

Refugees and social capital: Evidence from Northern Lebanon

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für Sozialforschung



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Refugees and social capital: Evidence from Northern Lebanon

Discussion Paper

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Abstract

Refugees and social capital: Evidence from Northern Lebanon*

Despite numerous studies on the social and political impact of refugees in Europe, we have very little systematic evidence on the impact of refugee settlement on social cohesion in the developing world. Using data gathered in Northern Lebanon, we show that increased salience of the "refugee crisis" decreases natives' trust and prosocial preferences toward refugees, suggesting a negative impact of mass refugee settlement. However, this negative impact is driven exclusively by respondents with no individual exposure to refugees. In fact, despite concerns that refugee settlements may result in local conflict, we find that individual proximity to refugees is positively correlated with trust towards refugees, and that proximity has a positive spillover effect on social capital towards other migrants. This implies that, while the refugee crisis may have had a negative impact on social cohesion, this negative impact is mitigated in areas where natives are in contact with refugees.

Keywords: Migration; social capital; experiment; ethnicity

JEL classification: F22; H41; D74

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Introduction

While the recent “refugee crisis” has focused attention on the impact of migrants on European societies, on a global scale, a large majority of displaced individuals are resettled either permanently or temporarily in the developing countries neighboring areas of conflict. In fact, the top five hosting countries are all middle or low-income countries—Turkey, Pakistan, Lebanon, Iran and Uganda—and together they host nearly one third of all refugees (UNHCR, 2017). Despite the fact that only a small proportion of refugees are hosted in Europe or other developed countries and that these countries are arguably less susceptible to shocks given relatively strong political and social institutions, there is very little research on the impact of refugee settlement in the middle and low income countries that have been most affected by the refugee crisis.¹

In this paper, we provide evidence on the social and political impact of refugee settlement on the host country using original survey data gathered from a representative sample in Northern Lebanon. Lebanon constitutes an ideal setting in which to study the impact of mass refugee settlement: The Syrian civil war has resulted in a large inflow of refugees from a neighboring country, and Lebanon is currently hosting a refugee population that represents about twenty-five percent of its population. Added to this, Lebanon has an exceptionally ethnically and religiously diverse population, with a history of ethnic conflict, political strife and civil war. Therefore, Lebanon captures two important features of refugee migration in developing countries that are different from the developed world: (1) incoming refugees may have an initial social distance that is closer to the native population, and (2) initial political and social institutions may be less robust.

Lastly, Lebanon is rather unique in its approach to refugee settlement. Rather than restricting refugees to large, isolated camps (the approach taken in Turkey and Jordan) Lebanon banned the construction of permanent refugee shelters and allowed refugees to settle among the general population, resulting in relatively close proximity between the native and refugee populations. This allows us to study both the global impact of mass refugee migration on social cohesion, and

¹See for example Steinmayr (2006) for outcomes ranging from prejudice to voting behavior and social capital in Austria, and Hangartner et al. (2019) for evidence from Greece.

the local impact of increased exposure to refugees.

We contribute to the understanding of the social and political impact of refugee settlement in developing countries by studying the impact of refugee settlement on prosocial behavior such as trust, altruism, cooperation and reciprocity between social groups. We focus on social capital, which is linked to political behavior (see Putnam, 1994), rather than focusing on voting behavior directly since the political process in Lebanon is heavily sectarian. Importantly, while previous papers have focused on the effect of migrants on the native population, an influx of refugees may have significant spillover effects on the social fabric of the host-country beyond the narrow channel of native-refugee relations. Therefore, we consider the impact of the refugee crisis on social capital between three relevant social groups: the native population (Lebanese), the new refugee population (Syrians), and an established migrant population (Palestinians).

We explore two channels through which proximity to new refugees impacts social capital: a “global” impact as the country as a whole reacts to the challenge of settling new refugees, and a “local” impact as individuals react to an influx of refugees in their local communities. Despite the low social distance between Lebanese natives and Syrian refugees, relative to refugees in the EU, we hypothesize that the global impact of the refugee crisis will negatively affect social capital towards refugees. However, the direction of the local impact is unclear: On one hand, a large literature within social psychology has established that personal contact can lead to a decrease in discrimination of out-group individuals (Allport, 1954). On the other hand, a large literature in economics and political science has established that polarized ethnic diversity can lead to inter-group conflict as groups compete over scarce resources (Ray and Esteban, 2017). Additionally, the direction of the spillover impact of the refugee crisis on social capital between Lebanese and Palestinians is unclear: Social capital towards new and established refugees may be positively linked, as the two groups are implicitly associated through their joint refugee status. However, it may also be the case that the introduction of a new refugee group may reduce the perceived social distance between native Lebanese and the established Palestinian refugees.

As expected, we find that respondents that are primed with the refugee crisis respond by reporting lower levels of social capital towards Syrian refugees, sug-

gesting a negative global impact of the refugee crisis on social capital. However, we also consider the interaction between the local and global effects—while these findings are only suggestive, the results are surprisingly stark: we find that the priming effect on social capital is driven entirely by respondents with no local exposure to refugees.

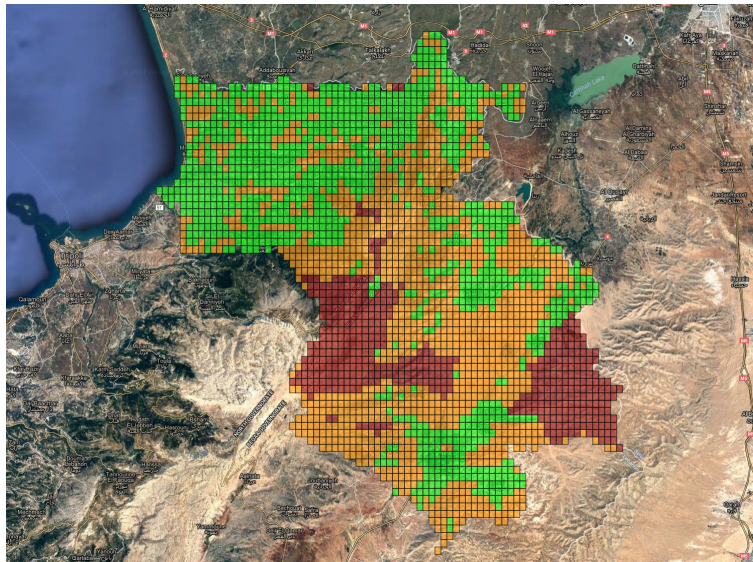
We also find that, in contrast to our prior expectations, proximity to refugees is positively related to natives' reported measures of trust and prosocial preferences towards refugees. That is, despite reports of conflict between natives and Syrian refugees in areas of co-habitation (e.g. Bank, 2013, UNDP, 2017), we find that the positive effect of contact dominates conflict. Lastly, the evidence suggests proximity to recent refugees has a *positive* spillover effect on other migrant groups: Lebanese natives in closer proximity to Syrian refugees also report higher levels of social capital towards Palestinian refugees.

Our findings contribute to the literature on the refugee crisis in several meaningful ways. Most importantly, our paper provides novel systematic evidence on the social and political impact of the refugee crisis in a developing country with a history of ethnic and sectarian conflict. We show that, in isolation, the refugee crisis appears to have a negative impact on social capital, similar to evidence from Europe (Hangartner et al., 2019). However, the positive relationship between proximity to refugees and social capital indicates that, in contrast to mixed evidence from Europe (see Edo et al., 2018 for a review), the positive impact of contact dominates conflict. Moreover, we provide novel evidence on the spillover effect of the refugee crisis on social cohesion between natives and existing migrant groups. We find little evidence of negative spillovers of the refugee crisis on existing migrant groups; instead, proximity to Syrian refugees is positively correlated with social capital towards Palestinians. Overall, this suggests that while developing countries may have less stable political and social institutions, the potential negative impact of a refugee crisis is mitigated a close physical proximity to refugees, which results in a higher degree of positive contact.

1 Design Overview

In the following section, we present a short overview of our design (full details can be found in our pre-analysis plan: <https://egap.org/registration/3022>), and present our empirical hypotheses. Our data consists of survey responses from 1,000 Lebanese respondents from districts in the immediate north of Lebanon (see Figure 1): Akkar, Hermel and north-eastern Baalbek. First, we employed a multi-stage random sampling method to gain a representative sample of Northern Lebanon’s Lebanese resident population. Our primary sampling units (PSUs) were 1km x 1km grid cells, and within each randomly selected PSU, we recruited a number of respondents proportional to the number of inhabitants within the grid.

Figure 1: Sampling area



Notes: The map plots the sampling area, where squares denote PSUs. Red squares were dropped due to security reasons, lack of accessibility or measurement error. Green squares denote populated PSUs.

To measure our main outcome, social capital, we used a proxy questionnaire for four well-established experimental measures: trust, reciprocity, altruism and cooperation. While we did not incentivize subject responses, we based our survey

on Falk et al. (2016), who establish a strong correlation between their questionnaire and standard experimental games (see questions 31-34 in the survey for details). Our primary measure of social capital is the pseudo-experimental measure of trust, which is the most commonly used proxy for social capital. However, we also consider a composite metric of social capital that consists of a weighted sum of the four measures (we follow the technique outlined in Anderson (2008) to construct the composite index), and results for the two measures are largely comparable.

Additionally, our survey relied on two primes. First, we vary the identity of the recipient in the pseudo-experimental games between Syrian, Lebanese and Palestinian. We elicit responses from respondents for all three identities. However, we vary the order of the recipient identity, and for certain empirical tests we only use responses from the first identity to avoid order effects (we pre-registered all analyses).

Second, to identify the global impact of the refugee crisis, we primed half of the respondents to think about the refugee crisis by asking them the following questions:

Currently, Lebanon is hosting over one million refugees from Syria...

1. How have you and your family been personally affected by the refugee crisis?
2. How do you think Lebanon as a whole has been affected by the refugee crisis?
3. Do you support Lebanon's response to the refugee crisis?

Lastly, we consider the local impact of the refugee crisis by measuring proximity to refugees. As a proxy for local exposure, we geocode the location of all temporary refugee settlements, and measure the distance between the respondent's residence and the nearest settlement. While this is an imperfect measure of local exposure, logically, individuals who are closer to settlements will be more exposed to refugees (we verify that it is correlated with self-reported contact with refugees). Additionally, unlike self-reported measures of contact, it is exogenous

to the day-to-day behavioral choices of respondents.²

Since refugee settlement is an endogenous choice, we address potential confounds that may influence refugee settlement as well as social capital. In particular, we consider the following confounds:

1. Wealth—pre-treatment economic wealth of a given PSU measured using nighttime satellite images.
2. Accessibility—pre-treatment accessibility using the distance to roads and waterways of a given PSU.
3. Density—pre-treatment population density estimates of a given PSU.

In addition, we control for the individual variables age, gender, Muslim (Syrian refugees are primarily Muslim)—variables that may not be affected by the treatment, but that may correlate with measures of social capital—and a self-reported measure of nationalism.

Despite controlling for obvious confounds, Syrian refugee settlement in Lebanon is an endogenous process, which raises concerns regarding whether our correlational analysis indicates a causal relationship. Therefore, we also conduct an IV analysis using altitude as an instrument. Notably, using detailed data from UNHCR, we document that Syrian refugees did not settle in the mountainous terrain of Mount Lebanon, while the lower parts of the country were heavily settled (see Figures 2 and 3 in our PAP for more detail). We believe this is primarily due to the difficulty of constructing suitable temporary shelter at higher altitudes, where winters are quite severe—in fact, the availability of cheap and suitable housing the main factor driving refugees’ choice of location (UN-Habitat and UNHCR, 2018). This has resulted in local-level variation in refugee settlement patterns in Northern Lebanon and, importantly, there are reasons to believe that altitude has no direct effect on social capital once we control for the aforementioned potential confounds.³

²That is, respondents with lower levels of trust towards refugees may actively avoid contact with refugees. However, given rather low mobility in Lebanon, it does not seem likely that a significant number of Lebanese individuals changed residences to avoid refugees.

³There are important channels that may cause attitudes towards refugees to be different in mountainous areas: they are generally less populated, less accessible, less wealthy and,

1.1 Hypotheses

Drawing on our sample of Northern Lebanese residents, we test several hypotheses regarding the impact of refugee settlement on social capital. First, we consider the global impact of the refugee crisis on the social structure of Lebanon. Based on the local political and social dialogue regarding the refugee “crisis” and studies documenting a negative impact of the refugee crisis on social attitudes towards refugees and voting behavior in Europe (Hangartner et al., 2019), despite the relatively low social distance between Lebanese natives and Syrian refugees we hypothesize a negative impact of priming the refugee crisis on social capital towards Syrian refugees:

HYPOTHESIS 1. *Native out-group trust towards the Syrian recipient is lower for respondents primed with the refugee crisis. [H1]*

Likewise, since the refugee crisis may negatively impact social capital towards all refugees, we expect there to be a negative impact of the prime on social capital towards *Palestinian* refugees due to their refugee status.

HYPOTHESIS 2. *Lebanese trust towards the Palestinian recipient is lower for respondents primed with the refugee crisis. [H2]*

Next, we consider the local impact of proximity to Syrian refugees on social capital. We hypothesize that social capital is impacted by proximity to new refugees through two channels: contact and conflict. First, a large literature within social psychology has established that personal contact can lead to a decrease in discrimination of out-group individuals (Allport, 1954). Given a closer physical proximity to refugees, natives living close to refugee settlements arguably have a greater degree of contact with refugees, which would have a positive effect on trust. Second, a large literature in economics and political science has established that polarized ethnic diversity can lead to inter-group conflict as groups compete over scarce resources (Ray and Esteban, 2017). Given the high ethnic diversity of communities hosting refugee populations, combined with the

in Lebanon, less Muslim. However, these are precisely the confounds that we control for—therefore, the identifying assumption is that altitude is *conditionally* independent from attitudes towards refugees.

increased economic pressures of an increased population, the conflict mechanism predicts a negative impact of proximity on trust. Due to strong anecdotal evidence of social conflict between natives and refugees in Northern Lebanon (see Bank, 2013 and UNDP, 2017), in the balance, we expect the conflict mechanism to dominate the contact mechanism:

HYPOTHESIS 3. *Lebanese trust towards the Syrian recipient is decreasing in proximity to refugees. [H3]*

Related, the conflict hypothesis would point to a hardening of in-group solidarity, which would have a positive impact on native's in-group social capital:

HYPOTHESIS 4. *Lebanese in-group trust is increasing in proximity to refugees. [H4]*

Lastly, an influx of new refugees may impact the relationship between the native population and established refugee/migrant groups. Again, we hypothesize that there are two potential channels of impact: First, social capital towards new and established refugees may be positively linked, as the two groups are implicitly associated through their joint refugee status. Second, the relative social status of established refugee groups may be negatively linked with new refugees, as the introduction of a new group may reduce the perceived social distance between natives and the established refugees. On the balance, we expect the joint association effect to dominate:

HYPOTHESIS 5. *Lebanese social capital towards both refugee groups is positively correlated, and Lebanese trust towards the Palestinian recipient is decreasing in proximity to Syrian refugees.⁴[H5]*

Additionally, to explore mechanisms in greater detail and to validate our measure of proximity, we also elicit the following measures of conflict and contact from the Lebanese respondents:

⁴In contrast to Syrian refugees, Palestinian refugees are constrained to reside in designated refugee camps, and there is only one Palestinian refugee camp in our sampling area, compared to hundreds of Syrian temporary refugee camps. This limits exposure to Palestinian refugees and, importantly, means that proximity to Syrian refugee settlements does not imply proximity to Palestinian refugees.

1. **Resource competition [Economic]:** Refugee settlement may increase competition over local governmental and economic resources, which may *decrease* social capital toward Syrians. We measure resource competition using an additive index (see question 39 in the survey).
2. **Cultural threat [Psychological]:** Refugee settlement may increase perceived cultural threat thereby *reducing* social capital toward Syrians. We measure cultural threat using a feeling thermometer toward Syrians (see question 42 in the survey).
3. **Contact [Psychological]:** Refugee settlement may increase contact between Syrians and Lebanese thereby *increasing* social capital toward Syrians. We measure contact using a standard measure (see question 40 in the survey).

2 Analysis and Results

In this section, we detail the main findings of the study. While most of the analysis presented in this section directly follows our pre-registered analysis plan, we also report other results when it is logical to do so and clearly label these results as ex-post.

2.1 Global Impact: Priming Experiment

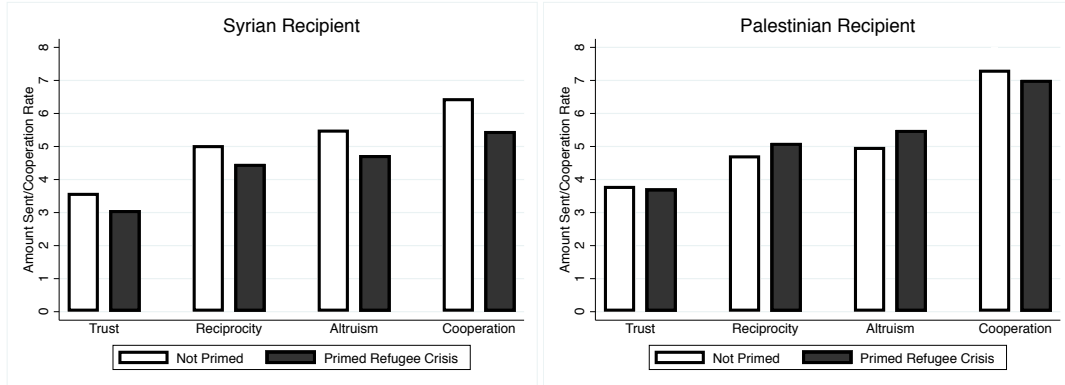
We first provide evidence on the global impact of the refugee crisis on social cohesion by reporting the results of the priming experiment. As preregistered, we only consider data from the first recipient identity to avoid order effects; however, this severely limits our sample size. As show in Figure 2, Lebanese respondents that are primed with the refugee crisis on average report lower levels of the prosocial measures with a Syrian recipient—while the difference in trust is not statistically significant (p-value of 0.3201), the p-value for the social capital index is 0.0596.

This result suggests that, comparable to results from the EU, the perceived impact of the refugee crisis on the native society may contribute to lower levels

Figure 2: Priming: Lebanese Respondents

(a) Syrian recipients

(b) Palestinian recipients



Notes: Following our pre-registered analysis plan, we only include answers from the first identity-category of each respondent.

of social capital between natives and new refugees. We do not, however, see any evidence of a spillover effect to Palestinian refugees (H2).

RESULT 1. *[H1 and H2] A higher degree of salience of the refugee crisis causes a lower degree of social capital towards Syrian refugees (H1), but does not impact social capital towards Palestinian refugees (H2).*

2.1.1 Interaction of proximity and priming

Next, we explore whether the priming has heterogeneous effects as a function of exposure to refugees—note that this analysis was not in our pre-registered analysis plan and should therefore be considered as suggestive. Given our findings, however, it is a natural extension of our analysis and we are able to utilize a pre-registered measure of exposure. Specifically, we pre-registered an altitude cutoff, below which we classify respondents as exposed to refugees, and above which we classify respondents as not exposed.

Looking at Figure 3, we see that the negative impact of priming the refugee crisis on social capital towards Syrian refugees seems to be driven *entirely* by respondents who are not exposed to refugees. Additionally, while not statistically significant, it is interesting to note that all measures of social capital towards Palestinian refugees are lower for primed respondents with no proximity

to refugees (see Figure 3), consistent with the hypothesis of a positive correlation between social capital towards Syrian and Palestinian refugees.

Figure 3: The impact of refugee proximity on refugee crisis prime (Syrian recipient)

(a) Not exposed to refugees.

(b) Exposed to refugees.

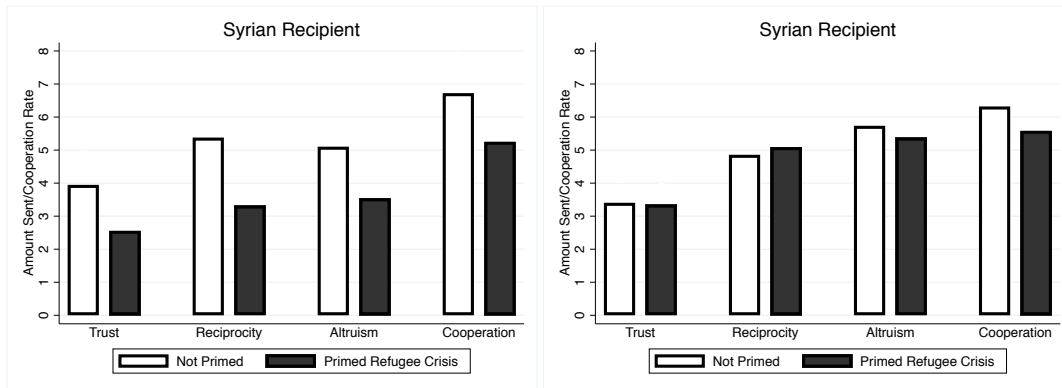
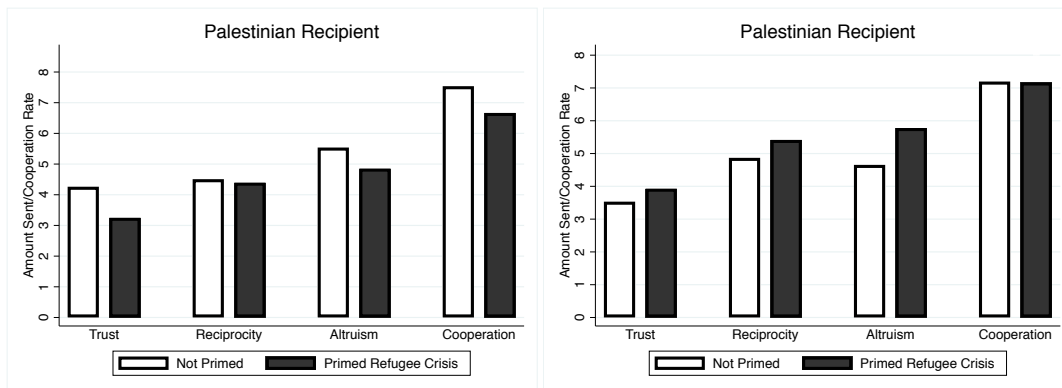


Figure 4: The impact of refugee proximity on refugee crisis prime (Palestinian recipient)

(a) Not exposed to refugees

(b) Exposed to refugees



2.2 Local Impact: Proximity to Refugees

Next, we provide evidence on the local impact of the refugee crisis on social cohesion by reporting our estimated effect of proximity to refugees on social capital.

As discussed above, we consider three different models here: a basic correlation coefficient, a linear model that controls for potential confounders, and lastly our pre-registered IV model using altitude as an instrument for proximity. We present the results for the social capital index; however, the results are equivalent for trust (see Table 2 in the Appendix).

In a first step, we measure the unconditional correlation between proximity to refugees and social capital, proxied by the distance to the nearest refugee settlement. Contrary to our pre-registered hypothesis, the correlation between distance (10 km) and social capital is negative (-0.0663, p-value of 0.001), implying that individuals with a higher degree of proximity to Syrian refugees report higher levels of social capital for Syrian recipients. This suggests that, in the case of proximity, the conflict effect is dominated by the contact effect.

In a second step, we control for the pre-treatment confounders we highlight in our design section, namely wealth, accessibility, density, age and gender. The results are reported in Table 1, column 2. Here we see that the coefficient on the distance to the nearest refugee shelter remains negative (-0.0356, p-value of 0.041), although the magnitude of the coefficient decreases relative to the simple correlation coefficient.

In a third step, we employ our IV approach. First, the results of the first stage of our 2SLS estimation show a significant and large positive correlation between altitude and distance to the nearest refugee settlement (0.648, first-stage F-stat of 248.37). As seen in column (2) of Table 1, the estimated impact of the distance to the nearest refugee shelter on the social capital index remains negative and of similar size to the coefficient of the OLS regression (-0.0438, p-value of 0.058). Column (3) shows that the result is robust to controlling for self-reported religion (grouped by Muslim/Not Muslim) and nationalism, showing that the result is not driven by a different religious composition at higher altitudes (this was not our pre-registered model specification, but we include the additional model since it is a natural robustness concern).

On the balance, the evidence from our three models supports the finding of a positive impact of proximity to refugees on social capital towards refugees.

RESULT 2. *[H3] The results of our analysis point towards a positive causal impact of proximity to refugees on native's social capital towards refugees, suggesting that,*

Table 1: Impact of proximity on social capital index

Recipient	Syrian			Palestinian	Lebanese
	(1)	(2)	(3)	(4)*	(5*)
SC Index	OLS	IV	IV	OLS	OLS
Distance (10 km)	-0.0356** (0.0174)	-0.0438* (0.0231)	-0.0727** (0.0302)	-0.361** (0.0159)	-0.0182 (0.155)
Wealth	0.0100*** (0.00351)	0.00977*** (0.00354)	0.0111*** (0.00359)	0.0127*** (0.00348)	0.0154*** (0.00316)
Accessibility	0.0789 (0.0653)	0.0710 (0.0669)	0.0565 (0.0729)	0.116 (0.0648)	0.119** (0.0588)
Density	0.00526 (0.00804)	0.00470 (0.00809)	-0.00196 (0.00801)	0.00387 (0.00798)	-0.0134 (0.00725)
Age	-0.00484*** (0.00187)	-0.00479** (0.00187)	-0.00297 (0.00186)	-0.00473** (0.00186)	-0.00544*** (0.00168)
Female	0.161*** (0.0523)	0.161*** (0.0522)	0.173*** (0.0511)	0.124** (0.0519)	0.0597*** (0.0472)
Muslim	-	-	0.486*** (0.0726)	-	-
Nationalism	-	-	0.0168 (0.0560)	-	-
<i>N</i>	1000	1000	1000	1000	1000

Standard errors in parentheses clustered at PSU, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

contrary to our *ex-ante* prior, the contact effect outweighs the conflict effect.

Additionally, we consider the impact of proximity to refugees on Lebanese respondent's reported in-group social capital. Across all regression models, we find no evidence of a causal effect of proximity on native's in-group social capital.

RESULT 3. [H4] *We find no evidence that native's in-group social capital is affected by proximity to new refugees.*

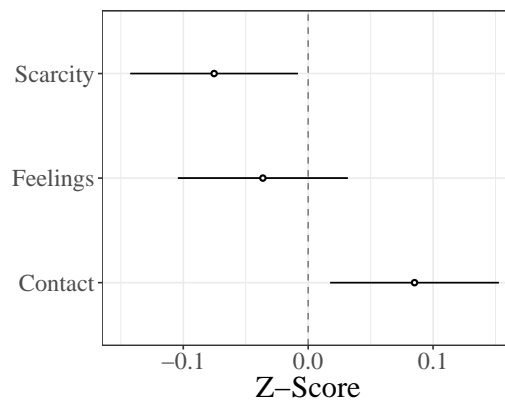
Lastly, column (4) of Table 1 shows that proximity to Syrian refugees has a positive impact on native's social capital towards Palestinian refugees. This suggests a positive link between Lebanese respondent's social capital towards Syrian and Palestinian refugees, rather than a negative link due to divergent relative status.

RESULT 4. [H5] *We find that native's social capital towards new refugees and pre-existing migrant communities is positively linked, suggesting that both out-groups share a joint social status.*

2.2.1 Mechanisms

We also explore the mechanisms involved in the positive effect of proximity to refugees on native's social capital towards refugees. As seen in Figure 5, proximity to refugees is, unsurprisingly, correlated with higher contact.

Figure 5: Mechanisms: Social capital and proximity



Factors associated with the conflict mechanism, however, are not positively correlated with proximity. Proximity is not positively correlated with a feeling of cultural threat and respondents with a higher degree of proximity to refugees are less likely to experience high degrees of resource competition, due either to endogenous selection of refugees in areas with high economic activity and government resources, or due to the fact that refugees result in a higher degree of economic activity and a greater allocation of government resources.

These findings further suggest that the correlation between proximity and social capital is due to the contact effect dominating the conflict effect: a higher degree of proximity to Syrian refugees results in a greater degree of contact, and our data show that, rather than increasing economic and cultural conflict, this contact results in a positive impact on social capital between natives and refugees with positive spillovers to other migrant communities.

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A Supplementary Appendix

A.1 Additional Statistical Tables

Table 2: Impact of proximity on trust (amount sent)

Recipient	Syrian			Palestinian	Lebanese
	(1)	(2)	(3)	(4)*	(5*)
Trust	OLS	IV	IV	OLS	OLS
Distance (10km)	-0.167** (0.0672)	-0.176* (0.0949)	-0.254** (0.103)	-0.207*** (0.0631)	-0.0227 (0.0764)
Wealth	0.0391* (0.0202)	0.0388* (0.0201)	0.0432** (0.0193)	0.0357* (0.0202)	0.0440** (0.0175)
Accessibility	0.493 (0.317)	0.485 (0.325)	0.492 (0.315)	0.538* (0.324)	0.478 (0.292)
Density	0.0400 (0.0677)	0.0394 (0.0677)	0.0170 (0.0671)	0.0482 (0.0608)	-0.00768 (0.0427)
Age	-0.0194*** (0.00703)	-0.0193*** (0.00701)	-0.0123* (0.00709)	-0.0165** (0.00798)	-0.0226*** (0.00734)
Female	0.488*** (0.187)	0.488*** (0.187)	0.528*** (0.184)	0.312* (0.185)	0.159 (0.197)
Muslim			1.793*** (0.264)		
Nationalism			-0.0382 (0.223)		
<i>N</i>	1000	1000	1000	1000	1000

Standard errors in parentheses clustered at PSU, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A.2 Survey

Instructions to enumerators:

- If not otherwise specified, mark only one answer choice.
- If not otherwise specified, do not read out the answer choices.
- Anything in square brackets is information for the enumerator, which must not be read out loud.

A. Section A

Let's start with a few questions about yourself.

1. What is your citizenship?
 - a. Lebanese
 - b. Other, namely _____ → *[If other, exclude from interview. Say: "Thank you very much for your time. This time around, however, we only want to interview Lebanese citizens."*

2. Gender *[Fill in gender of respondent]*
 - a. Male
 - b. Female

3. Housing *[Fill in the type of housing of respondent]*
 - a. Camp
 - b. Shared apartment
 - c. Separate apartment
 - d. Shared house
 - e. Separate house
 - f. Other, _____ *[Fill in]*

4. How old are you? *[Fill in years]*
 - a. _____ years

5. What is your highest level of education? *[Read out answer choices]*
 - a. No formal education
 - b. Incomplete primary school
 - c. Complete primary school
 - d. Incomplete secondary
 - e. Complete secondary
 - f. Some university-level education, without degree
 - g. University-level education, with degree
 - h. Other, _____ *[Fill in]*

6. What is your marital status?
 - a. Married
 - b. In a relationship
 - c. Divorced

- d. Separated
- e. Widowed
- f. Single

7. How many children do you have?

- a. _____ [*Fill in number*]

8. What is your primary occupation? [*Read out answer choices*]

- a. Full time employee (30 hours a week or more)
- b. Part time employee (less than 30 hours a week)
- c. Self-employed / owns business
- d. Retired
- e. Housewife / houseman
- f. Student
- g. Unemployed
- h. Other, namely _____ [*Fill in*]

9. Which of the following best describes your profession? If you do not currently work, characterize your major work in the past. [*Read out answer choices*]

- a. No profession
- b. Agriculture and fishing
- c. Manufacturing
- d. Construction
- e. Trade and repair
- f. Hotels and restaurants
- g. Transport and communications
- h. Education
- i. Health and social work
- j. Other, namely _____ [*Fill in*]

10. How many persons live in your household, including you?

- a. _____ [*Fill in number*]

11. What is the total approximate income of your household in USD each month?

- a. _____ USD

12. What percentage of your household income comes from money transfers from relatives who either work abroad or in another Lebanese city?

- a. _____ %

13. Where were you born? [*Fill in country and city*]

- a. Country: _____
- b. City: _____

14. What is your religion?

- a. Christian Maronite Catholic

- b. Christian Greek Orthodox
- c. Christian Melkite Catholic
- d. Christian Armenian Apostolic
- e. Muslim Sunni
- f. Muslim Shia
- g. Druze
- h. Atheist / Agnostic / No belief
- i. Other, namely _____ [*Fill in*]

15. How often do you pray during a given week? [*Fill in number*]

- a. _____

16. How important is religion in your life?

- a. Very important
- b. Important
- c. Neither important, nor unimportant
- d. Unimportant
- e. Very unimportant

17. I'd like you to think of your three closest neighbors. Can you tell me their nationality?

- a. Neighbor 1 _____ [*Fill in nationality*]
- b. Neighbor 2 _____ [*Fill in nationality*]
- c. Neighbor 3 _____ [*Fill in nationality*]

B. Section B

18. In general, how willing are you to take risks? Please use a scale from 0 to 10, where 0 means "*completely unwilling to take risks*" and a 10 means "*very willing to take risks*".

- a. _____ [*Fill in number*]

19. How willing are you to give up something today in order to get more in the future? Again, indicate your answer on a scale from 0 to 10, where 0 means "*completely unwilling to do so*" and a 10 means you "*very willing to do so*".

- b. _____ [*Fill in number*]

20. On a scale from 0 (not at all) to 10 (perfectly), how well does the following statement describe you as a person? "As long as I am not convinced otherwise, I assume that people have only the best intentions."

- a. _____ [*Fill in number*]

[*The next question includes several random elements. In total, there are many different versions of the following question. Please take care in programming this question. Please also include variables that note which words respondents were assigned to.*]

21. Now, we would like to introduce you to a hypothetical Syrian refugee named Mohamad. Mohamad is 24 years old. He has been contemplating whether to migrate toward the European Union to apply for asylum. Friends told Mohamad that refugees are [*randomize: ostracized / welcomed*] in Europe. He also heard that refugees have a [*randomize: good / poor*] chance of gaining full-time employment in the EU. His friends also said that certain European countries have recently put in place [*randomize: less / more*] strict border controls. At the same time, the economic situation in Mohamad's home region has [*randomize: deteriorated / improved*]. Meanwhile, the security situation continues to be [*randomize: poor / good*].

Given this information, what would you advise Mohamad to do? [*Read out answer choices*]

- a. Definitely not migrate
- b. Probably not migrate
- c. Unsure
- d. Probably migrate
- e. Definitely migrate

22. How about yourself, on a scale from 1 to 10, how likely are you to migrate elsewhere in the coming years? 1 means very unlikely, while 10 means very likely.

- a. _____ [*Fill in number*]

23. And, if you were to migrate, what could country would you like to go to?

- a. _____ [*Fill in country*]

C. Section C

[*The following three questions should only be asked to 50% of all Lebanese respondents. It should be **randomized** whether a respondent receives these three questions or not. Please take care in programming this randomization. Please also include a variable that notes whether a respondent was assigned the questions or not.*]

24. Currently, Lebanon is hosting over one million refugees from Syria. We'd like to ask you a couple of questions related to the refugee crisis. How have you and your family been personally affected by the refugee crisis? [*Read out answer choices*]

- a. Positively affected
- b. Neutrally affected
- c. Negatively affected

25. How do you think Lebanon as a whole has been affected by the refugee crisis?

[Read out answer choices]

- a. Positively affected
- b. Neutrally affected
- c. Negatively affected

26. Do you support Lebanon's response to the refugee crisis? *[Read out answer choices]*

- a. Yes, absolutely
- b. Yes, by and large
- c. No, not really
- d. No, not definitely not

*[Next, there are three blocks of questions, A, B and C. Each block includes four similar (but not identical) sets of questions. These blocks must be put in **random** order. That is, it should be **randomized** whether a respondent first receives Questions 27 – 30 and then Questions 31 to 34 and then Questions 35 to 38 or whether the ordering will be different (e.g., first Q31 to 34, then Q27 to 30 and then Q35 to 38). Please take care in programming this randomization. Please also include a variable that notes in which order the blocks were asked.]*

Block A

Next, I'd like you to think of the following situation: You and a Syrian refugee nearby named Omar both participate in a study. You do not know Omar, but you know that he is a 35-year refugee from Syria. In the study, you and Omar will be asked to make choices about how to assign a certain amount of money.

27. Imagine the following game. Both you and Omar get \$10. Next, you and Omar have to give any amount of that money to the other person. You decide first. Omar decides second. Importantly: Each Dollar that you transfer to Omar, the Syrian refugee, will be tripled by us and then given to Omar. That means, if you give \$1 of your \$10 to Omar, you then have \$9, while Omar will have \$10 plus 3 times \$1, so \$13. Then, Omar can decide to send some money back to you. Let's now play this game. How much of your \$10 do you give to Omar, which we then triple?

- a. _____ *[Fill in number]*

28. Next, imagine that we play the game again. Again, both you and Omar get \$10. This time, Omar decides first and you second. Imagine that Omar, the Syrian refugee, transfers \$3 of his \$10 to you. That means, he remains with \$7, while you get 3 times \$3 (we have tripled the amount). Overall, you end up with your original \$10 plus an additional \$9, so \$19 in total. Now, it is your turn to give money back. How much of the \$19 would you transfer back to Omar?

- a. _____ *[Fill in number]*

29. Now, we'd like to play a different game. This time, you get \$20. You are then asked to give any amount of that money to Omar, the Syrian refugee. This will be the end of the study. You will remain with \$20 minus whatever you have given to Omar. How much would you transfer to Omar?

a. _____ [*Fill in number*]

30. Finally, we would like to play another game. Imagine you and Omar, the Syrian refugee, both simultaneously have to choose between two options, *Cooperate* or *Not Cooperate*. That is, when you choose between *Cooperate* or *Not Cooperate*, you do not know what Omar has chosen. And Omar also does not know what you have chosen. The amount you and Omar are paid depends on both of your choices.

- 1) If you choose to *Not Cooperate* and Omar also does *Not Cooperate*, you both get \$5.
- 2) If you choose to *Cooperate* and Omar chooses to *Cooperate*, you each receive \$10.
- 3) If you choose to *Not Cooperate* and Omar chooses to *Cooperate*, then you receive \$20 and Omar receives \$0.
- 4) If you choose to *Cooperate* and Omar chooses to *Not Cooperate*, then you receive \$0 and Omar receives \$20.

Would you choose to *Cooperate* or to *Not Cooperate*?

- a) Cooperate
- b) Not Cooperate

Block B

Imagine the following situation: You and a Lebanese individual nearby named Rami both participate in a study. You do not know Rami, but you do know that he is a 37-year old Lebanese citizen. In the study, you and Rami will be asked to make choices about how to assign a certain amount of money.

31. Imagine the following game. Both you and Rami get \$10. Next, you and Rami have to give any amount of that money to the other person. You decide first. Rami decides second. Importantly: each Dollar that you transfer to Rami, the Lebanese citizen, will be tripled by us and then given to Rami. That means, if you give \$1 of your \$10 to Rami, you then have \$9, while Rami will have \$10 plus 3 times \$1, so \$13. Then, Rami can decide to send some money back to you. Let's now play this game. How much of your \$10 do you give to Rami, which we then triple?

a. _____ [*Fill in number*]

32. Next, imagine that we play the game again. Again, both you and Rami get \$10. This time, Rami decides first and you second. Imagine that Rami, the Lebanese citizen, transfers \$3 of his \$10 to you. That means, he remains with \$7, while you get 3 times \$3 (we have tripled the amount). Overall, you end up with your

original \$10 plus an additional \$9, so \$19 in total. Now, it is your turn to give money back. How much of the \$19 would you transfer back to Rami?

a. _____ [Fill in number]

33. Now, we'd like to play a different game. This time, you get \$20. You are then asked to give any amount of that money to Rami, the Lebanese citizen. This will be the end of the study. You will remain with \$20 minus whatever you have given to Rami. How much would you transfer to Rami?

a. _____ [Fill in number]

34. Finally, we would like to play another game. Imagine you and Rami, the Lebanese citizen, both simultaneously have to choose between two options, *Cooperate* or *Not Cooperate*. That is, when you choose between *Cooperate* or *Not Cooperate*, you do not know what Rami has chosen. And Rami also does not know what you have chosen. The amount you and Rami are paid depends on both your choices.

5) If you choose to *Not Cooperate* and Rami also does *Not Cooperate*, you both get \$5.

6) If you choose to *Cooperate* and Rami chooses to *Cooperate*, you each receive \$10.

7) If you choose to *Not Cooperate* and Rami chooses to *Cooperate*, then you receive \$20 and Rami receives \$0.

8) If you choose to *Cooperate* and Rami chooses to *Not Cooperate*, then you receive \$0 and Rami receives \$20.

Would you choose to *Cooperate* or to *Not Cooperate*?

a) Cooperate

b) Not Cooperate

Block C

Imagine the following situation: You and a Palestinian refugee nearby named Adham both participate in a study. You do not know Adham, but you do know that he is a 33-year old Palestinian refugee. In the study, you and Adham will be asked to make choices about how to assign a certain amount of money.

35. Imagine the following game. Both you and Adham get \$10. Next, you and Adham have to give any amount of that money to the other person. You decide first. Adham decides second. Importantly: each Dollar that you transfer to Adham, the Palestinian refugee, will be tripled by us and then given to Adham. That means, if you give \$1 of your \$10 to Adham, you then have \$9, while Adham will have \$10 plus 3 times \$1, so \$13. Then, Adham can decide to send some money back to you. Let's now play this game. How much of your \$10 do you give to Adham, which we then triple?

a. _____ [Fill in number]

36. Next, imagine that we play the game again. Again, both you and Adham get \$10. This time, Adham decides first and you second. Imagine that Adham, the Palestinian refugee, transfers \$3 of his \$10 to you. That means, he remains with \$7, while you get 3 times \$3 (we have tripled the amount). Overall, you end up with your original \$10 plus an additional \$9, so \$19 in total. Now, it is your turn to give money back. How much of the \$19 would you transfer back to Adham?
a. _____ [*Fill in number*]

37. Now, we'd like to play a different game. This time, you get \$20. You are then asked to give any amount of that money to Adham, the Palestinian refugee,. This will be the end of the study. You will remain with \$20 minus whatever you have given to Adham. How much would you transfer to Adham?
a. _____ [*Fill in number*]

38. Finally, we would like to play another game. Imagine you and Adham, the Palestinian refugee, both simultaneously have to choose between two options, Cooperate or Not Cooperate. That is, when you choose between Cooperate or Not Cooperate, you do not know what Adham has chosen. And Adham also does not know what you have chosen. The amount you and Adham are paid depends on both your choices.

9) If you choose to *Not Cooperate* and Adham also does *Not Cooperate*, you both get \$5.

10) If you choose to *Cooperate* and Adham chooses to *Cooperate*, you each receive \$10.

11) If you choose to *Not Cooperate* and Adham chooses to *Cooperate*, then you receive \$20 and Adham receives \$0.

12) If you choose to *Cooperate* and Adham chooses to *Not Cooperate*, then you receive \$0 and Adham receives \$20.

Would you choose to *Cooperate* or to *Not Cooperate*?

- a) Cooperate
- b) Not Cooperate

D. Section D

39. In your view, to what extent are the following resources scarce in this neighborhood? Please rate it from 0 (not scarce at all) to 10 (very scarce). [*Fill in numbers*]

- a. Water: _____
- b. Electricity: _____
- c. Food: _____
- d. Supplies: _____
- e. Clothing: _____

40. In the last month, how many Syrian and Lebanese individuals have you interacted with. This does not include your family or friends. [*Fill in numbers*]

- a. Syrians: _____
- b. Lebanese: _____

41. We have spoken to many people in this area and they have all described themselves in different ways. Some people describe themselves in terms of their religion or nationality. Others describe themselves in economic terms, such as working class, middle class, or a farmer. Which specific group do you feel you belong to first and foremost? [*Read out answer choices*]

- a. Nationality
- b. Religion
- c. Class

42. On a scale from 0 to 100, where 0 means (very cold) and 100 means (very warm), how warm or cold do you feel toward Syrian refugees?

- a. _____ [*Fill in number*]

43. Lebanon has seen migrants come from many countries. Two big groups are Syrians and Palestinians. To what extent do you think these two groups are similar or different? Please answer on a scale from 0 (very similar) to 10 (very different).

- a. _____ [*Fill in number*]

44. Last, would you be happy to give us your phone number so that we can stay in touch with you?

- a. _____ [*Fill in number*]

Thank you very much for agreeing to participate in this survey. Your participation means a lot to us!

[End of survey]

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