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## Wasted Potential: Mismatching Syrian Refugee Skills in the Lebanese Labor Market

Daniel Garrote Sánchez

### Executive Summary

Adult Syrian refugees in Lebanon are often portrayed as a homogeneous group of low-skilled workers. However, the reality is that Syrian refugees are much more varied in their educational levels and professional backgrounds and skills. LCPS conducted a survey in three mid-sized cities in Lebanon (Saida, Zahle, and Halba) in order to better understand the socio-economic situation of Syrian refugees and host communities in the country. We found that Syrian refugees have a wide range of skills and experiences that could benefit the Lebanese economy. Despite this, the only work available to Syrian refugees is predominantly in low-skilled, insecure, and precarious occupations such as day laborers in construction or agriculture. There are several political and legal barriers in place that prevent them from accessing the labor market in Lebanon. The under-utilization of refugees' skills not only reduces their capacity to sustain their livelihoods but also results in a loss of productivity and economic growth for the Lebanese economy as a whole. In a context of under-utilization of refugees' skills, vocational and skill-formation programs commonly implemented tend to have little positive impacts. This brief ends with some policy recommendations on how to utilize Syrian refugee labor for their benefit and for the Lebanese economy as a whole.

**1**  
 UNHCR. 2020. 'Syria Regional  
 Refugee Response.'  
[data2.unhcr.org/en/situations/  
 syria/location/71](https://data2.unhcr.org/en/situations/syria/location/71).

## Introduction

Ten years into the refugee crisis, there are about 900,000 Syrians registered with UNHCR in Lebanon, an underestimated figure considering that UNHCR stopped registering refugees in 2015.<sup>1</sup> The discourse surrounding refugees has revolved around the 'burden' they represent to the host community—mostly promoted by several political parties and media—or as 'vulnerable subjects' in need of protection according to humanitarian agencies. Less emphasis has been put on the self-sustainability of refugees, understanding their potential as active members of the society, as well as the barriers they face that hinder their ability to generate their own income.

In this policy brief, we analyze the skills that the Syrian population has brought with them—through education and work experience—and how those skills are used in the Lebanese labor market. In theory, higher skills improve the ability of individuals to sustain their livelihoods as, on average, it provides people with greater access to higher skilled jobs that provide better work conditions and higher wages. However, in order to transform those skills into higher productivity, individuals first have to be able to find jobs that require their level of skills and reward them accordingly. If refugees are unemployed or perform jobs that require lower—or different—skills, this results in an under-utilization or misuse of skills, which has severe impact on the economy, employers, and individuals.

In order to better understand the extent of Syrians' skills under-utilization, we use the Living Condition Survey of Refugees and Host Communities in Lebanon (LCSRHCL) that was conducted in 2018 by the Lebanese Center for Policy Studies (LCPS) and the Syrian Center for Policy Research (SCPR). The survey covered 1,556 households and 7,208 individuals (2,882 Lebanese and 4,326 Syrians) that are representative of the population of three Lebanese municipalities: Saida, Zahle, and Halba,<sup>2</sup> and was based on a detailed questionnaire including topics on living conditions, labor market, current status and history, education, and networks. The results of this brief mostly rely on descriptive and regression analysis of this survey. While there has been a deep deterioration in economic activity since the time of the survey, the discussion of skill waste remains highly relevant and affects not only the welfare of refugees, but also their contribution to the Lebanese economy.

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 We limited the scope to three municipalities in order to be able to cover a representative sample of the population in each municipality and provide meaningful results at the local level, thus prioritizing depth at the expense of breadth.

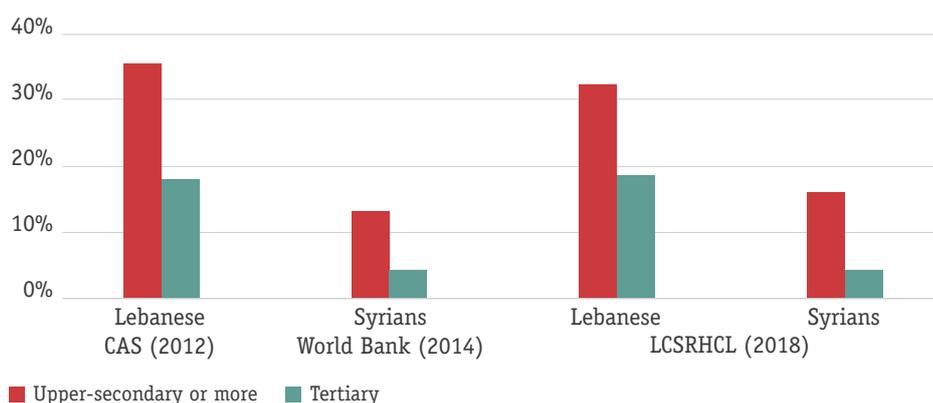
## Low but Varying Skill Levels of the Syrian Population

It is widely known that the education levels of the Syrian population are, on average, significantly lower than those of the Lebanese population. According to the Lebanese Central Administration of Statistics (CAS), about 35% of the Lebanese population over 25 years old attended secondary education (grades 10 to 12, which ends with a Baccalaureate certificate) and half of those

reached tertiary education (18%).<sup>3</sup> In contrast, it is estimated that 13% of the Syrian population in Lebanon attended secondary education and 4.5% reached tertiary school.<sup>4</sup> However, the comparison might be biased as these statistics for the Syrian population refer to the population over five years old (and not over 25 as the ones for Lebanese), which might artificially reduce their average education levels.<sup>5</sup> For a better comparison between the two communities, the LCSRHCL (2018) surveyed both Lebanese and Syrians in the municipalities of Saida, Zahle, and Halba, showing higher education levels of the Lebanese adult population: 33% have at least upper-secondary education compared to 16% of Syrians (figure 1).

Figure 1

### Educational attainments of the Lebanese and Syrian population in Lebanon



Source CAS (2012), World Bank and UNHCR (2014), and LCSRHCL (2018).

Note The CAS (2012) and LCSRHCL (2018) cover all adults 25 years old and above, while the World Bank (2014) includes all the population above five years old. The CAS (2012) and World Bank (2014) are representative at the national level while the LCSRHCL (2018) is representative of the three covered municipalities (Halba, Saida, and Zahle).

However, there are large variations in the skill levels and types among the Syrian population in Lebanon. The ongoing conflict in Syria has forced Syrians from all socio-economic backgrounds to flee abroad and, while the most skilled individuals were more inclined to travel further distances to Europe or America, there is a significant pool of educated Syrians in Lebanon.<sup>6</sup> As Verme et al. (2014) highlight, this group of middle class and wealthy Syrians mostly left the country early in the conflict with the intention to work in Lebanon. The LCSRHCL (2018) survey captures this diversity of backgrounds in the municipalities of Halba, Saida, and Zahle, where 4% of adult Syrians have tertiary schooling, 12% upper-secondary education, 22% lower-secondary, and 62% primary education or less. This data highlights the presence of medium and highly skilled adult Syrians ready to engage in the economy in Lebanon.

<sup>3</sup> Central Administration of Statistics (CAS). 2012. 'Education in Lebanon.' *Statistics in Focus*, Issue 3.

<sup>4</sup> Verme, P. et al. 2015. 'The Welfare of Syrian Refugees: Evidence from Jordan and Lebanon.' World Bank.

<sup>5</sup> Part of the population below 25 but above 5 years of age are not yet of age to reach secondary school, reducing the percentage of the population that have attended that level.

<sup>6</sup> Abdel Jelil, M., P. A. Corral Rodas, A. Dahmani Scuitti, M. E. Davalos, G. Demarchi, N. N. Demirel, QT. Do, R. Hanna, D. JM. Houeix, S. Lenehan, H. K. Muger. 2018. 'Asylum Seekers in the European Union: Building Evidence to Inform Policy Making.' Washington, D.C.: World Bank Group.

Similarly, most Syrian adults arrived in Lebanon with previous work experience that could be valuable and transferable to the Lebanese labor market. Among Syrian males, 85% reported having a job in Syria prior to migrating to Lebanon, while only 15% were unemployed (figure 2). About half of Syrian

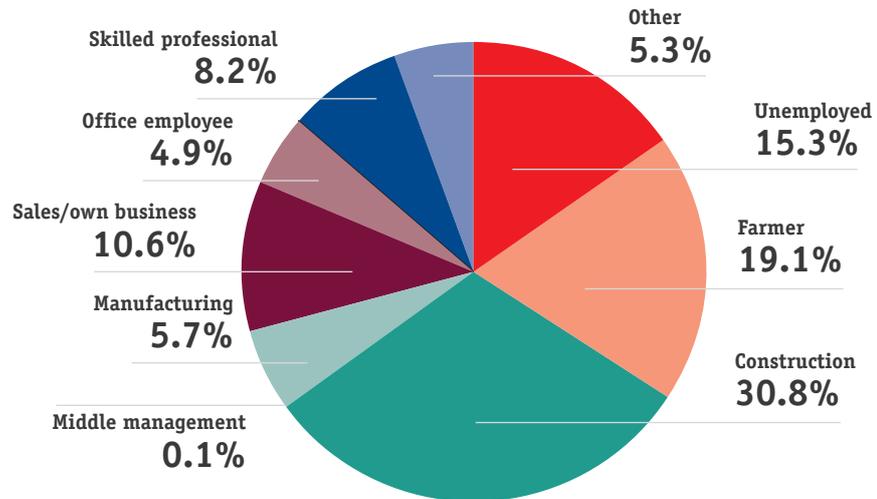
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men's job experiences are in key low-skilled sectors such as agriculture and construction. However, it is important to note that about 20% were working in mid-skilled jobs

in the service sector and close to 10% were high-skilled workers in diverse sectors ranging from skilled technicians and carpenters to teachers, lawyers, or doctors.

Figure 2

**Employment status and sector among Syrian male adults (25+) in Syria prior to migration**



Source [LCSRHCL \(2018\)](#).

**Large Skill Waste Among the Syrian Population**

Despite their diverse skill levels and work experience, Syrians' performance in the Lebanese labor market is underwhelming across localities. Our survey results show that Syrian adults engage significantly less in the workforce than Lebanese—with 53% being out of the labor force compared to 38%—and when they are actively looking for jobs, they are less likely to find any—16% are unemployed compared to 9% of Lebanese. What is more, when Syrian refugees do find jobs, they tend to be unskilled and pay poorly, clustered in limited—and usually informal—sectors such as agriculture and construction,

and provide little opportunities for advancement. In other words, education and work experience in Syria do not ensure access to jobs in Lebanon for which Syrian refugees are qualified for. The most recent survey at the national level implemented by CAS and the International Labor Organization (ILO) between April 2018 and March 2019 show a clear deterioration in the labor market, with the unemployment rate increasing from 9.3% in 2011-12 to 11.4% in 2018-19.<sup>7</sup> The collapse of the Lebanese pound since the fall of 2019 and the aggravation of the financial and economic crisis in the country has likely had a further toll on unemployment rates in the country, although official estimates are still not available. However, the economic literature of past episodes of economic crisis show that migrants and refugees suffer from larger unemployment responses to economic shocks relative to locals,<sup>8</sup> so the results from our survey will likely be even more accentuated with the most recent economic developments.

On top of the larger unemployment rates and lower employment activity, refugees that have a job tend to suffer from skill ‘waste’ or mismatches. The mismatch between the skills refugees possess and the type of work they have in the Lebanese economy can be measured vertically—comparing the education level of a person with the average amount of education (in years) required for the job—or horizontally—e.g. whether

the past work experience in Syria is in the same sector as their current job. To assess the vertical mismatches (also referred to as over-qualification), we divide the levels of skills and qualifications required in a job following the International Standard Classification of Occupations (ISCO-88) of the ILO.<sup>9</sup> According to this metric, workers with tertiary education should have high-skill jobs in order to match their skill level to the job requirements, while those with medium or low-skill jobs are considered to be over-qualified. The same applies for those with upper-secondary education when they have a low-skill level job. The results of the municipalities studied show that close to 15% of Syrian workers in Lebanon are over-qualified for the jobs they have. This is more prevalent among males and in municipalities with more mid- or high-skilled individuals (Saida and Halba).<sup>10</sup>

Even more prevalent are the sectoral disparities between the current job and refugees’ past work experience in Syria. The LCSRHCL (2018) shows that, among Syrian adults that were working in Syria by the time of migration, only 27% were working in Lebanon in 2018 in the same sector (figure 3). The vast majority are either unemployed (42%) or have found jobs in other sectors where they did not have the same expertise (31%), while their skillset from

**7**  
Central Administration of Statistics (CAS) and International Labor Organization (ILO). 2019. ‘Labour Force and Household Living Conditions Survey 2018-2019 in Lebanon.’ <http://www.cas.gov.lb/images/Publications/Labour%20Force%20and%20Household%20Living%20Conditions%20Survey%202018-2019.pdf>

**8**  
See for example: Dustmann, C, A. Glitz, and T. Vogel. 2010. ‘Employment, Wages, and the Economic Cycle: Differences Between Immigrants and Natives.’ *European Economic Review*, 54 (1): 1-17; and Azlor, L, A. Pii Damm, and M. Schultz-Nielsenc. 2020. ‘Local Labour Demand and Immigrant Employment.’ *Labour Economics*, 63.

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These categories can be grouped into three skill levels: (1) High-skill jobs, which comprises legislators, senior officials and managers, skilled professionals, and technicians and associate professionals; (2) Medium-skill jobs, which comprises clerks, service and sales workers, crafts and trades workers, and plant and machine operators and assemblers; (3) Low-skill jobs, which comprises elementary occupations such as laborers, farmers, street vendors, or garbage collectors.

**10**  
18% of men are overqualified, compared to 7% of women.

Syria was devalued. From a gendered perspective, horizontal skill waste is widespread across men and women, although it is even more prevalent among the latter (70% compared to 85%). Another important distinction across genders is that Syrian women with past work experience mostly stay out of the workforce (76%) while their male compatriots tend to work in other sectors. There are also large variations across the studied municipalities. It is interesting to notice that in Halba and Zahle—localities that were centers of refuge given their proximity to the Syrian border—have much larger mismatches than in Saida, a more distant municipality that attracted Syrian population for more

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diverse reasons including job opportunities. However, given that we only have data for three municipalities, no solid conclusions can be drawn.

Digging deeper into the sectoral comparison, there are

significantly fewer Syrians with their own business in Lebanon, and they are mostly absent from mid- or high-level sectors. Conversely, a larger percentage of Syrians are working in sales in Saida and Halba without past experience in the sector. Even workers with low-skilled jobs in Syria suffer from sectoral mismatches. A clear example is agriculture, where, despite being the second largest employment group among Syrians refugees before they fled their country, more Syrian farmers found jobs in the construction sector than in agriculture after arriving in Lebanon.<sup>11</sup>

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These results are even more striking given that two out three municipalities under study are agricultural hubs (Halba in Akkar and Zahle in Bekaa).

Figure 3

**Horizontal skill waste among Syrian refugees aged 25-65**



Source [LC SRHCL \(2018\)](#).

Combining both measures of skill waste, we calculate that more than eight in 10 Syrians adults are underusing their educational or job-related experience in the Lebanese labor market. This can take the form of not participating in gainful economic activity or working in jobs they are overqualified for or that do not correspond to their previous sectoral experience. Results from regression analysis show that four characteristics make a Syrian refugee particularly likely to be under-utilized in the Lebanese economy: (a) Having higher levels of education, which does not translate into higher skilled jobs; (b) being young, which exacerbates the problem of skill waste; (c) being a woman, who are more likely to drop out of the labor market after arriving in Lebanon; and (d) living far away from Lebanese population centers, which creates isolation from economic centers and limits social networks.

### Reasons Behind Refugees' Skill Waste

Over-qualification and skill waste of refugees and other migrants entering the labor market in a foreign country is a common problem not just in Lebanon but globally. High-skilled refugees face difficulties validating the degrees they obtained in their country of origin due to the diverse quality of education systems or the limited language ability of the host country.<sup>12</sup> Another main barrier to the full use of refugees' skills is the discrimination against them in many host labor markets.<sup>13</sup>

However, the extent of skill waste in Lebanon is particularly large and is mostly a consequence of the restrictive legal environment for refugees in the Lebanese labor market, which has historically limited employment

opportunities to previous cohorts of Palestinian refugees.<sup>14</sup> Kumar et al. (2018) surveyed Syrian refugees in Lebanon and found that an overwhelming majority cited legal restrictions as the main barrier to entering the labor market.<sup>15</sup> Lebanon is yet to sign the 1951 UN Refugee Convention that grants the right of refugees to work.<sup>16</sup> Under Lebanese law, some foreigners have to obtain a work permit within the 'kafala' sponsorship system in order to work legally in the country. This system increases the costs of legalization, reducing its economic attractiveness. However, up until 2014, the migration of Syrians was regulated by the 1993 bilateral agreement between Syria and Lebanon, which permitted the movement of people and goods between the two countries, including economic activity and residency.<sup>17</sup> Following political and social pressures, the government suspended the refugees' right to work and incorporated the 'pledge not to work' as a requirement to renew the

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Friedberg, R. M. 2000. 'You Can't Take It with You? Immigrant Assimilation and the Portability of Human Capital.' *Journal of Labor Economics*, 18(2): 221-251.

13

Bertrand, M. and S. Mullainathan. 2004. 'Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination.' *American Economic Review*, 94(4): 991-1013.

14

United Nations Development Program. 2018. 'Assessing Vulnerabilities in Palestinian Gatherings in Lebanon: Results of the 2017 Household Survey.' Lebanon: UNDP.

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Kumar, K. B. et al. 2018. 'Opportunities for All: Mutually Beneficial Opportunities for Syrians and Host Countries in Middle Eastern Labor Markets.' (Santa Monica, CA: RAND Corporation).

16

The convention and the following protocol have already been ratified by 148 countries.

17

Dionigi, F. 2016. 'The Syrian Refugee Crisis in Lebanon: State Fragility and Social Resilience.' *LSE Middle East Centre Paper*.

**18**  
Inter-Agency Coordination  
Lebanon and UNDP. 2017.  
'Annex 2: Unofficial Translation:  
Decision Number 1/41,  
31/1/2017'; in Questions &  
Answers for LCRP Partners:  
Recent Demonstrations and  
Municipal Restrictions Against  
Syrian Refugees Labour  
Competition and Businesses,  
Lebanon.'  
<https://reliefweb.int/sites/reliefweb.int/files/resources/SoStQ%26AonRecentLabour-Protests-final.pdf>

**19**  
Ibid.

**20**  
International Labor Organization.  
2014. 'Assessment of the Impact  
of Syrian Refugees in Lebanon  
and their Employment Profile';  
and Kumar et al. 'Opportunities  
for All: Mutually Beneficial  
Opportunities for Syrians and  
Host Countries in Middle  
Eastern Labor Markets.'

residency permits on the basis of UNHCR registration.<sup>18</sup> While the government made it legally possible again for refugees to work in 2017, the options for work were limited to only a few low-skilled sectors (agriculture, construction, and cleaning services). Attaining jobs in other sectors was made more difficult for Syrian refugees by the evaluation role of the National Employment Office, which is tasked with assuring that job vacancies cannot instead be filled by national workers.<sup>19</sup> As a result, higher-skill Syrian refugees are unable to find jobs appropriate to their skill level. The high cost of work permits and stringent procedures (such as a certified documentation of a housing commitment, valid passport, and registrations) coupled with the suspension of new registrations by UNHCR in 2015, have further pushed refugees into informality and limited work opportunities to vulnerable, low-paid, and low-skilled jobs that often entail long working hours and a lack of redress mechanisms in case of employer abuse.<sup>20</sup> More recently, employment policies for migrants have further tightened. On 21 May 2019, the Ministry of Labor issued an order to enforce strict restrictions on foreign labor (based on Decree No. 17561 of 1964) and to impose disciplinary measures on businesses that do not comply with the requirements of hiring foreigners in Lebanon, including sponsorship and formalization.

Beyond those legal constraints, over-qualification might also be the result of skill mismatches between the skills refugees can offer and what Lebanese firms are demanding. These mismatches are more common for refugees that flee their country for security reasons than for economic

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migrants that chose to migrate to a specific place based on expected job opportunities. In the three municipalities that we surveyed, we observe signs of these mismatches among workers with past

employment experience in certain low-skilled sectors (i.e. agriculture and construction) that do not have legal restrictions and thus had more chances to transfer their skills to the Lebanese economy. Still, only 49% of refugees with work experience in construction and 16% of those in agriculture are currently working in the same sector in Lebanon.

### **The Consequences of Skill Waste for Syrians and for the Lebanese Economy**

In general, education affects both the capacity of individuals to participate in economic activities and their productivity. As such, a more educated population has, on average, better access to higher skilled jobs that provide better work conditions and higher wages. In the economic literature, the returns to

education is a widely used measure to analyze the increase in wages associated with an additional year of studying. Psacharopoulos, G. and H. Patrinos (2004) show that returns to education are around 10% globally, that is, for every year of schooling people earn, on average, 10% higher wages.<sup>21</sup> In the case of the Middle East, returns to education are somewhat lower, at around 7%, although still very significant.

For under-utilized refugees, returns to education can be much lower, with limited access to precarious daily-labor jobs that hinder the capacity of sustaining living conditions. In the three studied municipalities, close to nine in 10 Syrian workers in 2018 had earnings below the legal monthly minimum wage of \$450 compared to 17% of Lebanese. Results from regression analysis using the LCSRHCL (2018) confirm this gloomy picture, as annual returns to education for Syrians are close to zero, compared to more than 5% for Lebanese (appendix 1). This means that a Syrian refugee with a secondary degree has similar earnings to one with no educational background whatsoever. Moreover, more educated Syrians are less likely to be employed, perhaps accounting for the difficulty they have finding jobs according to their skill levels.

The inefficient use of Syrian refugees' skills has severe costs, not only for themselves but also for employers and the Lebanese economy as a whole. Human capital is one of the key components in which a sustainable economic growth is cemented. However, the under-utilization of refugees' skills results in a loss of productivity and economic growth, forgoing their economic potential and instead relegating them to vulnerable consumers of public resources (education, health, electricity, etc.). This loss is particularly hard to understand in sectors where Lebanese and Syrians do not compete for the same jobs, and in areas where there is an unmet labor demand. A study by ILO (2014) found that, prior to the Syrian crisis, Lebanese firms in certain sectors were finding difficulties in filling vacancies for specific skills even though there was unemployment in the economy.<sup>22</sup> Among the most prevalent shortages, the report highlighted mid-skilled jobs such as agribusiness with farm management skills, artisans in the furniture sector, or technicians such as welders or electricians—all sectors where Syrians could fill the gap.

### Limited Capacity of Vocational Programs to Improve Syrians' Earnings Potential

Many organizations in Lebanon, from large international NGOs to community-based local groups, have developed vocational training programs for Syrian

**21**  
Psacharopoulos, G. and H. A. Patrinos. 2004. 'Returns to Investment in Education: A Further Update.' *Education Economics, Taylor & Francis Journals*, 12(2): 111-134.

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**22**  
International Labor Organization. 2012. 'Matching Skills and Jobs in Lebanon: Main Features of the Labour Market - Challenges, Opportunities and Recommendations.'

23

Dziadosz, A. 2016. 'Syrian Exiles in Lebanon Seek a Refuge in Work.' *Financial Times*.

refugees in order to provide further skills and improve their employability and earnings potential. These programs tend to be short in duration—three to six months—in different sectors such as tailoring, beauty care, or food processing.<sup>23</sup> However, the previously mentioned limitations in the use of Syrians' skills in the Lebanese labor market casts doubts about the effectiveness of these interventions as a livelihood policy tool. In few extreme cases, there are programs that offer skills in sectors where refugees are actually banned from working, thus limiting their potential usefulness.

Using the LCSRHCL (2018), we observe that the participation of adult Syrian refugees in vocational programs tend to be low (about 2%). Multivariate regression analysis in the three municipalities (Halba, Saida, and Zahle) shows that participants in these programs do not earn higher wages than those that did not participate, even after controlling for other socio-economic characteristics (see models 1 and 2 of the table in appendix 1). This suggests that, unless non-participants had higher skills that were not observed in our survey,<sup>24</sup> these programs fail to improve labor earnings. This is in line with the widespread skill waste observed where there are no productivity gains derived from skill upgrades. When looking at employability instead of wages, vocational programs are weakly associated with higher likelihood of employment, with only few instances where the differences are statistically significant. As the link between skills and earnings is non-existent, it is more likely that the channel through which these programs can potentially help refugees is by providing them with a platform for social connections that helps them navigate the Lebanese labor market and find employment rather than significantly improving their skills in the eyes of the employers.

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Which is hard to argue.

## Conclusions and Policy Implications

The previous analysis confronts the narrative of Syrian refugees in Lebanon as a homogeneous, low-skilled population, and instead depicts the fact that they have a more complex mix of backgrounds and skills. At the same time, we raise concerns about the extent of under-utilization of skills of Syrian refugees in Lebanon. As a result, refugees do not see a monetary reward for their education acquired, which has strong implications on how much they value education. Beyond intrinsic motivation, it reduces a person's incentive to invest in their education as wages most likely will not reflect these efforts.

Policies and programs run by local and national governments or international humanitarian agencies to facilitate the usage of Syrians' skills in the labor market (rather than focusing on increasing their skills) can have strong payoffs not only for refugees (by enhancing their employability and earnings' potential), but also to the Lebanese economy, as it increases the level of output that would alleviate the financial cost of hosting refugees.

However, given the legal restrictions on refugees in the labor market that limit the returns to skills, the focus should shift from isolated skill-training programs to linking Syrians to employers, providing the skills demanded in the labor market and, more importantly, building professional networks with companies.<sup>25</sup> This could be done by launching platforms that act as intermediaries that forge agreements with firms to provide subsidized on-the-job trainings with the option of subsequent job opportunities. Furthermore, geographic skills mismatches between what employers in a locality demand and refugees supply provide signs of limited mobility within the country. As a result, enhancing mobility and facilitating the matching of skills across different regions can become a mutually beneficial situation for all parties involved.

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In this line, the 2017-2020 Lebanon Crisis Response Plan has recently advocated for a better match of the skills taught in educational programs with the qualifications required in the labor market (3RP, 2018a, pp. 17-18).

## Annex 1

### Multivariate regressions on the determinants of earnings and employment of Syrians in Lebanon

Variables	(1) Log wages	(2) Log wages	(3) Employment	(4) Employment
Age	0.051** (0.025)	-0.009 (0.035)	0.035*** (0.005)	0.0272*** (0.008)
Age ^ 2	-0.0006* (0.0003)	0.0001 (0.0004)	-0.0005*** (6.95e-05)	-0.0004*** (0.0001)
Male	0.786*** (0.117)	0.919*** (0.140)	0.471*** (0.024)	0.507*** (0.037)
Widowed	0.599*** (0.224)	0.619** (0.254)	0.146** (0.064)	0.163** (0.067)
Divorced	-0.110 (0.217)	-0.097 (0.336)	0.176* (0.092)	0.224* (0.117)
Engaged	0.052 (0.131)	-0.103 (0.193)	0.130 (0.090)	0.229* (0.125)
Single	0.085 (0.129)	0.075 (0.177)	0.110*** (0.036)	0.101* (0.060)
UNHCR registered	-0.047 (0.104)	0.014 (0.124)	-0.015 (0.044)	-0.053 (0.057)
Residency permits	0.081 (0.078)	-0.088 (0.101)	0.086*** (0.026)	0.062** (0.030)
Long term sickness	-0.034 (0.087)	0.055 (0.106)	-0.090*** (0.0299)	-0.074** (0.034)
Years of education	0.020 (0.013)	0.018 (0.014)	-0.00655* (0.00363)	-0.008** (0.004)
Vocational program	0.135 (0.119)	0.147 (0.182)	0.0985 (0.0784)	0.195* (0.108)
Low-skilled job		-0.151 (0.137)		-0.009 (0.043)
Medium-skilled job		-0.120 (0.145)		0.104* (0.060)
High-skilled job		-0.020 (0.156)		0.179*** (0.051)
Distance to closest Leb. HH	-0.117* (0.061)	-0.125* (0.065)	-0.006 (0.015)	-0.017 (0.018)
Member org. in Lebanon	0.494** (0.232)	0.699*** (0.254)	0.0015 (0.060)	0.044 (0.078)
Zahle	-0.624*** (0.0890)	-0.733*** (0.113)	0.096*** (0.033)	0.086** (0.038)
Halba	-0.331*** (0.069)	-0.444*** (0.097)	-0.144*** (0.024)	-0.092*** (0.030)
Constant	11.30*** (0.473)	12.59*** (0.699)	-0.354*** (0.106)	-0.212 (0.172)
Observations	580	307	1,920	1,148
R-squared	0.434	0.443	0.299	0.360

Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10

## Biobibliography

Bertrand, Marianne, and Sendhil Mullainathan. 'Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination.' *American Economic Review* 94, no. 4 (2004): 991–1013.

Central Administration of Statistics. 'Education in Lebanon'. Statistics in Focus, Issue 3. Lebanon: CAS (2012).

Dionigi, Filippo. 'The Syrian Refugee Crisis in Lebanon: State Fragility and Social Resilience.' *LSE Middle East Centre Paper*, 15, 2016.

Dziadosz, Alex. 'Syrian Exiles in Lebanon Seek a Refuge in Work.' *Subscribe to read | Financial Times*. Financial Times, November 22, 2016.  
<https://www.ft.com/content/1d4b1ec6-9a9e-11e6-8f9b-70e3cabccfae>.

Friedberg, Rachel M. 'You Can't Take It with You? Immigrant Assimilation and the Portability of Human Capital.' *Journal of Labor Economics* 18, no. 2 (2000): 221–51.  
International Labor Organization. 'Assessment of the Impact of Syrian Refugees in Lebanon and Their Employment Profile.' International Labour Organization. Regional Office for the Arab States. 2014.

Kumar, Krishna B., Shelly Culbertson, Louay Constant, Shanthi Nataraj, Fatih Unlu, Kathryn Bouskill, Joy S. Moini, Katherine Costello, Gursel Aliyev, and Fadia Afashe. *Opportunities for All: Mutually Beneficial Opportunities for Syrians and Host Countries in Middle Eastern Labor Markets*. Santa Monica, CA: RAND Corporation, 2018.

Psacharopoulos, George and Harry Anthony Patrinos. 'Returns to Investment in Education: A Further Update,' *Education Economics, Taylor & Francis Journals* 12, no. 2 (2004): 111-134.

United Nations Development Program. 'Assessing Vulnerabilities in Palestinian Gatherings in Lebanon: Results of the 2017 Household Survey.' Lebanon: UNDP. 2018.

Verme, Paolo, Chiara Gigliarano, Christina Wieser, Kerren Hedlund, Marc Petzoldt, and Marco Santacroce. 'The Welfare of Syrian Refugees: Evidence from Jordan and Lebanon.' *World Bank*, 2015.

World Bank Group. 'Asylum Seekers in the European Union: Building Evidence to Inform Policy Making.' *Washington D.C: World Bank*, 2018.

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Daniel Garrote Sánchez contributed to this project while being a senior researcher at the Lebanese Center for Policy Studies. He currently works as a labor market consultant at the World Bank. His areas of work include economic migration, labor markets and the task content of jobs, conflict and forced displacement, and development of lagging regions. Prior to joining LCPS, he served as a labor migration consultant for the World Bank and the Ministry of Labor of Saudi Arabia. He also worked for six years as an economic researcher at the Central Bank of Spain covering a range of macroeconomic topics such as fiscal policy, labor markets, and deleveraging. Garrote Sánchez holds a master's degree in Public Administration and International Development from the Harvard Kennedy School of Government.

# LCPS

## About the Policy Brief

A Policy Brief is a short piece regularly published by LCPS that analyzes key political, economic, and social issues and provides policy recommendations to a wide audience of decision makers and the public at large.

## About LCPS

Founded in 1989, the Lebanese Center for Policy Studies is a Beirut-based independent, non-partisan think-tank whose mission is to produce and advocate policies that improve good governance in fields such as oil and gas, economic development, public finance, and decentralization.

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