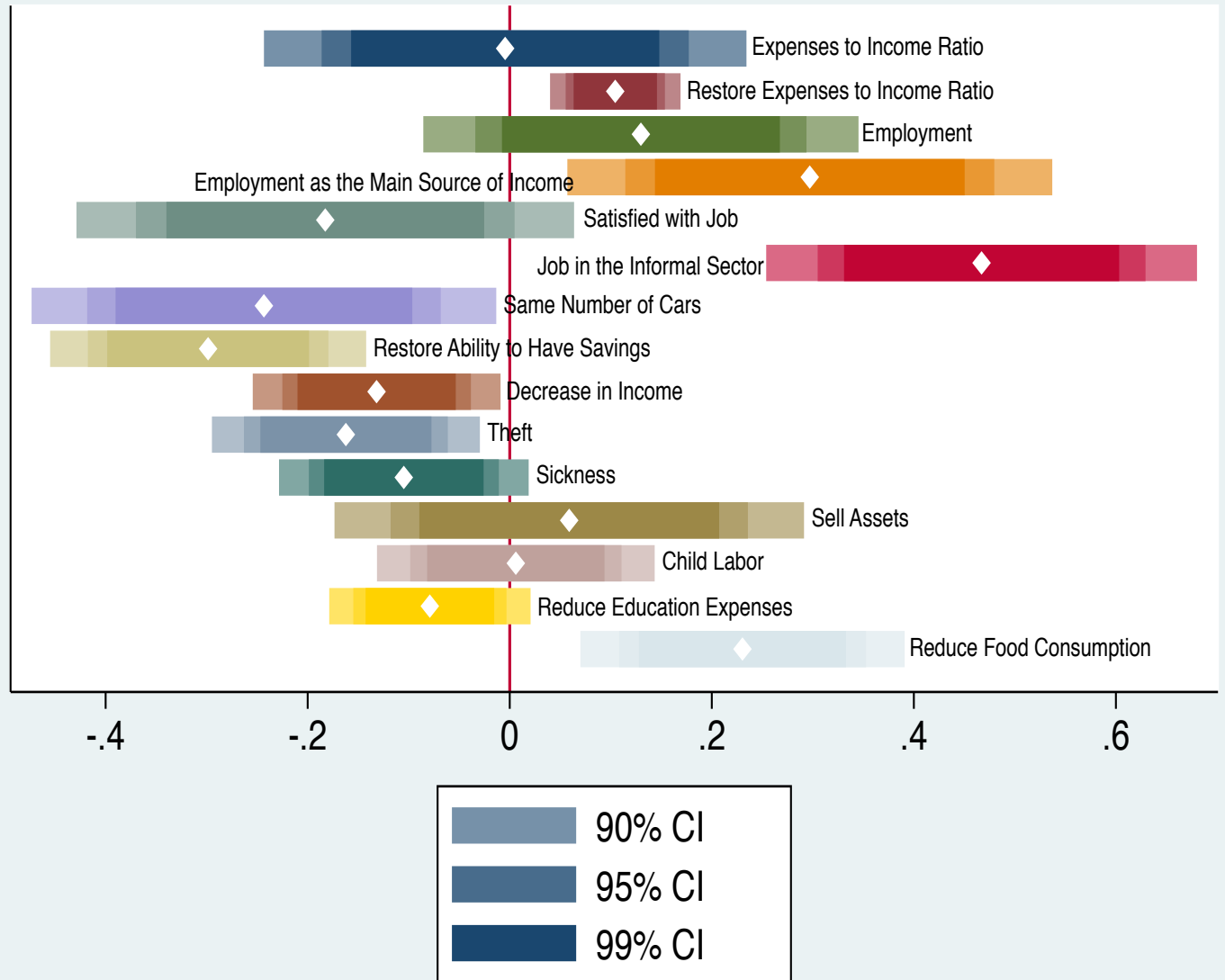
**Table 4: Summary Statistics of the Outcomes**

Means and p-values

<b>Variables</b>	<b>Zaatari Camp</b>	<b>Reintegration</b>	<b>p-value</b>
Income in Jordan (USD)	206.794	375.911	0.000
Expenses in Jordan (USD)	137.807	278.953	0.000
Restoration of Expenses to Income Ratio	0.005	0.141	0.000
Employment Status	0.303	0.359	0.278
Informal Sector	0.165	0.606	0.000
Restoration of Employment as the Main Source of Income	0.289	0.547	0.000
Satisfaction with Job	0.576	0.409	0.005
Same Number of Cars	0.688	0.508	0.001
Presence of Savings	0.853	0.508	0.000
Decrease in Income	0.922	0.787	0.000
Theft	0.225	0.032	0.000
Sickness	0.211	0.173	0.396
Sell Assets	0.335	0.331	0.937
Child Labor	0.229	0.276	0.334
Reduction in Educational Expenses	0.206	0.139	0.125
Reduction in Food Consumption	0.569	0.72	0.005
Personal Integration	7.986	4.756	0.000
Personal Security	2.636	2.798	0.020
Happiness	5.05	4.524	0.082
Optimism	6.128	5.11	0.002

Figure 1. Impact Estimates from Reintegration based on Covariate Matching  
Estimations

## Impact Estimates from Reintegration Covariate Matching Estimations





**Table 5: Net Income**

Covariate Matching Estimations

<b>VARIABLES</b>	<b>Log of Income in Jordan</b>	<b>Log of Expenses in Jordan</b>	<b>Probability of Having a Lower Expenses to Income Ratio</b>
Reintegration	0.687*** (0.125)	0.861*** (0.138)	0.104*** (0.0251)
Observations	325	318	335

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 6: Labor Opportunities**

Covariate Matching Estimations

<b>VARIABLES</b>	<b>Probability of being Employed</b>	<b>Probability of Having a Job in the Informal Sector</b>	<b>Probability of Having Employment as the Main Source of Income</b>	<b>Probability of Being Satisfied with the Current Job</b>
Reintegration	0.13 (0.0836)	0.467*** (0.0828)	0.297*** (0.0932)	-0.183* (0.0956)
Observations	335	334	335	304

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 7: Wealth**

Covariate Matching Estimations

<b>VARIABLES</b>	<b>Probability of Having the Same Number of Cars or More</b>	<b>Probability of Restoring the ability to have Savings</b>
Reintegration	-0.237*** (0.0893)	-0.304*** (0.0599)
Observations	335	335

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 8: Shocks**

Covariate Matching Estimations

<b>VARIABLES</b>	<b>Probability of Experiencing an Income Shock</b>	<b>Probability of Experiencing Theft</b>	<b>Probability of Experiencing Sickness</b>
Reintegration	-0.132*** (0.0476)	-0.162*** (0.0515)	-0.105** (0.048)
Observations	334	333	334

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 9: Coping Strategies**

Covariate Matching Estimations

<b>VARIABLES</b>	<b>Probability of Selling Assets</b>	<b>Probability of Child Labor</b>	<b>Probability of Reducing Educational Expenses</b>	<b>Probability of Reducing Food Consumption</b>
Reintegration	0.0589 (0.0902)	0.00606 (0.0534)	-0.0790** (0.0387)	0.230*** (0.0623)
Observations	331	330	329	332

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 10: Security and Integration**

Covariate Matching Estimations

<b>VARIABLES</b>	<b>Perceived Integration Score (1-5)</b>	<b>Perceived Personal Security Score (1-5)</b>
Reintegration	-2.724*** (0.500)	0.235*** (0.0607)
Observations	330	328

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 11: Psychological Well-Being**

Covariate Matching Estimations

<b>VARIABLES</b>	<b>Happiness Score (1-10)</b>	<b>Optimism Score (1-10)</b>
Reintegration	-0.404 (0.482)	-1.114** (0.486)
Observations	333	334

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 12: First and Second Stage of Adaptation**

Covariate Matching Estimation

<b>Variables</b>	<b>Probability of Being Employed</b>	<b>Probability of Being Satisfied with Current Job</b>	<b>Probability of Experiencing an Income Shock</b>	<b>Probability of Experiencing Sickness</b>	<b>Probability of Reducing Educational Expenses</b>	<b>Optimism Score (1-10)</b>
<b>Stage 1 (1-3 years)</b>	0.172* (0.095)	-0.339*** (0.0822)	-0.157** (0.0693)	0 (0.0651)	-0.106* (0.0616)	-0.908 (0.784)
Observations	186	171	185	185	180	185
<b>Stage 2 (3-6 years)</b>	0.11 (0.127)	-0.097 (0.141)	-0.0667 (0.066)	-0.213*** (0.0709)	-0.0533 (0.0649)	-1.173* (0.673)
Observations	150	134	150	150	150	150

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 13: Net Income**

Propensity Score Matching Estimation

<b>VARIABLES</b>	<b>Log of Income in Jordan</b>	<b>Log of Expenses in Jordan</b>	<b>Probability of Having a Lower Expenses to Income Ratio</b>
<b>Reintegration</b>	0.755*** (0.149)	0.843*** (0.14)	0.116*** (0.0408)
<b>Observations</b>	325	318	335

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 14: Labor opportunities**

Propensity Score Matching Estimation

<b>VARIABLES</b>	<b>Probability of Being Employed</b>	<b>Probability of Having a Job in the Informal Sector</b>	<b>Probability of Having Employment as the Main Source of Income</b>	<b>Probability of Being Satisfied with Current Job</b>
<b>Reintegration</b>	0.190*** (0.0698)	0.455*** (0.0643)	0.318*** (0.0956)	-0.158 (0.0967)
<b>Observations</b>	335	334	335	304

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 15: Wealth**

Propensity Score Matching Estimation

<b>VARIABLES</b>	<b>Probability of Having the Same Number of Cars or More</b>	<b>Probability of Restoring the ability to have Savings</b>
<b>Reintegration</b>	-0.252*** (0.0733)	-0.381*** (0.0605)
<b>Observations</b>	335	335

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 16: Shocks**

Propensity Score Matching Estimation

<b>VARIABLES</b>	<b>Probability of Experiencing an Income Shock</b>	<b>Probability of Experiencing Theft</b>	<b>Probability of Experiencing Sickness</b>
<b>Reintegration</b>	-0.100* (0.0553)	-0.152*** (0.0334)	-0.126** (0.0544)
<b>Observations</b>	334	333	334

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 17: Coping Strategies**

Propensity Score Matching Estimation

<b>VARIABLES</b>	<b>Probability of Selling Assets</b>	<b>Probability of Child Labor</b>	<b>Probability of Reducing Educational Expenses</b>	<b>Probability of Reducing Food Consumption</b>
<b>Reintegration</b>	-0.035 (0.0963)	-0.027 (0.0451)	-0.0694* (0.0362)	0.248*** (0.0648)
<b>Observations</b>	331	330	329	332

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 18: Integration and Security**

Propensity Score Matching Estimation

<b>VARIABLES</b>	<b>Perceived Integration Score (1-5)</b>	<b>Perceived Personal Security Score (1-5)</b>
<b>Reintegration</b>	-3.088*** (0.496)	0.159*** (0.0601)
<b>Observations</b>	330	328

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 19: Psychological Well-being**  
Propensity Score Matching Estimation

<b>VARIABLES</b>	<b>Happiness Score (1-10)</b>	<b>Optimism Score (1-10)</b>
<b>Reintegration</b>	-0.520 (0.367)	-0.874* (0.522)
<b>Observations</b>	333	334

Standard error in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 20: Log Income in Jordan**  
Rosenbaum Bound Test

Gamma	sig+	sig-	t-hat+	t-hat-	CI+	CI-
1	0.00000	0.00000	0.68500	0.68500	0.45300	0.92900
2	0.00000	0.00000	0.38700	0.99700	0.12600	1.27300
3	0.02100	0.00000	0.21700	1.17500	-0.07600	1.50400
3.65	0.09500	0.00000	0.14100	1.25700	-0.18400	1.60900
3.7	0.10400	0.00000	0.13600	1.26300	-0.19100	1.61600

\* gamma - log odds of differential assignment due to unobserved factors

sig+ - upper bound significance level

sig- - lower bound significance level

t-hat+ - upper bound Hodges-Lehmann point estimate

t-hat- - lower bound Hodges-Lehmann point estimate

CI+ - upper bound confidence interval (a= .99)

CI- - lower bound confidence interval (a= .99)

**Table 21: Log Expenses in Jordan**

Rosenbaum Bound Test

Gamma	sig+	sig-	t-hat+	t-hat-	CI+	CI-
1	0.00000	0.00000	0.74500	0.74500	0.42900	1.05100
2	0.01400	0.00000	0.33400	1.12900	-0.07500	1.46400
2.45	0.08800	0.00000	0.21300	1.24100	-0.24600	1.59300
2.5	0.10200	0.00000	0.19900	1.25500	-0.26000	1.60400

\* gamma - log odds of differential assignment due to unobserved factors

sig+ - upper bound significance level

sig- - lower bound significance level

t-hat+ - upper bound Hodges-Lehmann point estimate

t-hat- - lower bound Hodges-Lehmann point estimate

CI+ - upper bound confidence interval ( $\alpha = .99$ )CI- - lower bound confidence interval ( $\alpha = .99$ )**Table 22: Probability of Having a Lower Expenses to Income Ratio**

Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	1.80100	1.80100	0.03600	0.03600
1.05	1.75500	1.86100	0.04000	0.03100
1.6	1.33700	2.36800	0.09100	0.00900
1.65	1.308	2.408	0.095	0.008
1.7	1.28100	2.44800	0.10000	0.00700

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 23: Probability of being Employed**

Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	1.37262	1.37262	0.084934	0.084934
1.05	1.24441	1.51229	0.106675	0.06523

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 24: Probability of Having Employment as the Main Source of Income**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	2.42548	2.42548	0.007644	0.007644
1.1	2.17183	2.70035	0.014934	0.003463
1.2	1.9323	2.94357	0.026662	0.001622
1.3	1.71275	3.16854	0.043379	0.000766
1.4	1.5101	3.37795	0.065509	0.000365
1.5	1.3219	3.57396	0.0931	0.000176
1.55	1.2326	3.66748	0.108862	0.000122

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 25: Probability of Being Satisfied with Current Job**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	1.76172	1.76172	0.039058	0.039058
1.1	2.02505	1.51483	0.021431	0.064908
1.2	2.25942	1.28316	0.011929	0.099717
1.25	2.36974	1.17469	0.0089	0.120059

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 26: Probability of Having a Job in the Informal Sector**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	4.27399	4.27399	0.00001	0.00001
2	2.43826	6.28604	0.00738	0.00000
3	1.39696	7.54559	0.08121	0.00000
3.1	1.31365	7.65105	0.09448	0.00000
3.15	1.27304	7.70273	0.10150	0.00000

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)



**Table 27: Probability of Having the Same Number of Cars or More**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	1.77754	1.77754	0.03774	0.03774
1.1	2.04206	1.52873	0.020573	0.063166
1.2	2.2781	1.29584	0.01136	0.097515
1.25	2.38926	1.18683	0.008441	0.117646

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 28: Probability of Restoring the Ability of Having Savings**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	4.02139	4.02139	0.00003	0.00003
2	5.9106	2.34182	0.00000	0.00960
3	7.12498	1.40399	0.00000	0.08016
3.1	7.22805	1.32939	0.00000	0.09186
3.2	7.32863	1.2573	0.00000	0.10432

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 29: Probability of Experiencing an Income Shock**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	1.25272	1.25272	0.105153	0.105153
1.05	1.36328	1.15251	0.086397	0.124556

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 30: Probability of Experiencing Theft**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	2.73882	2.73882	0.00308	0.00308
2	4.2283	1.4901	0.00001	0.06810
2.1	4.34394	1.40705	0.00001	0.07971
2.2	4.4559	1.3284	0.00000	0.09202
2.3	4.5645	1.25371	0.00000	0.10497

Gamma : odds of differential assignment due to unobserved factors  
 Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)  
 Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)  
 p\_mh+ : significance level (assumption: overestimation of treatment effect)  
 p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 31: Probability of Experiencing Sickness**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	0.35386	0.35386	0.361722	0.361722
1.05	0.46305	0.247588	0.321664	0.402227

Gamma : odds of differential assignment due to unobserved factors  
 Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)  
 Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)  
 p\_mh+ : significance level (assumption: overestimation of treatment effect)  
 p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 32: Probability of Reducing Educational Expenses**  
Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	0.917355	0.917355	0.179478	0.179478
1.05	1.01866	0.824075	0.154183	0.204949

Gamma : odds of differential assignment due to unobserved factors  
 Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)  
 Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)  
 p\_mh+ : significance level (assumption: overestimation of treatment effect)  
 p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 33: Probability of Reducing Food Consumption**

Rosenbaum Bound Test

Gamma	Q_mh+	Q_mh-	p_mh+	p_mh-
1	2.00981	2.00981	0.022226	0.022226
1.1	1.76565	2.27173	0.038727	0.011551
1.2	1.53644	2.50486	0.062215	0.006125
1.3	1.32642	2.72066	0.092351	0.003258
1.35	1.22763	2.82289	0.109792	0.00238

Gamma : odds of differential assignment due to unobserved factors

Q\_mh+ : Mantel-Haenszel statistic (assumption: overestimation of treatment effect)

Q\_mh- : Mantel-Haenszel statistic (assumption: underestimation of treatment effect)

p\_mh+ : significance level (assumption: overestimation of treatment effect)

p\_mh- : significance level (assumption: underestimation of treatment effect)

**Table 34: Perceived Integration - Score (1-5)**

Rosenbaum Bound Test

Gamma	sig+	sig-	t-hat+	t-hat-	CI+	CI-
1	0.00000	0.00000	-3.00000	-3.00000	-4.00000	-2.00000
2	0.00000	0.00001	-4.50000	-2.00000	-5.50000	-1.00000
3	0.00000	0.00253	-5.00000	-1.00000	-6.00000	0.00000
4	0.00000	0.03165	-5.50000	-1.00000	-6.50000	0.50000
4.1	0.00000	0.03770	-5.50000	-1.00000	-6.50000	0.50000
4.2	0.00000	0.04446	-5.50000	-0.50000	-6.50000	0.50000
4.3	0.00000	0.05195	-5.50000	-0.50000	-6.50000	0.50000
4.4	0.00000	0.06018	-5.50000	-0.50000	-6.50000	0.50000
4.5	0.00000	0.06914	-5.50000	-0.50000	-7.00000	0.50000
4.6	0.00000	0.07885	-5.50000	-0.50000	-7.00000	1.00000
4.7	0.00000	0.08929	-5.50000	-0.50000	-7.00000	1.00000
4.8	0.00000	0.10045	-5.50000	-0.50000	-7.00000	1.00000

\* gamma - log odds of differential assignment due to unobserved factors

sig+ - upper bound significance level

sig- - lower bound significance level

t-hat+ - upper bound Hodges-Lehmann point estimate

t-hat- - lower bound Hodges-Lehmann point estimate

CI+ - upper bound confidence interval (a= .99)

CI- - lower bound confidence interval (a= .99)

**Table 35: Perceived Personal Security – Score (1-5)**

Rosenbaum Bound Test

Gamma	sig+	sig-	t-hat+	t-hat-	CI+	CI-
1	0.28217	0.28217	0.00000	0.00000	0.00000	0.00000
1.05	0.32635	0.24098	0.00000	0.00000	0.00000	0.00000

\* gamma - log odds of differential assignment due to unobserved factors

sig+ - upper bound significance level

sig- - lower bound significance level

t-hat+ - upper bound Hodges-Lehmann point estimate

t-hat- - lower bound Hodges-Lehmann point estimate

CI+ - upper bound confidence interval ( $\alpha = .99$ )CI- - lower bound confidence interval ( $\alpha = .99$ )**Table 36: Optimism – Score (1-10)**

Rosenbaum Bound Test

Gamma	sig+	sig-	t-hat+	t-hat-	CI+	CI-
1	0.00000	0.00000	-2.50000	-2.50000	-3.50000	-1.50000
2	0.00000	0.00324	-3.50000	-1.00000	-4.50000	0.00000
2.1	0.00000	0.00586	-3.50000	-1.00000	-5.00000	0.00000
2.2	0.00000	0.00990	-3.50000	-1.00000	-5.00000	0.00000
2.3	0.00000	0.01582	-4.00000	-1.00000	-5.00000	0.50000
2.4	0.00000	0.02404	-4.00000	-1.00000	-5.00000	0.50000
2.5	0.00000	0.03498	-4.00000	-1.00000	-5.00000	0.50000
2.6	0.00000	0.04898	-4.00000	-1.00000	-5.00000	0.50000
2.7	0.00000	0.06628	-4.00000	-0.50000	-5.50000	0.50000
2.8	0.00000	0.08702	-4.00000	-0.50000	-5.50000	0.50000
2.9	0.00000	0.11122	-4.00000	-0.50000	-5.50000	1.00000

\* gamma - log odds of differential assignment due to unobserved factors

sig+ - upper bound significance level

sig- - lower bound significance level

t-hat+ - upper bound Hodges-Lehmann point estimate

t-hat- - lower bound Hodges-Lehmann point estimate

CI+ - upper bound confidence interval ( $\alpha = .99$ )CI- - lower bound confidence interval ( $\alpha = .99$ )

**Table 37: Net Income and Labor Opportunities**

Probit Estimation

	Restore Expenses to Income Ratio	Employment	Restore Employment as the Main Source of Income	Satisfaction with Job	Job in the Informal Sector
Reintegration	1.659*** (0.468)	0.226 (0.176)	0.683*** (0.173)	-0.567*** (0.182)	1.174*** (0.179)
Education	-0.33 (0.312)	0.469*** (0.168)	0.127 (0.165)	0.305* (0.175)	-0.113 (0.177)
Daraa	0.434 (0.338)	0.0127 (0.18)	0.244 (0.179)	-0.162 (0.182)	-0.0657 (0.184)
Years Current Status	0.226 (0.181)	-0.0359 (0.102)	-0.0599 (0.0997)	-0.286*** (0.101)	0.00139 (0.106)
Job Type	-0.411 (0.3)	0.238 (0.158)	0.302* (0.154)	-0.109 (0.161)	0.103 (0.165)
Age	-0.0119 (0.0117)	-0.00725 (0.00602)	-0.00884 (0.00578)	0.000345 (0.00596)	-0.000959 (0.00609)
Female	0.789** (0.329)	-0.622*** (0.173)	-0.185 (0.167)	0.176 (0.1730)	0.102 (0.173)
Family Size	-0.00276 (0.0742)	0.00484 (0.031)	-0.0372 (0.031)	0.0338 (0.0311)	0.00162 (0.0331)
Constant	-3.588*** (0.922)	-0.169 (0.458)	-0.0814 (0.448)	1.039** (0.458)	-0.910* (0.475)
Observations	335	335	335	304	334

Standard error in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 38: Wealth**  
 Probit Estimation

	Same number of Cars	Restore Savings
Reintegration	-0.429** (0.172)	-0.853*** (0.181)
Education	-0.411** (0.164)	-0.555*** (0.171)
Daraa	-0.076 (0.1740)	0.0284 (0.189)
Years Current Status	0.114 (0.0985)	0.0376 (0.107)
Job Types	-0.205 (0.154)	-0.186 (0.165)
Age	0.00292 (0.00577)	-1.00E-04 (0.006420)
Female	0.293* (0.168)	-0.0293 (0.177)
Family Size	-0.0192 (0.03010)	-0.0276 (0.03440)
Constant	0.185 (0.4410)	1.209** (0.48600)
Observations	335	335

Standard error in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 39: Shocks and Coping Strategies**  
 Probit Estimation

	Decrease in Income	Theft	Sickness	Sell Assets	Child Labor	Reduce Education Expenses	Reduce Food Intake
Reintegration	-0.751*** (0.215)	-1.018*** (0.279)	-0.291 (0.196)	0.12 (0.175)	0.0618 (0.194)	-0.233 (0.21)	0.594*** (0.177)
Education	0.0898 (0.211)	0.246 (0.223)	-0.115 (0.19)	0.0668 (0.168)	-0.113 (0.195)	0.276 (0.194)	-0.176 (0.168)
Daraa	0.0184 (0.216)	0.057 (0.253)	-0.0908 (0.196)	0.0642 (0.178)	-0.208 (0.194)	-0.154 (0.206)	-0.0159 (0.177)
Years Current Status	0.0183 (0.122)	0.421*** (0.151)	0.087 (0.111)	-0.0196 (0.101)	0.0549 (0.11)	0.071 (0.121)	0.0315 (0.0977)
Job Types	-0.215 (0.194)	0.104 (0.2)	0.225 (0.169)	-0.176 (0.158)	0.411** (0.1720)	-0.162 (0.184)	-0.254 (0.156)
Age	-0.00589 (0.00697)	-0.00181 (0.007730)	0.00265 (0.00639)	-0.00524 (0.00586)	0.0271*** (0.00654)	0.00661 (0.00668)	0.00196 (0.0056)
Female	0.474** (0.217)	-0.492** (0.239)	0.178 (0.182)	-0.0714 (0.168)	0.00833 (0.185)	-0.113 (0.1990)	-0.0405 (0.166)
Family Size	0.0556 (0.0414)	0.0396 (0.0371)	0.0149 (0.0333)	0.0198 (0.0303)	0.0930*** (0.0333)	0.0733** (0.0343)	0.0147 (0.0295)
Constant	1.242** (0.557)	-2.416*** (0.65)	-1.269** (0.496)	-0.311 (0.445)	-2.502*** (0.523)	-1.599*** (0.525)	-0.019 (0.438)
Observations	334	333	334	331	330	329	332

## Appendix 40: Survey

I. Basic Data					
Age العمر		Education المستوى التعليمي		Nationality الجنسية	
Gender (F/M) الجنس		Civil Status الحالة الاجتماعية		Family Size عدد أفراد الأسرة	
Asylum seeker (1) Refugee document (2)		First Language		City of Birth مكان الولادة	
Place of Residence in Home Country? مكان الإقامة في سوريا		Rural/urban? قرية/مدينة		Religion الديانة	
II. Family Unit					
Relationship العلاقة	Age العمر	Status الحالة الاجتماعية	Medical condition الحالة الصحية	Length of time in/ out of school الزمن الذي قضاه في المدرسة	Length of time living in Jordan المدة التي قضاها في الاردن
Is there any member of your family still living in Syria? Who is still living in Syria? هل هناك اي فرد من افراد اسرتك ما زال يعيش في سوريا؟ من هو؟					
Has any member of your family gotten married since your arrival to Jordan? هل تزوج احد افراد اسرتك منذ وصولكم الى الاردن؟					
III. Residence					
Have you and your family lived in a different place in Jordan since your arrival? هل عشت انت و افراد اسرتك في اكثر من مكان منذ وصولكم الى الاردن؟					
Place of residence. مكان الإقامة			Length of time living in that place. مدة الإقامة		
If you used to live in one of the refugee camps, to what do you attribute the fact that you or your family were able to leave the camp? خرجتم من المخيم؟ اذا كنت عشت في اي من مخيمات اللاجئين. وضح كيف					
IV. Wealth (Durable assets)					
	Country of origin	Jordan	Donated, Inherited, Rented or Owned	Characteristics	
Houses بيوت					
Rooms غرف					
Restrooms حمامات					
Televisions					



تلفزيون				
Refrigerators ثلاجة				
Stoves افران				
Cars سيارات				
Vacations a year اجازات نهاية السنة				
Times a week when you go out with your family عدد مرات الخروج مع العائلة اسبوعيا				
Access to loans الحصول على قرض				
Access to retirement plan/ Pension الحصول على راتب تقاعدي				
Savings الادخار				
Debts الدين				
<b>V. Economic Data</b>				
Describe the main activities that make up the average day: ما هي اهم النشاطات التي تقوم بها يوميا؟				
Are you currently employed, unemployed or looking for a job? هل انت حاليا موظف غير موظف تبحث عن عمل؟				
Which members of your family were employed in your country of origin? اي من افراد اسرتك كان يعمل في سوريا؟				
Which members of the family are currently employed? اي من افراد اسرتك يعمل حاليا؟				
What was your main occupation in your home country? ماذا كان مصدر الدخل الرئيسي لك في سوريا؟				
What have been your last three jobs here? فيها هنا في الاردن؟ ما هي اخر ثلاث وظائف عملت				
Main sources of income				
Syria	Amount	Jordan	Amount	
Expenses	Syria	Jordan		
Rent. الاجار				
Food. الطعام				
Health. الصحة				
Education. التعليم				
Electricity. الكهرباء				
Water. الماء				

Drinkable water. للشرب الصالحة المياه.		
Transportation. المواصلات.		
Other expenses. مصاريف اخرى.		
Total. المجموع.		
Was any member of the household working on the informal sector in your country of origin? Which members were working in the informal sector? هل كان اي فرد من افراد الاسرة يعمل لحسابه الخاصه في سوريا؟ من هو؟		
Is any member of the households working on the informal sector? What members of your family are currently working in the informal sector? هل يعمل اي فرد من افراد الاسرة حاليا لحسابه الخاص؟ من هو؟		
Did you used to run a business in country of origin? هل كنت تدير عملا في بلدك؟		
Do you currently run a business? هل تدير عملا هنا؟		
Did you use to have more than one job at a time in your country? هل كنت تعمل اكثر من عمل في سوريا؟		
How many jobs do you tend to have at time in here? هل تعمل اكثر من عمل حاليا؟		
How long was your weekly working time in your country of origin? كم كانت تبلغ ساعات عملك في سوريا؟		
How long is your weekly working time here? كم ساعه تعمل في الاسبوع هنا؟		
Were you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with your job in your country? هل كنت مقتنع تماما , راضي , غير مقتنع , غير مقتنع ابدا عن عملك في بلدك؟		
Are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with your job in this country? هل انت مقتنع تماما , راضي , غير مقتنع , غير مقتنع ابدا عن عملك هنا؟		
<b>VI. Psychological Data</b>		
General Happiness: "All things considered, how happy would you say you are today?" (0-10) كم تقيّم سعادتك 10 حاليا من		
General Optimism: "All things considered, how hopeful do you feel about the future?" (0-10) كم هي نسبة تفاؤلك 10 في المستقبل من		
<b>VII. Security Data</b>		
Do you consider that current situation of security of your family is very bad, bad, regular, good or very good? الشعور بالامان هنا انت و افراد اسرتك .. سيئ جدا , سيئ طبيعي , جيد , جيد جدا		
Who is responsible for the security of your family? من العائلة؟ من هو المسؤول عن ا		
If something negative would happened to your family to who would you call first? Who will be your second choice? Who would be your third choice? في حال حدوث أي مشكلة مع العائلة لمن تلجا اولا؟ ثانيا؟ ثالثا؟		
Do you think your family is safer now than before? هل تعتقد ان عائلتك اكثر امانا الان؟		
Do you consider that your personal current situation of security is very bad, bad, regular, good or very good? شعورك بالامان هنا .. سيئ جدا , سيئ طبيعي , جيد , جيد جدا		
Who is responsible for your personal security? من هو المسؤول عن امنك؟		
If something negative were to happen to you to whom would you call first? Who would be your second choice? Who would be your third choice? ا ؟ ثالثا؟ في حال حدوث مشكلة معك .. لمن تلجا اولا؟ ثانيا؟		

Do you feel safer now than before? هل تشعر انك اكثر امانا حاليا؟		
All things considered, how integrated you think your family is now?(0-10). ما هو مدى اندماج عائلتك ؟ 10 من		
All thing considered, how integrated you think you are now? (0-10). ما هو مدى اندماجك ؟ 10 من		
<b>VIII. Shocks</b>		
Have you experienced any decrease in your income since your arrival (increase in prices, reduction of assistance, reductions of remittances)? ...تعرضت لأي انخفاض في دخلك منذ وصولك (زيادة اسعار، تقليل حجم المساعدات هل		
What was the cause of this decrease? ما هو سبب هذا الانخفاض؟		
Have you experienced any theft since your arrival? شهور ؟ 6 هل تعرضت للسرقة في اخر		
Have you experienced a loss of employment since your arrival?		
Have any of your family members had any sickness during the last 6 months? الاخيرة ؟ 6 هل تعرض اي من افراد عائلتك لاي نوع من انواع المرض خلال الاشهر		
What kind of sickness? ما هو نوع المرض ؟		
Which of these options correspond to your response to the previous shocks (answer Y for yes or N for no):		
Increase your weekly working time		Use savings
Have more than one job		Request for a loan or credit
Request one of your children to start working		Request any kind of assistance
Reduce household's food intake		Sell assets
Reduce household's consumption		Reduce in education spending
Request one of the members of the family to start working in the informal sector		
If one of your answers is assistance, please explain who is providing assistance and how? إذا كنت قد لجأت الى طلب المساعدة ، من فضلك وضح من قام بتقديم المساعدة لك ؟		
If your answer is none of the previous alternatives please explain your actual response. إذا كانت اجابتك لا شيء مما ذكر من فضلك وضح كيف كانت ردة فعلك ؟		
Is there any other shock that you have experienced here that is not included in the survey? هل هناك اي نوع من انواع الصدمات تعرضت لها ولم يتم ذكرها في الدراسة ؟		
Do you think that this survey captures your situation? هل تعتقد ان هذه الدراسة تغطي وضعك ؟		
Do you think that this survey is too intrusive? هل تعتقد ان هذه الدراسة فضولية ؟		

I understand that participation in this survey is strictly and completely voluntary. I understand that all information collected will be kept confidential and used only for research purposes. I am willingly participating in this survey and answering the questions to the best of my ability.

Date: \_\_\_\_\_