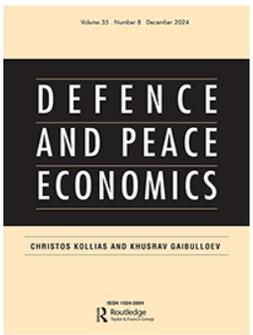

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Employability of Syrian Refugees in Lebanon: The Role of Legal Residency

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ABSTRACT

The onset of the Syrian crisis in 2011 has led people to flow to neighboring countries seeking protection. Syrian refugees have become a topic of interest for many researchers where studies have highlighted their vulnerability in their host countries, including finding a job. There have been papers addressing the factors influencing Syrian refugees' employability, but very few have specifically focused on the role of legal residence and legal documentation. In this research, our main objective is to examine the correlation between Syrian refugees' legal residency and their labor force participation in Lebanon. We use the Vulnerability Assessment of Syrian Refugees in Lebanon (VASyR) dataset and run a Probit model. The main finding of our empirical analysis is that Syrian refugees with legal residency are more likely to be employed in Lebanon. After dividing by educational levels, the results suggest that legal residency is positively associated with a higher probability of finding work among those with a school education or university education as the highest educational attainment. This paper also includes identity documentation factors (identification document (ID), national passport, family booklet) and some demographic factors (gender, marital status, education, age). Finally, the paper provides some policy recommendations regarding this issue.

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Introduction

By 2022, the global count of displaced individuals due to war, violence, persecution, or conflicts reached approximately 89.3 million (United Nations High Commissioner for Refugees UNHCR 2022). Among them, 27.2 million are refugees, while around 4.6 million are asylum seekers. Most refugees spend extensive periods in their host countries, spanning years or even decades. In 2019, it was estimated that about 16 million individuals were stuck in protracted refugee situations (UNHCR 2020). This signifies that these refugees have been living in exile for more than five consecutive years, with limited prospects for finding long-term solutions to their displacement. Consequently, refugees facing such circumstances often encounter significant challenges in terms of protection and experience restrictions on their rights (UNHCR 2020). They may face constraints on their freedom of movement, difficulties securing legal employment, accessing land, or obtaining justice. In recent years, the global barriers and obstacles confronting refugees have increased, making examining issues related to legal residency and employability increasingly pertinent. Among the foremost concerns is the right of refugees to work and access the labor market, posing a significant challenge for policymakers in countries hosting them. Therefore, understanding how legal residency status impacts the employability of refugees can provide valuable insights to governments and relevant

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international organizations in their efforts to ensure international protection and seek durable solutions. This analysis aims to contribute to developing policies and practices that empower refugees to exercise their rights effectively.

25 percent of the total refugee population consists of Syrians as a result of the 10-year Syrian crisis. Since the beginning of the Syrian crisis in 2011, more than 6.8 million Syrians have been forced to flee their home (UNHCR 2021b). Around 5.5 million refugees have sought refuge in neighboring countries, mainly Turkey, Lebanon, and Jordan (UNHCR 2021b). Specifically, Lebanon has the most refugees per capita, with about 1.5 million Syrian refugees residing there, as estimated by the government.[1] However, it is worth noting that Lebanon has no reliable data about the number of Syrian refugees within its borders.[2] Among the main issues the Syrian refugees encounter in Lebanon is legal residency; less than 20 percent of refugees above 15 possess legal residency, which impacts all aspects of their lives (VASyR. 2020). Refugees are at a higher risk of arrest and detention without legal residency. Additionally, the lack of legal residency hinders their access to essential services such as health care, education, and social services, and it impedes their ability to obtain civil status documents like birth certificates and marriage certificates (UNHCR 2021a).

Different reports tackle the impact of Syrian refugees' legal status on their livelihood conditions. These reports show that possessing legal residency affects every aspect of refugees' lives. A report by Alsharabati and Nammour (2017) shows that the safety level of Syrian refugees is highly related to whether they have a legal residency; it is reported that 87 percent to 91 percent of the respondents mentioned that having legal residency increases their safety. Moreover, according to the Norwegian Refugee Council in 2014, the limited legal status for Syrian Refugees has deprived them of accessing justice and seeking fairness; they have become more exposed to abuse and exploitation (Janmyr 2016). In addition, limited legal status for Syrian refugees in Lebanon leads to restricted freedom of movement and a lack of access to essential services. According to a survey done in 2015, 67 percent of Syrian refugees' participants pointed out that the main problem with limited legal status is that it restricts their movement (Janmyr 2016). In addition to the lack of legal residency and its devastating effects on their lives, Syrian refugees in Lebanon face numerous human rights violations and discrimination, including growing violence, oppressive policies of the Lebanese government, and restrictions on employment, housing, and mobility (Reidy 2018).

Accordingly, United Nations High Commissioner for Refugees (UNHCR) aims to protect the Syrian refugees in Lebanon and thus promote three durable solutions such as voluntary repatriation to their home country, local integration in their country, or resettlement to another country. As the Lebanese government lacks the option regarding local integration, UNHCR aims to secure the resettlement option for them. According to the UNHCR report (2021b), about 10 percent of the total refugee population living in Lebanon requires resettlement or humanitarian pathways, far exceeding the number of places available, which makes it an overwhelming issue. As a result, UNHCR continues to urge governments to expand resettlement programs. Based on anticipated quotas, UNHCR intends to resettle 9,250 refugees in 2021, where 8,000 of them are Syrian refugees. In its discourse, the Lebanese government clearly and continually emphasizes the importance of refugees' return to their home country; however, several Syrian refugees are expected to remain in Lebanon.

Besides exploring durable solutions, Syrian refugees have rights and responsibilities issued by the convention and relate to the status of refugees. One of their rights is that refugees can access work (Zimmermann, Dörschner, and Machts 2011). Formal labor market access is unavailable to refugees in many countries. In most developing countries, refugees have limited access to the labor market, which might be affected by legal residency and work permits (Clemens, Huang, and Graham 2018). Specifically, Turkey, Jordan, and Lebanon, which have hosted the highest number of Syrian refugees globally, differ in terms of providing legal residency and work permits.

For instance, Turkey has the largest number of refugees, exceeding 3.6 million, according to UNHCR (2021b). Syrian refugees are granted temporary protection identification documents that allow them to live in Turkey; however, these documents do not replace residency permits (İçduygu and Millet 2016). Refugees who have these documents can apply for work permits six months after

receiving the protection status, and then they can get access to work. However, these work permits have different restrictions, such as geographic restrictions, the limited number of refugees allowed to work, and the fees they should pay (Clemens, Huang, and Graham 2018). Therefore, according to Turkish authorities (2016), approximately 7,000 Syrian refugees can only obtain work permits (Clemens, Huang, and Graham 2018).

Moving to Jordan, non-Jordanians can get work permits if they have legal residency and official documents, and their prospective employer should pay a fee and prove that this employee has skills not found among Jordanian people (Achilli 2015). According to a report by the International Labour Organisation (ILO) in 2015, only 10 percent of Syrian refugees in Jordan got their work permits, while many other Syrians' work permit papers were rejected (Clemens, Huang, and Graham 2018). Although many official work restrictions exist on refugees in Jordan, and many refugees work informally. Specifically, Syrian refugees also work informal, although their work permits were not yet issued in Jordan (Achilli 2015). Starting in July 2021, Jordan agreed to issue work permits for Syrian refugees to work in different sectors open to non-Jordanians.[3] This step was given to recover Jordan's economy after Covid-19.[2] However, many Syrian refugees who hold work permits nowadays in Jordan, are still struggling to find jobs, with the unemployment rate hitting 23 percent in Jordan.[2]

Lebanon, our case study, relied on the UNHCR agency regarding Syrian refugees' issues. Thus, Lebanon adopted practices done by UNHCR in conducting registration, multiple required documents, and refugee status determination. At the beginning of the conflict, Lebanon opens its border to Syrians. Syrians who entered from official borders were granted six months of free legal residency, which can also be renewed for another six months (Janmyr 2016). However, in January 2015, UNHCR was requested by Lebanon to stop the registration of Syrian Refugees (UNHCR 2017). Syrian refugees who have refugee certificates from UNHCR are allowed to acquire residency from the General Security Offices (GSO) of the Lebanese government, which is free of charge; however, their men should sign a paper that pledges them not to participate in the labor force in Lebanon (UNHCR 2017). This policy was not applied consistently by GSO, but having a Lebanese sponsor has been the only way Syrian men receive a residency permit. It costs $200 per year for each family member over 15 years old to apply for this residency permit through the Lebanese sponsor (Fakhoury and Özkul 2019). Due to the local minimum wage of $450 in Lebanon and the fact that most Syrian refugees cannot find formal employment, a $200 fee is too expensive for them. Thus, most Syrians reside in Lebanon illegally due to the complex process of getting the documents and paying the fees (Fakhoury and Özkul 2019).

One important consequence of lacking legal residency is the hindrance it poses to refugees securing employment opportunities. Different reports have examined the role of legal residency on refugees' employability in Lebanon. For example, in their report, Alsharabati and Nammour (2017) documented that the non-renewal of legal papers has led 37 percent of Syrian respondents to have conflicts with the checkpoints (Alsharabati and Nammour 2017). Checkpoints are considered by 71 percent of Syrian refugee respondents as an important factor that has a significant effect on their lives; around half of the respondents mentioned that going to work is the reason behind considering checkpoints have a substantial impact on their lives (Alsharabati and Nammour 2017). Syrian refugees should renew their residency permits to obtain a work permit in Lebanon. Moreover, getting a work permit for a Syrian refugee in Lebanon is also difficult and requires having a legal residency (Baroud and Zeidan 2021). Thus, Syrian refugees work informally in Lebanon in poor conditions, as 92 percent do not have work contracts (Clemens, Huang, and Graham 2018). Thus, not having a legal residency impedes refugees' participation in the labor market (Baroud and Zeidan 2021).

Different papers have addressed the factors influencing refugees' employability, but very few have explicitly focused on the role of legal residency or legal documentation as a contributing factor. Thus, this paper will tackle this issue. Moreover, to the best of our knowledge, this paper is the first

empirical study in Lebanon to address the role of legal residency and other factors affecting Syrian refugees' access to the labor market. Therefore, this paper aims to explain the correlation between Syrian Refugees' legal residency and their labor force participation in Lebanon. In a broader context, our study provides empirical evidence that legal papers can play a crucial role in helping refugees to access employment opportunities.

The remainder of this paper is organized as follows. Section 2 introduces the related literature review. Section 3 presents the data and empirical model. Empirical findings are discussed in section 4. Finally, in section 5, we make concluding remarks and provide some policies.

Related Literature Review

This section reviews relevant literature on different factors affecting the refugees' labor participation in countries hosting them and discusses the hypotheses of the independent variables. The literature is divided into two parts:

Refugees Legal Status and Labor Market Participation

The host countries usually restrict refugee access to the labor market (De Vroome and Van Tubergen 2010). The legal status could hinder refugees' efforts to secure employment opportunities both directly and indirectly. In direct terms, refugees with legal status that allows them to work are more likely to obtain employment or to be recruited by an employer. Indirectly, legal status can restrict their investment in country-specific education and training (Damelang and Kosyakova 2021). Legal status is a critical aspect of refugees' labor market participation (Krahn et al., 2000). We will first discuss the factors that could hinder employers from hiring refugees, and then proceed a review of studies that have been conducted to explore how the legal status of refugees affects their likelihood of finding employment.

First, several factors can discourage employers from hiring refugees. First, most host countries impose restrictive regulations on refugees' right to work, such as the need for a work permit that cannot be issued without legal residency, contributing to employers being less likely to hire refugees (Zetter and Ruaudel 2016). Many employers may also hesitate to employ refugees because of the lack of clarity in the legal provisions that allow refugees to work. As a result of these political and legal uncertainties, potential employers are reluctant to hire refugees (Zetter and Ruaudel 2016). Additionally, the absence of documentation such as education diplomas and certificates poses challenges for employers to verify the qualifications of refugees for specific jobs. Employers may also be discouraged from hiring refugees due to social stigma and stereotypes that portray them as less reliable or desirable to work with than natives, often due to differences in nationality or ethnicity (Morrar and Rios-Avila 2021). Moreover, some studies report that employers in the host countries have negative attitudes toward hiring refugees. For instance, a study conducted by de Hoop, Coombes, and Holla (2022) used survey vignettes to examine employer attitudes toward hiring refugees in Rwanda. The study found that employers reported a 6 percent lower propensity to hire educated refugees than Rwandans with the same qualifications and characteristics. Furthermore, According to Kaabel (2018), based on interviews, employers' negative attitudes toward hiring refugees result in dismissing their job applications.

Second, some studies have examined how refugees' legal status can influence refugees' chances of obtaining employment in the host country. For example, a case study was conducted by Bertrand (2019) in Switzerland to examine how the legal framework impacts the chances of labor market participation for refugees. The results of this study show that possessing a residence permit and participating in the labor market are strongly correlated. Specifically, the possibility of finding a job for a refugee is often correlated with a more secure permit. Another study by Hassan, Makhlouf, and Hassan (2021) examines the integration of Syrian refugees into the Egyptian labor market by focusing on the legal regulations

and limitations affecting their employment. The author claims that Syrian refugees have the right to work in Egypt, but they face limitations due to the larger labor laws applicable to all foreign nationals. It is necessary to obtain a work permit; however, permits are typically issued based on a set of restrictive criteria, which may hinder refugees' ability to work. Their issuance entails expenses that may be challenging to afford. Moreover, another requirement for obtaining a work permit is the possession of a valid residency permit, which Syrian refugees interviewed in this study indicated as the most common problem. Despite the legal right to work being necessary for access to work, the findings of this study stress that it is rarely sufficient because access to the labor market also depends on other political and economic factors. Furthermore, Simoonga (2020) conducted a qualitative study about factors that impact refugee labor market participation in Sweden and focused explicitly on the effect of refugees' legal status on their participation in the labor market. The results of this study reveal that a residence permit is necessary for refugees to access various social services and have a better chance of getting hired in Sweden. Thus, it is generally accepted that not having legal residency impedes their participation in the labor market. Taken together, we hypothesize the followings:

H_1: Refugees who have legal residency are more likely to be employed.
H_2: Refugees who have legal papers (ID, passport, marriage documents) have a higher tendency to find a job.

Demographic Factors and Refugees' Labor Market Participation

The purpose of this part is to provide an overview of the most commonly used demographic factors that influence refugee participation in the labor market.

Gender

Several studies include the variable gender and examine its relationship with refugees' employability. De Vroome and Van Tubergen (2010) argue that male refugees are more likely to get employment compared to female refugees in the Netherlands; however, the significant positive relationship between being male and labor force participation becomes insignificant as the authors include other variables such as health, education, language, labor market experience, etc. Similarly, Bloch (2008), in his research regarding UK refugees and their labor force participation, finds a significant difference in employment between men and women where the odds of men getting paid work are over four times greater than women. Moreover, according to an empirical study done on 1,235 Syrian Refugees in Turkey regarding the factors that affect their labor market activities, it is found that those who are men have a higher probability of being employed (Kayaoglu and Erdogan 2019). Also, according to ILO Regional Office for Arab States (2014), Syrian men are seven times more likely than women to look for a job in Jordan which could explain the higher probability for males to be employed compared to females (Turner 2015). However, Calderón, Gáfaro, and Ibáñez (2011) reached the opposite result where they found that displaced men are less likely to be employed while female employment increases following displacement. Conversely, some researchers are concerned about female refugees and their labor force participation. Accordingly, Dumper (2002) focused on female refugees and specific professions in London, such as teachers, nurses, and doctors. He finds that female refugees that meet the occupations in demand are less likely to be employed in that specific job. In addition, he shows that it is difficult for female refugees to find jobs that are comparable to their profession. Matsuoka and Sorenson (1999) state that childcare responsibilities and cultural norms negatively affect women's economic participation. Furthermore, Codell et al. (2011) argue that after 6 months of refugees getting resettlement in the western United States, the sex of a refugee turns out to have no significant effect on their labor force participation. We then hypothesize the following:

H_3: Male refugees tend to participate in the labor market more than female refugees.

Marital Status

Another variable that might impact the employability of the refugees is their marital status. In their empirical study, Bakker, Dagevos, and Engbersen (2017) argue that being part of a relationship, whether with or without children, enhances the likelihood of getting employed as refugees. Another finding in their study is that single parents of refugees, unmarried, divorced, or widowed with children, are less likely to be employed compared to singles. Also, going back to the empirical study of Kayaoglu and Erdogan (2019) on the factors affecting Syrian refugees' labor market participation, the results indicate that married people are less likely to be unemployed than those who are not married. This could be explained by the fact that married people have more responsibilities that put them under more pressure to find a job (Kayaoglu and Erdogan 2019). Some papers argue that the effect of marital status on the employability of refugees' changes across gender. For instance, Calderón, Gáfaro, and Ibáñez (2011) found that displaced men are less likely to be employed, where this disadvantage widens when restricting the sample to married men. The result of being displaced on their employability is insignificant for married females. However, De Vroome and Van Tubergen (2010) find no significant relationship between refugees' marital status and employability. Summarizing these arguments, we hypothesize the following:

H_4: Refugees who are married are more likely to be employed.

Education

Several studies examine the relationship between refugees' education and their labor force participation in the host country. In their empirical study, Codell et al. (2011) argue that refugees with more education are more likely to obtain jobs. Also, in the study conducted by De Vroome and Van Tubergen (2010), the results reveal that both foreign education and education in the Netherlands contribute positively to refugees' employability, with education in the Netherlands having a more significant impact than foreign education. The intuition behind refugees having lower returns from foreign education is the differences in quality and fit with the labor market in the host country (Friedberg 2000). Within the same context, Kayaoglu and Erdogan (2019) find that Syrian refugees residing in Turkey with diplomas above high school have a 12 percent higher probability of being employed than those without a diploma (Kayaoglu and Erdogan 2019). However, they argue that having an education below high school does not affect the probability of Syrian refugees finding a job; only having a diploma above high school has an effect. Furthermore, Rooth (1999) argues that a higher level of formal education, measured by both pre-migration and post-migration formal education, often does not result in a statistically significant positive effect and, sometimes, can adversely affect an individual's odds of finding employment. We, therefore, hypothesize the following:

H_5: Refugees with higher education levels tend to have a better chance of finding a job.

Age

The age of a refugee might affect his/her participation in the labor market. According to Bakker, Dagevos, and Engbersen (2017), the higher age of a refugee receiving the first residency status decreases the chances of obtaining a paid job. Moreover, they link other variables to the age variable in their research. For example, they argue that if the refugees are young, they can enroll in Dutch education, where they can acquire both the Dutch language and a qualification. Accordingly, these adolescents are more likely to be enrolled in the job market after obtaining those skills. De Vroome and Van Tubergen (2010) show that refugees' age is negatively correlated with employment and occupation. Thus, an older refugee is less likely to be employed or to have a good job. Moving to Kayaoglu and Erdogan (2019), they find that younger Syrian refugees in Turkey have a higher probability of being employed. Moreover, their results show that males of all ages are more likely

to be active in the labor market than females. However, Codell et al. (2011) find that the age of a refugee has no significant effect on the likelihood of being employed. According to the mentioned results, we hypothesize the following:

H_6: A negative correlation occurs between age and employment.

Data and Empirical Model

Situating the Case Selection

Our study focuses on Lebanon, which may raise a question about the reasons for choosing Lebanon as our case study. The main rationale behind this choice is that Lebanon has the world's highest density of refugees per square kilometer, with a refugee population density of around 244 refugees per square kilometer (Abou Mrad, 2020). Meanwhile, Lebanon has never signed an international treaty granting recognition or any rights to these refugees and lacks any domestic law governing them (Abou Mrad, 2020). Another factor that makes this a unique case study is the fact that Lebanon is already home to a considerable number of Palestinian refugees, about 300,000 Palestinian refugees, whose presence has endured for decades in the country.[4] Moreover, Lebanon suffers from a high rate of unemployment which has been exacerbated by the compounded crisis, rising from 11.4 percent in 2018-19 to 29.6 percent in 2022. It is crucial to note that the problems that refugees encounter are compounded by the pre-existing challenges that host communities confront, making Lebanon a rich case to study when it comes to the employability of Syrian refugees. Moreover, attitudes toward refugees can be influenced by the ethnic diversity in Lebanon potentially leading to conflict (Bertinelli et al., 2022). Consequently, Lebanon serves as a significant case to perform this study.

Data and Variables

In order to study the effect of legal residency on the likelihood of Syrian Refugees' labor force participation, we use a micro-level dataset taken from the 'Vulnerability Assessment of Syrian Refugees in Lebanon (VASyR) Survey'.[5] This survey is conducted by UNHCR, the United Nations International Children's Emergency Fund (UNICEF), and the United Nations World Food Programme (WFP) in 2020 to offer a multi-sectoral update on Syrian refugees' situation in Lebanon. The survey includes different questions regarding legal documentation, health status, livelihood conditions, financial status, and safety. The empirical analysis is conducted on a random sample of 22,741 respondents from Syrian refugees residing in Lebanon. A data cleaning was done to remove the missing answers for respondents who did not answer or those who answered by 'do not know'. Therefore, the sample dropped to 11,413 respondents.

In this study, the dependent variable is generated from the variable asking the participants whether they have worked for wages or profit in the last seven days. Thus, the binary variable 'Work' is the dependent variable which takes the value one if the respondent has done any work and zero otherwise. The main independent variable 'Residency' is generated as a dummy variable that takes the value of one if the respondent had a regularized legal residency at any time in 2020 and zero otherwise. Other independent variables in this study are classified into two categories. The first category set includes identity documentation variables. The first variable in this set is the binary variable 'ID' takes the value one if the respondent has a national ID card, civil extract, or any other individual ID and zero otherwise, the binary variable 'Passport' takes the value one if the respondent has a national passport and zero otherwise, and the binary variable 'Family Booklet' takes the value one if the respondent has a family booklet[6] and zero otherwise.

The second set of explanatory variables contains demographic variables. The first variable includes the gender 'Male', a dummy variable that takes the value one if the respondent is male and zero otherwise. The set also consists of the dummy variable 'Married' that takes the value one if the respondent is married

Table 1. Descriptive statistics - dependent and independent variables.

Variable	Mean	Std. Dev.
Dependent Variable		
Work	0.257	0.437
Key Independent Variables		
Residency	0.392	0.488
Other Independent Variables		
Identity Documentation Variables		
ID	0.866	0.34
Passport	0.121	0.326
Family Booklet	0.41	0.492
Demographic Factors		
Male	0.488	0.5
Married	0.679	0.467
No Education	0.11	0.312
School Education	0.856	0.352
University Education	0.035	0.183
Youth	0.331	0.47
Young Adults	0.418	0.493
Middle Adults	0.215	0.411
Old Adults	0.036	0.187
Beirut	0.07	0.254
Mount Lebanon	0.116	0.321
Other governorates	0.814	0.389

Notes: The number of observations is 11,413. The first column reports the dependent and independent variables. The second column reports the number of observations. The second and third columns report the mean and the standard deviation, respectively.

and zero otherwise. The set also includes education, which is represented through three binary variables: the 'No Education' that takes the value one if the respondent is illiterate or Kindergarten 2 is the highest grade that he/she has ever attended and zero otherwise (this is the reference group for the education variable), the 'School Education' that takes the value one if the respondent has elementary, intermediate, secondary, or technical education and zero otherwise, the 'University Education' which takes the value one if the respondent has attended university and zero otherwise. From the variable age in the data, we generated four dummy variables. The first dummy variable is 'Youth', which takes the value of one if the respondent age is between 15 and 24 years and zero otherwise. The second dummy variable is 'Young Adults', which takes the value of one if the respondent is between 25 and 39 years and zero otherwise. The third dummy variable is 'Middle Adults', which equals one if the respondent is between 40 and 59 years and zero otherwise. The fourth dummy variable 'Old Adults', the reference group, takes the value 1 if the respondent is 60 years or above and zero otherwise. Lastly, to account for geographic location, we have included two dummy variables 'Beirut' and 'Mount Lebanon' in our regression to account for geographic location, where other governorates are taken as reference group.

Table 1 shows summary statistics of the variables used in the empirical analysis. We can observe that only 25.7% of the respondents reported that they work and 39.2% have legal residency. Regarding identity documentation, 86.6% of respondents have ID, 12.1% have a national passport, and 41% have a family booklet. Moving into the demographic variables, 48.8% of respondents are male. We find that 67.9% of respondents are married, 3.5% have attended university, and 85.6% have attended school. We also observe that 33.1% of respondents are youth, 21.5% are middle adults, and 41.8% are young adults. The table also indicates that around 19% are residing in Beirut and Mount Lebanon while the remaining are from other governorates.

Collinearity Test

There is a problem associated with the existence of a correlation between the independent variables since it increases the variance of regression coefficients, resulting in inaccurate statistical

Table 2. Variance inflation factor.

	VIF	Tolerance
Key Independent Variable		
Residency	1.70	0.586
Identity Documentation Variables		
ID	6.89	0.145
Passport	1.23	0.809
Family Booklet	1.71	0.584
Demographic Variables		
Male	2.03	0.492
Married	4.44	0.225
Education: School	9.44	0.105
Education: University	1.40	0.716
Age: Youth	5.74	0.174
Age: Young Adults	7.71	0.129
Age: Middle Adults	4.23	0.236
Beirut	1.11	0.904
Mount Lebanon	1.17	0.854
Mean VIF	3.75	

significance. Thus, it is essential to test whether there is a collinearity problem. Accordingly, our testing method is based on the Variance Inflation Factor (VIF), one of the most used diagnostic tests. According to Hair et al. (1995), the VIF level should not exceed 10. That is because a VIF value above 10 indicates the presence of multicollinearity. In Table 2, we can observe that all the VIF values are below 10. Moreover, the value of our VIF mean is 2.858, implying that we do not have any multi-collinearity problem among our explanatory variables.

Modelling Approach

This research examines the correlation between legal residency and Syrian refugees' employability in Lebanon. Through the empirical analysis, the model used to estimate the results is the Probit model as the data used is qualitative and the dependent variable is dummy:

$$Work_i = \beta_1 Residency_i + \beta_2 Documentation_i + \beta_3 Demographic_i + u_i$$

$$i = \{1, 2, \ldots .N\}$$

Where N represents the number of observations which is 11,413. $Work_i$ is the dependent variable, $Residency_i$ is the main independent variable, $Documentation_i$ refers to the set of the identity documentation factors (ID, Passport, and Family Booklet), and $Demographic_i$ denotes the set of demographic factors (Male, Married, School Education, University Education, Youth, Young Adults, Middle Adults, Beirut and Mount Lebanon). The error term that follows a normal distribution is represented by u_i. $\beta_1, \beta_2 \ldots \ldots .\beta_{11}$ are the perimeters to be estimated. We run four different models to capture the independent variables' effect accurately. All the models include the key independent variable 'residency'. The first model adds to it the identity documentation factors. The second model, along with the main independent variable, includes the demographic factors, excluding the age dummies. The third model combines the first two models. Finally, the age dummies are added to the previous model in the last model.

Results and Discussion

Benchmark Results

Table 3 shows the estimated marginal effects of the independent variables on the likelihood of Syrian refugees to work. The four columns present the four models mentioned above. The

Table 3. Probit regression results (marginal effects).

	(1)	(2)	(3)	(4)
Key Independent Variable				
Residency	0.069***	0.031***	0.029***	0.022**
	(0.009)	(0.008)	(0.008)	(0.008)
Identity Documentation Variables				
ID	0.036***		0.022*	0.014
	(0.012)		(0.012)	(0.012)
Passport	0.101***		0.046***	0.050***
	(0.014)		(0.013)	(0.013)
Family Booklet	0.017**		0.008	0.010
	(0.008)		(0.008)	(0.008)
Demographic Variables				
Male		0.379***	0.377***	0.379***
		(0.008)	(0.008)	(0.008)
Married		0.042***	0.039***	−0.015
		(0.009)	(0.009)	(0.012)
Education: School		−0.001	−0.002	−0.023
		(0.015)	(0.015)	(0.016)
Education: University		0.019	0.014	0.029
		(0.026)	(0.026)	(0.023)
Beirut		0.058***	0.055***	0.049***
		(0.016)	(0.016)	(0.016)
Mount Lebanon		0.046***	0.041***	0.039***
		(0.013)	(0.013)	(0.013)
Age: Youth				0.338***
				(0.048)
Age: Young Adults				0.438***
				(0.040)
Age: Middle Adults				0.442***
				(0.050)
N	11413	11413	11413	11413
Pseudo R^2	0.010	0.188	0.189	0.209
Log-likelihood	−6438.794	−5283.514	−5276.703	−5147.552
AIC	12887.587	10583.029	10575.406	10323.104
BIC	12924.300	10641.769	10656.174	10425.899

Notes: The table reports the marginal effects from a probit regression. Robust standard errors are reported in parentheses. * $p<0.100$, ** $p<0.050$, *** $p<0.010$.

main independent variable 'Residency' in the four models is statistically significant with a positive marginal effect, implying that having legal residency increases the likelihood of Syrian refugees working in Lebanon. This is consistent with our first hypothesis (H_1), stating that refugees with legal residency are more likely to be employed. Moreover, this is consistent with the results of the qualitative study conducted by Simoonga (2020) who demonstrates that legal residency increases the likelihood of refugees getting hired in Sweden. This result can be interpreted as job opportunities for Syrian refugees who do not hold a legal residency and are restricted to nearby jobs where no checkpoints are available on their way (Nassar and Stel 2019). Another interpretation is that obtaining a work permit for Syrian refugees in Lebanon requires renewing their legal residency (Baroud and Zeidan 2021). Therefore, not achieving a work permit will limit Syrian refugees' job opportunities, depriving them of accessing jobs formally.

Moving to the identity documentation factors (ID, Passport, Family Booklet), the findings reveal that Syrian refugees holding an ID tend to work. This result is statistically significant in the first and third models but has lost significance in the full model. Concerning having a national passport, it is found that refugees with a passport have a higher probability of being employed. The result is significant across all the models, including this variable. The intuition behind these two findings could be that a valid ID or passport is required to obtain a residency permit, which could eliminate barriers to employment.[7] Also, most employers in Lebanon fear hiring Syrians without identification documents, identities, or national passports.[8] As for the family booklet, the results are predictable.

Syrian refugees who possess family booklets have an increased chance of finding work. The result is only significant in the first model. Based on these findings, Hypothesis 2, stating that refugees with identification documents (ID, passport, marriage documents) are more likely to find work, cannot be rejected.

Moving to the demographic factors, the results suggest that being male increases the probability for Syrian refugees to work by 38 percent; the result is statistically significant across all models. This finding is in line with our third hypothesis, which states that male refugees participate more in the labor market than female refugees. De Vroome and Van Tubergen (2010) concluded that male refugees in the Netherlands are more likely to get a job than female refugees. Specifically, on Syrian refugees, our result is in line with the result of Kayaoglu and Erdogan (2019) who find that male Syrian refugees are more likely to get employment than female Syrian refugees in Turkey. This finding is aligned with the social norm that men are responsible for maintaining their families financially, while women have childcare responsibilities that negatively affect their economic participation (Matsuoka and Sorenson 1999).

Regarding marital status, it is shown that married people are more likely to be employed. The result is statistically significant in the second and third models but has lost significance in the full model. Our finding supports the fourth hypothesis, mentioning that married refugees are more likely to be employed. This result is in line with that reported by Bakker, Dagevos, and Engbersen (2017) who suggest that refugees in a relationship have higher chances of getting a job. However, our result contradicts that of De Vroome and Van Tubergen (2010) that the refugees' marital status has an insignificant impact on their employability. Furthermore, one might argue that married people usually have more family responsibilities, increasing their pressure to find a job (Kayaoglu and Erdogan 2019).

Regarding education, the results show that neither school nor university education significantly impacts Syrian refugees' employability. Thus, we found no support for our fifth hypothesis, stating that refugees with higher education tend to have a better chance of finding a job. Besides, Rooth (1999) reached a similar conclusion indicating that more formal education does not necessarily result in a statistically significant effect on refugee employment odds. Our results, however, differ from those of De Vroome and Van Tubergen (2010) who argue that education and refugees' employability in Netherland have a positive and significant relationship. In addition, the findings suggest that the Syrian refugees residing in Beirut or Mount Lebanon have a higher tendency to be employed than other governates. This could be explained by the fact that Beirut is the capital of Lebanon, where more work opportunities are available. Both Beirut and Mount Lebanon are more urbanized areas and have a higher concentration of businesses and industries in Lebanon in addition to better access to education and training, thus higher employability of refugees in these two areas.

Moving to age, in model 4, we added model 3 three dummy variables (Youth, Young Adults, and Middle Adults) to show the impact of each age group on the dependent variable. The findings indicate that youth, young adults, and middle adults Syrian refugees are all more likely to work compared to old adults (the reference group), with middle adults having the highest probability.[9] All these results are statistically significant. Thus, we can support our sixth hypothesis, which assumes a negative correlation between employment and age. Furthermore, our results are similar to those of Bakker, Dagevos, and Engbersen (2017) and De Vroome and Van Tubergen (2010), which suggest that the higher age of a refugee is associated with a lower chance of getting employment.

Results by Age

Table 4 presents the marginal effects by age. It includes four different regressions for the age groups in our sample. Columns 1, 2, 3, and 4 correspond to youth, young adults, middle adults, and old adults, respectively. The residency variable is not significant among young and middle adults with a marginal effect of 0.047 and 0.035, respectively. This implies that having legal residency positively impacts the likelihood of young and middle adults Syrian refugees working

Table 4. Probit regression results by age (marginal effects).

	(1) Youth	(2) Young Adults	(3) Middle Adults	(4) Old Adults
Key Independent Variable				
Residency	−0.011	0.047***	0.035*	−0.006
	(0.013)	(0.014)	(0.018)	(0.013)
Identity Documentation Variables				
ID	0.020	−0.006	0.031	−0.038
	(0.016)	(0.024)	(0.032)	(0.041)
Passport	0.059***	0.029	0.075**	−0.010
	(0.022)	(0.022)	(0.031)	(0.014)
Family Booklet	0.007	0.034**	0.020*	−0.006
	(0.014)	(0.014)	(0.018)	(0.013)
Male	0.301***	0.493***	0.399***	0.046**
	(0.014)	(0.012)	(0.018)	(0.019)
Married	0.043***	−0.079***	−0.179***	−0.011
	(0.016)	(0.026)	(0.040)	(0.013)
Education: School	−0.018	−0.057**	0.011	0.004
	(0.072)	(0.027)	(0.026)	(0.015)
Education: University	−0.034	−0.072**	0.005	0.224
	(0.076)	(0.031)	(0.060)	(0.155)
Beirut	−0.003	0.018	0.179***	0.030
	(0.023)	(0.026)	(0.037)	(0.060)
Mount Lebanon	0.021	0.023	0.095***	−0.013
	(0.020)	(0.021)	(0.032)	(0.014)
N	3774	4766	2455	415
Pseudo R^2	0.142	0.252	0.184	0.146
AIC	3311.197	4411.839	2396.505	126.530
BIC	3379.792	4483.001	2460.370	170.841

Notes: The table reports the marginal effects from a probit regression. Robust standard errors are reported in parentheses. * $p<0.100$, ** $p<0.050$, *** $p<0.010$.

in Lebanon. Similar to the benchmark results, the results reveal that individuals with passports are more likely to participate in the labor market among youth and middle adults. In addition, having a family booklet has been found to exhibit a positive effect on the employability of Syrian refugees. This is consistent with our benchmark results, but it can be noticed that the results are only significant in columns 2 and 3, which correspond to young and middle adults, respectively.

Moving to the demographic factors, we found that male refugees tend to participate more in the labor force. This comes in line with our benchmark results, and the result is significant across all age groups. Regarding marital status, the results reveal that those who are married and aged between 15 and 24 years are more likely to find work, while those who are married and aged between 25 and 39 or between 40 and 59 are less likely; the result is statistically significant among these three age groups but insignificant among old adults. This result differs from our benchmark results. When it comes to our education variables, we can notice that young adults' Syrian refugees who have a school education or university as the highest attainment have lower chances of getting work than illiterate young adults by 5.7 percent and 7.2 percent, respectively. The results are only significant among this age group. This finding is in line with the findings reported by Rooth (1999), who found that a high level of formal education can adversely impact employment chances. Our interpretation of this finding is that most Syrian refugees work in the domestic services, construction, and apparel sectors (ILO 2014). In other words, job opportunities available to them are mainly those jobs that require basic skills and provide low income. Thus, educated Syrian refugees will not be interested in such positions and will become unemployed. Also, the results indicate that Syrian refugees residing in Beirut or Mount Lebanon have a higher tendency to be employed compared to other governorates.

Table 5. Probit regression results by education level (marginal effects).

	(1) No Education	(2) School Education	(3) University Education
Key Independent Variable	0.012	0.019**	0.090*
Residency			
Identity Documentation Variables	(0.019)	(0.009)	(0.048)
ID	0.025	0.012	0.010
	(0.028)	(0.014)	(0.077)
Passport	−0.017	0.059***	0.100
	(0.030)	(0.014)	(0.065)
Family Booklet	0.006	0.016	−0.024
Demographic Variables	(0.020)	(0.009)	(0.052)
Male	0.305***	0.390***	0.400***
	(0.032)	(0.008)	(0.041)
Married	−0.096***	0.000	0.060
	(0.029)	(0.014)	(0.056)
Age: Youth	0.260**	0.399***	0.048
	(0.131)	(0.066)	(0.174)
Age: Young Adults	0.369***	0.499***	0.149
	(0.052)	(0.058)	(0.119)
Age: Middle Adults	0.272***	0.515***	0.120
	(0.048)	(0.070)	(0.170)
Beirut	−0.027	0.065***	−0.040
	(0.036)	(0.018)	(0.071)
Mount Lebanon	0.055	0.034**	0.161**
	(0.039)	(0.014)	(0.072)
N	1251	9764	398
Pseudo R^2	0.198	0.209	0.205
AIC	929.432	8976.915	411.318
BIC	991.012	9063.152	459.155

Notes: The table reports the marginal effects from a probit regression. Robust standard errors are reported in parentheses. * $p<0.100$, ** $p<0.050$, *** $p<0.010$.

Results by Education Level

Table 5 presents the estimated marginal effects after dividing our sample by their education level. The first column refers to the Syrian refugees who are not educated, while the second and third columns correspond to those who have attended school and university, respectively. Starting with our key independent variable, we find that legal residency is positively associated with a higher probability of finding work among those with a school or university education as the highest educational attainment. This result is statistically significant among Syrian refugees with these education levels, but we lost significance for illiterate people. Moreover, we notice that the effect of holding an ID becomes insignificant after dividing our sample by education level. In terms of passports, the results indicate that Syrian refugees with school degrees have a greater chance of working if they have one, which agrees with the benchmark results. However, the finding is insignificant for the remaining two groups. Similarly, Syrian refugees holding a family booklet and having a school education as their higher attainment have a higher probability of finding a job. This result is significant for this education level group; however, it lost significance for the other educational level groups.

According to our previous findings, regardless of educational level, Syrian male refugees are more likely than female refugees to work. The result is statistically significant among the three educational level groups. When it comes to marital status, it is shown that marriage has a negative and statistically significant impact on the probability of illiterate Syrian refugees finding work. This differs from the benchmark results. We can also observe that marriage does not significantly affect the likelihood of employment among those with a school or university education. Lastly, we have found statistically significant results for age among illiterate individuals and school-educated individuals only. The findings indicate that Syrian refugees who are illiterate or have limited formal education are more likely to secure employment during their youth, young adult, and middle adult stages compared to older adults. Finally, it

has been observed that Syrian refugees with a formal education experience a notable improvement in their employability when residing in Beirut, while those residing in Mount Lebanon also benefit from increased employment opportunities, regardless of their educational background.

Finally, to ensure the validity of our results, we perform a 70:30 cross-validation random split of our dataset as a robustness check. The results of our main model are presented in Tables A1 and A2 in the Appendix A, with 70% of the sample size and 30% of the sample size, respectively. We found that legal residency remains significant in all models in both the 70% and 30% sample sizes, consistent with our overall findings.

Conclusion

In our research, we have found that several identity documentation and demographic factors impact the probability of a Syrian refugee working in Lebanon. However, our paper's main objective is to examine the correlation between Syrian Refugees' legal residency and their labor force participation in Lebanon. The main finding of our empirical analysis is that Syrian refugees with legal residency are more likely to be employed in Lebanon. We can interpret this result as having legal residency ensures complete freedom of movement and facilitates access to a work permit, enhancing their labor market participation. Regarding the identity documentation factors, the results suggest that Syrian refugees holding an ID are more likely to be employed, while the variable becomes insignificant when adding the age groups to the model. Moreover, Syrian refugees with a national passport or a family booklet are more likely to participate in the job market. Moving to demographic factors, we find that male Syrian refugees are more likely to access the labor market in Lebanon. It is also found that being married increases the probability of the Syrian refugee working compared to unmarried Syrian refugees. Additionally, when dividing by age groups, young adults who have attended school or university level have less probability of being employed compared to illiterate young adults.

Thus, this research paper confirms that the legislation of host countries adds an extra burden to the vulnerability of refugees. To help these refugees exercise their rights and decrease their suffering, the government should simplify the complicated process of obtaining legal residency. Additionally, reducing the high fees associated with the application process would make legal residency more affordable for refugees. However, in the case of Lebanon, despite being the first nation to accommodate Syrian refugees, it prohibited UNHCR from registering Syrian refugees without legal residency. The severe and changeable regulations regarding the legal residency process for Syrian refugees have contributed to their vulnerability, mainly depriving them of their fundamental right to work. Unfortunately, local integration in Lebanon is not viable as the government does not provide it. Therefore, adopting measures to simplify the process of obtaining legal residency and thus fostering the integration of refugees would be an ineffective solution for the case of Lebanon. Consequently, unless the Lebanese government takes concrete steps to leverage the additional workforce and resources offered by Syrian refugees, resettling them may be the only feasible solution to ensure that refugees can exercise their right to work.

Lastly, as data becomes available, researchers may expand this study to examine how legal residency status impacts employability in general and in relation to formal and informal employment. Researchers can account for other determinants of refugees' labor market integration when more variables become available, such as social networks and experience.

Notes

1. https://www.unhcr.org/lb/wp-content/uploads/sites/16/2020/02/UNHCR-Lebanon-Operational-Fact-sheet-January-2020.pdf
2. https://lb.boell.org/sites/default/files/2022-07/Access-to-legal-stay-and-residency-EN.pdf
3. https://www.unhcr.org/news/press/2022/1/61effaa54/jordan-issues-record-number-work-permits-syrian-refugees.html#:~:text=And%20since%20July%202021%2C%20Syrian,workers%3B%20and%20in%20basic%20industries.
4. https://www.unocha.org/lebanon/about-ocha-lebanon

5. The data used in this paper are available on request from https://microdata.unhcr.org/index.php/catalog/286.
6. The family booklet is a document issued by the Government of Syria that records all family members and is evidence of parental identity and marital status for displaced families.
7. https://refugees-partners.org/wp-content/uploads/2020/10/Discriminatory-Policies-EN-1.pdf
8. https://blogs.lse.ac.uk/mec/2019/05/18/obstacles-to-accessing-civil-registration-and-identification-nrcs-field-experiences-with-displaced-persons/
9. We did the statistical test to see whether the difference between the coefficients of categories in categorical variables is significant. The null hypothesis is that the difference between the coefficients is equal to zero. The p-values are less than 0.05. Accordingly, we reject the null hypothesis. Thus, we found that the difference between the coefficients is significant. Results are available upon request.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Appendix A

Table A1. Robustness check: main model with 70% of the sample size.

	(1)	(2)	(3)	(4)
Key Independent Variable				
Residency	0.076***	0.040***	0.037***	0.031***
	(0.010)	(0.010)	(0.010)	(0.010)
Identity Documentation Variables				
ID	0.039***		0.026*	0.018
	(0.014)		(0.015)	(0.015)
Passport	0.098***		0.049***	0.050***
	(0.017)		(0.016)	(0.016)
Family Booklet	0.018*		0.008	0.010
	(0.010)		(0.010)	(0.010)
Demographic Variables				
Male		0.379***	0.378***	0.379***
		(0.009)	(0.009)	(0.009)
Married		0.039***	0.036***	−0.016
		(0.010)	(0.010)	(0.015)
Education: School		−0.011	−0.012	−0.032*
		(0.018)	(0.018)	(0.019)
Education: University		−0.002	−0.009	−0.045*
		(0.030)	(0.029)	(0.026)
Beirut		0.058***	0.056***	0.049**
		(0.019)	(0.019)	(0.019)
Mount Lebanon		0.050***	0.045***	0.042***
		(0.016)	(0.016)	(0.015)
Age: Youth				0.329***
				(0.055)
Age: Young Adults				0.424***
				(0.046)
Age: Middle Adults				0.430***
				(0.057)
N	7989	7989	7989	7989
Pseudo R^2	0.011	0.189	0.190	0.209
Log-likelihood	−4494.553	−3688.041	−3682.683	−3594.276
AIC	8999.106	7392.081	7387.367	7216.553
BIC	9034.035	7447.968	7464.211	7314.354

Notes: The table reports the marginal effects from a probit regression. Robust standard errors are reported in parentheses. * $p < 0.100$, ** $p < 0.050$, *** $p < 0.010$.

Table A2. Robustness check: main model with 30% of the sample size.

	(1)	(2)	(3)	(4)
Key Independent Variable				
Residency	0.083***	0.047***	0.045***	0.039***
	(0.016)	(0.015)	(0.015)	(0.015)
Identity Documentation Variables				
ID	0.041*		0.027	0.025
	(0.022)		(0.022)	(0.022)
Passport	0.119***		0.071***	0.070***
	(0.027)		(0.026)	(0.026)
Family Booklet	0.027*		0.009	0.013
	(0.016)		(0.015)	(0.015)
Demographic Variables				
Male		0.373***	0.371***	0.376***
		(0.014)	(0.014)	(0.014)
Married		0.037**	0.034**	−0.015
		(0.016)	(0.016)	(0.022)
Education: School		−0.077***	−0.080***	−0.106***
		(0.030)	(0.030)	(0.032)
Education: University		−0.058	−0.061	−0.097***
		(0.038)	(0.038)	(0.031)
Beirut		0.062**	0.057*	0.049*
		(0.029)	(0.029)	(0.028)
Mount Lebanon		0.063**	0.055**	0.054**
		(0.025)	(0.025)	(0.024)
Age: Youth				0.268***
				(0.074)
Age: Young Adults				0.368***
				(0.065)
Age: Middle Adults				0.345***
				(0.079)
N	3423	3423	3423	3423
Pseudo R^2	0.014	0.178	0.180	0.196
Log-likelihood	−1930.562	−1609.818	−1605.604	−1574.362
AIC	3871.123	3235.637	3233.209	3176.724
BIC	3901.815	3284.743	3300.730	3262.660

Notes: The table reports the marginal effects from a probit regression. Robust standard errors are reported in parentheses. * $p < 0.100$, ** $p < 0.050$, *** $p < 0.010$.