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Insecurity, Resource Scarcity, and Migration to Camps of Internally Displaced Persons in Northeast Nigeria

Frederic Noel Kamta
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Since 2009, more than two million people have been internally displaced in Nigeria due to the Boko Haram insurgency and counter-insurgency by Nigerian security forces. This paper investigates the effect of insecurity on decisions to flee to IDP camps in Maiduguri, the capital of Borno state in northeast Nigeria, and the role that scarcity of water and fertile land play in these decisions.

The analysis is based on a survey of internally displaced persons (IDPs) in the Bakassi IDP camp in Maiduguri, as well as interviews with experts in the capital city, Abuja. Maiduguri is the closest urban center to most rural areas of northeast Nigeria, and has received large numbers of IDPs since 2009. The Bakassi IDP camp is the largest in the region, and hosted approximately 39,000 IDPs when the research was undertaken in 2019. The author focuses on an individual’s resilience to conflict measured as the ‘time spent in conflict’, i.e. from the time the community became insecure until the individual fled to the IDP camp.

Main results:

- **Conflict was the main push factor for migration.** Insecurity, created by the activities of Boko Haram or the counter insurgency by state military forces, was the main push factor for migration.

- **The ‘time spent in conflict’ before deciding to flee varied across communities of origin.** Most respondents from Monguno, Guzamala, and Nganzai local government areas (LGAs) fled within one to seven days after the conflict began in their communities. 35 percent of respondents from Marte LGA migrated before conflict began in their community. In Gwoza, which is the furthest LGA from Lake Chad, people stayed longer in the community despite the insecurity generated by Boko Haram. 35 percent of respondents from Gwoza remained in their community for more than a year after it became insecure before leaving for the IDP camp. The author argues that these differences reflect other factors, besides insecurity, that influenced the decision to flee.

- **Income, land ownership, and water scarcity appear to affect the timing of the decision to flee.** In Gwoza LGA, ‘time spent in conflict’ was positively associated with income, and to a lesser extent associated with land ownership, previous experiences of...
water scarcity and occupation. In Guzamala LGA, land ownership was associated with the time that people spent in conflict before migrating, while in Nganza LGA, previous experiences of water scarcity were associated with the time spent in conflict before migrating. However, these factors did not considerably delay the decision to flee in either LGA; many of the IDPs from Guzamala and Nganza fled before or within a week of Boko Haram becoming active in their communities. No significant associations were found in Marte and Monguno LGAs, since most respondents from these communities spent little or no time in their communities once the conflict started.

- **Interviews with IDPs and experts corroborated the statistical findings.** Some IDPs indicated that they were willing to remain in their communities despite the presence of Boko Haram, but paid “taxes” or bribes to insurgents to ensure their safety.

### Knowledge and perceptions of COVID-19, prevalence of pre-existing conditions and access to essential resources in Somali IDP camps: a cross-sectional study

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This paper investigates knowledge and perceptions of COVID-19, prevalence of pre-existing conditions, and access to essential resources among residents of IDP camps in Somalia. There are over 3 million IDPs in Somalia living in over 2,100 settlements.

The analysis is based on a survey administered in Somali to 401 adults in 12 IDP camps in the Lower Shabelle region of Somalia. The survey covered: (1) demographic information, including sex, age, displacement status, household characteristics, education and employment; (2) participants’ health profiles, including current health status, existing conditions and symptoms, and concerns precipitated by COVID-19; (3) knowledge of COVID-19, most commonly used sources of information, trusted sources of COVID-19 information and perceptions of community efforts against COVID-19; and (4) access to water, sanitation and hygiene (WASH) facilities, COVID-19 screening and health services.

Main findings:

- The majority of respondents were female (86 percent) and had received no formal education (89 percent).
• 58 percent of respondents reported being in ‘good’ health, however 50 percent of participants reported having one or more pre-existing conditions. Health staff administering surveys reported that many participants did not know what the surveyed conditions were, had little recollection of previous diagnoses and had rarely visited a health professional.

• A considerable proportion of the sample reported experiencing symptoms that could potentially be attributed to COVID-19, including headache, fever, or muscle or body aches.

• When asked how COVID-19 has changed their daily lives, 59 percent of respondents indicated that lockdowns had decreased their income or caused them to lose their job.

• There is very poor knowledge among IDPs related to COVID-19. In response to questions assessing knowledge surrounding COVID-19 prevention and treatment, 50 percent of responses responded ‘I don’t know’.

• 49 percent and 57 percent of respondents reported that they trusted religious officials and the radio, respectively, to provide information about COVID-19, while only 37 percent and 5 percent said that they trusted health officials and humanitarian aid workers, respectively.

• Respondents reported a lack of access to adequate sanitation facilities (washing facilities, soap, disinfectants, and face masks) and an inability to practice social distancing protocols. Nevertheless, 77 percent of respondents reported taking at least one COVID-19 preventative measure.

• More than a third of respondents reported not being able to buy essential food items in the week preceding the survey, which forced them to skip meals, eat smaller portions or buy lower quality food.

• There is a significant lack of access to treatment and preventative services for COVID-19 among IDPs. Respondents’ self-reported access to COVID-19 screening and medical services was low, with 97 percent saying that they could not access screening and only 20 percent saying that they were confident that they could receive medical services if infected.

• 47 percent of respondents indicated that camp living conditions needed to change to prevent the spread of COVID-19.

Overall, this study reveals very low levels of COVID-19 knowledge and limited access to essential prevention and treatment resources among IDPs in Somali camps.
Internal Displacement’s Impacts on Health in Yemen

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https://www.internal-displacement.org/publications/internal-displacements-impacts-on-health-in-yemen

By the end of 2020, there were more than 3.6 million people internally displaced by conflict in Yemen, in addition to 223,000 people displaced by disasters. This paper discusses the health risks faced by IDPs in Yemen, the effect of climate change on IDPs’ access to healthcare, and the impact of reduced humanitarian assistance on health responses. The paper includes a ‘spotlight’ on the consequences of the COVID-19 pandemic for IDPs, drawing on the findings of an online survey, commissioned by IDMC, to investigate the impacts of COVID-19 on the health, livelihoods, housing, education and security of IDPs, IDP-returnees and non-displaced people in Yemen.

Main points:

• Some of the highest levels of vulnerability to health risks are concentrated in IDP sites where few services are available. IDPs living in hosting sites (i.e. repurposed facilities such as schools and spontaneous informal settlements) are particularly vulnerable to disease outbreaks, food insecurity and acute malnutrition due to uncoordinated or unreliable provision of services. Diarrheal diseases are common due to lack of basic WASH services as well as flooding after heavy rains. Among children, diarrheal disease increases the risk of malnutrition, while malnutrition increases the risk of severe diarrheal disease and associated complications. Additionally, availability of treatments for non-communicable, chronic diseases and mental health issues has been disrupted.

• Climate change is expected to increase the frequency of natural disasters, which negatively affect access to health care. Natural disasters (in particular, storms and floods) negatively affect access to health care by making roads impassable, isolating remote communities, destroying health facilities, and interrupting clean water supplies. They also disrupt economic activity, affecting the affordability of health services.

• Shortfalls in humanitarian funding for Yemen have precipitated cuts to basic health, nutrition and WASH programs, amplifying the health risks faced by IDPs. Funding for the Yemen Humanitarian Response Plan fell sharply from US$3.6 billion in 2019 (87 percent of the funding requirement) to US$2 billion in 2020 (59 percent of the funding requirement). Funding shortfalls necessitated cuts to health, nutrition and WASH programs, reducing the number of people reached with humanitarian assistance.
The COVID-19 pandemic has had particularly severe effects on the lives of IDPs. A November 2020 online survey commissioned by IDMC soliciting responses from IDPs, IDP-returnees and non-displaced people in Yemen found that: IDPs were more likely than the non-displaced to have experienced COVID-19 symptoms; more than a third of people in each group said they couldn’t follow social distancing guidelines; IDPs were least likely to receive treatment for COVID-19 symptoms, with more than half attributing this to not being able to afford treatment; and nearly two-thirds of IDPs said their treatment for chronic health issues had deteriorated.

Moving with risk: Forced displacement and vulnerability to hazards in Colombia

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This paper examines the social and spatial processes through which IDPs in Colombia become exposed to environmental hazards in settlement locations. Environmental hazards encompass threats stemming from the physical environment, such as landslides, floods and fire.

The analysis is based on case studies undertaken in 2017 and 2018 in four IDP settlement areas: the city of Manizales in Caldas; the settlements of Caimalito and Galicia in Risaralda; and Cazuca in the municipality of Soacha in Cundinamarca, on the outskirts of Bogota. These four informal settlements are broadly representative of the range of urban and peri-urban IDP sites across Colombia. Each site accommodates a mix of people identifying as Mestizo, Afro-Colombian and Indigenous groups. A total of 103 sets of interactions took place (24–30 per site) with 138 participants (84 women and 54 men).

Main findings:

- Many participants had experienced vulnerability (poverty, gender-based violence and environmental hazards) prior to their displacement. These experiences influenced decisions about where to move and how to establish a sense of greater security.
- The proximate causes of forced displacement included: murder of a family member; sexual violence; occupation of the home by armed groups; verbal threats; forced
recruitment of children; armed conflict; and pressure to carry out illicit activities, such as coca cultivation.

- Most participants were displaced multiple times, moving two to four times in the search for economic opportunities, to evade armed groups, to escape gender-based violence, or because of eviction due to rent arrears or lack of formal rights to land or dwellings.
- Given their mainly rural origins, participants encountered challenges adapting to lives in peri-urban and urban areas.
- For many, creating a permanent home was a highly symbolic act, enabling them to break the cycle of repeated displacement.
- Even in cases where the arrival of displaced families was uncoordinated, the shared experience of ‘land invasion’ and development of informal settlements became a collective project that fostered a degree of community organization.
- Many participants fear the threat of eviction by authorities. Some households or groups have managed to formalize their settlement and gain legal title to the land on which they have constructed dwellings.
- Participants emphasized ongoing economic, social and political marginalization that constrains their options. Most had found informal work, e.g. providing street food, cleaning houses, or casual jobs in construction. Many were unsuccessful in claiming government welfare support due to bureaucratic hurdles, fear of disclosing their location, or stigma associated with IDP status.
- Informal development of settlements, with houses built densely on adverse terrain with narrow walkways, makes them difficult for emergency vehicles to access. Proactive disaster risk reduction to protect the communities from environmental hazards has seldom occurred. The only risk-related government policy formally in operation is to try to enforce evictions of informal settlements. Very few participants had been offered a viable resettlement plan.

The authors conclude that experiences of conflict and displacement have fundamentally shaped the settlement decisions of IDPs. A preoccupation with fleeing conflict, and a perception of risk dominated by the experience of violence meant that avoiding environmental hazards was seldom factored into decisions about where to live and construct improvised homes.
Violence, Displacement, and Support for Internally Displaced Persons: Evidence from Syria

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This paper investigates the relationship between violence, altruism, and intergroup behavior during conflict. In particular, the authors examine whether past experiences of violence shape an individual’s willingness to host IDPs in Syria. Specifically, they consider whether past experiences of violence affect: (a) whether and for how long an individual decides to host IDPs; and (b) how much weight an individual assigns to indicators of need relative to ethnic and religious identity when deciding who to host. The authors hypothesize that victimization and suffering can lead to greater empathy, which in turn can motivate altruistic behavior toward those in need regardless of their ethnic or religious identity.

The analysis draws on survey data collected in December 2017 from over 2,000 Syrians living in rebel-held regions where many IDPs sought refuge. The survey collected information on past experiences of violence, whether respondents were currently hosting IDPs from other parts of Syria, and whether they would be willing to host additional IDPs should the need arise. Respondents were presented with descriptions of hypothetical IDP families whose attributes varied along several dimensions (e.g. ethnic and religious identity, gender of household head, level of need, and occupation) and asked to choose which family they would rather host, given their limited resources. 44 percent of respondents were hosting an IDP at the time the survey was administered.

Main findings:

- Syrians who previously experienced violence were more likely to host IDPs, relative to those who experienced less violence. A one standard deviation increase in violence is associated with a 5 percentage point increase in the likelihood of hosting IDPs and an additional 12 person-months of hosting overall.

- Syrians previously exposed to violence were more likely to host sick and vulnerable IDPs and outgroup IDPs from the Kurdish ethnic minority, relative to those who experienced less violence. Whereas residents with below average exposure to violence and displacement discriminate against Kurdish families and families with sick children, residents with above average prior exposure to violence do not appear to discriminate and tend to prefer hosting families with sick children.
• However, Sunni Muslims previously exposed to violence were less likely to host IDPs from the Christian minority, possibly due to their association with the Assad regime. Among Sunni Muslims, previous experiences of violence are associated with a lower willingness to host Christian IDPs, relative to those with less exposure. This is attributed to resentment of Assyrian Christians for their support for the Assad regime.

The authors conclude that altruism born of suffering can motivate decisions to host IDPs. However, altruism born of suffering is unlikely to extend to all outgroups, especially those associated with rival parties in the conflict. The findings suggest that sectarian politics come into play, i.e. whereas altruism toward apolitical outgroups may increase in the aftermath of violence, altruism toward outgroups associated with rival parties in the conflict may decrease due to blame attribution, the heightened importance of self-interested security concerns, or other mechanisms associated with parochial altruism.

Revisiting forced migration: A machine learning perspective

Maja Micevska


Using machine learning techniques, this paper investigates the factors that influence refugee flows and asylum applications from African countries. The author argues that, compared to traditional estimation methods, machine learning techniques are better suited to estimating complex relationships and interaction effects.

The analysis draws on several data sources including: UNHCR data on refugee stocks (from which refugee flows are derived) and asylum applications from 45 African countries from 1997 to 2017; data on various types of conflict from the Armed Conflict Location and Event Dataset (ACLED); GDP data from Penn World Tables; data from the World Bank on population, internet penetration, and net official development assistance and aid received; regime type from the Polity IV index; data on political terror from the Political Terror Scale website; number of disasters from the Centre for Research on the Epidemiology of Disaster; and country-level data on precipitation and temperature from the Climatic Research Unit of the University of East Anglia.

Main findings:
• **Country fixed effects are most important in explaining forced migration flows.**
  Country fixed effects account for factors, such as persistent conflicts, chronic poverty, geographic position, or proximity to refugee routes, which are not observed in the data and do not vary over time. This finding holds after controlling for variables that have been used as determinants of forced migration in previous studies.

• **Riots are the most important type of conflict for explaining asylum applications.**
  Fatalities and violent conflicts are important drivers of refugee flows, but not for asylum applications.

• **Internet penetration rates are important in explaining forced migration flows and asylum applications.** The author suggests that Internet access lowers communications costs and facilitates access to information about migration routes and destinations.

• Population growth is an important driver of asylum applications.

• GDP per capita does not seem to play a prominent role in predicting forced migration.

• Riots are the most important driver of asylum applications from Nigeria, but population growth and increasing Internet penetration rate also play a role in explaining asylum applications. Riots are an important driver of asylum applications from Cote d’Ivoire. Internet penetration is important for explaining asylum applications from Gambia, Senegal, Guinea, Cote d’Ivoire, and Mali. Algeria and the Democratic Republic of the Congo are important sources of asylum applications due to factors not included in the model.

The author notes that the salience of country fixed effects points to the importance of within-country differences (e.g. between regions or ethnic groups), which is not adequately captured in country-level data. The author calls for further research on the most important origin countries to scrutinize factors that have been neglected in previous research.

**Refugees’ and irregular migrants’ self-selection into Europe**

Cevat Giray Aksoy and Panu Poutvaara

*Journal of Development Economics*, Volume 152


This paper assesses the self-selection— in terms of education and predicted income— of refugees and irregular migrants from African and Asian countries who arrived in Europe in 2015 or 2016. The authors theorize that the decision to migrate is a function of an individual’s: educational attainment; gender; wage in their country of origin and predicted earnings in the destination country; loss of income and risks associated with conflict or
persecution in their country of origin; and costs and risks associated with the journey to the destination country. The analysis is disaggregated by the level of conflict intensity (battle deaths) in origin countries over the sample period, as follows: Afghanistan, Iraq, Nigeria, Pakistan, Sudan, and Syria are categorized as major conflict countries; Algeria and Iran are classified as minor conflict countries; and Bangladesh, Cameroon, Cote d’Ivoire, Morocco, and Senegal are categorized as ‘no conflict’ countries.

The authors predict that:

• If returns to skills are higher in the country of origin and the country of origin is relatively safe, then migrants tend to be negatively self-selected, i.e. they tend to have lower human capital.

• If, however, the country of origin suffers from severe conflict, then migrants tend to be positively self-selected, i.e. they tend to have higher human capital. This is because a sufficiently high risk of staying in an unsafe country lowers expected returns to human capital.

• Given that there is more gender discrimination in African and Asian countries than in European destination countries, it is likely that even though average returns to human capital among men are higher in origin countries than in Europe, the reverse is the case for women, i.e. while the self-selection of men is expected to be negative from countries with low risk of conflict or persecution and positive from countries with a high risk of conflict or persecution, the self-selection of women is expected to be positive from both low-risk and high-risk countries.

• Negative self-selection of male irregular migrants is stronger from more inegalitarian countries of origin.

The authors estimate a series of multivariate regression models to test these predictions. The analysis is based on data from: Flow Monitoring Surveys, 2015 and 2016 (waves 1–3), which include rich data on the profile, motivations, experiences, and intentions of migrants arriving in Europe in 2015 and 2016; the IAB-BAMF-SOEP Survey of Refugees in Germany, which includes data on refugees’ country of origin, demographic characteristics, and employment histories; 2009-2014 Gallup World Polls (GWP), which cover demographic and socioeconomic data on populations in origin countries; the Uppsala Conflict Data Program (UCDP), which provides information on conflict intensity in origin countries; and the World Bank’s World Development Indicators (WDI). The authors restrict their analysis to individuals aged between 25 and 64.

Main findings:
• Refugees, both male and female, who arrived in Europe are positively self-selected in terms of education and predicted income. This suggests that if the risk of being a victim of conflict or persecution increases, the probability of emigration becomes eventually increasing in human capital even if returns to human capital would be higher in the country of origin in the absence of conflict or persecution.

• Male irregular migrants who arrive in Europe are negatively self-selected in terms of education, and do not differ much from non-migrants in origin countries in terms of their income distribution. The negative self-selection of male irregular migrants compared with non-migrants in origin countries is driven by fewer migrants with secondary education. This result reflects the much wider income differences in African and Asian countries compared to European countries.

• Female irregular migrants who arrived in Europe are positively self-selected in terms of their education and predicted income. This result may reflect: (1) more pervasive gender discrimination in Africa and Asia than in Europe, which combined with low female labor force participation rates in most origin countries, can lower expected returns to education for women below expected returns in Europe; or (2) a subset of women could be escaping gender-based violence and repression even from “safe” countries—producing a self-selection pattern that is similar to refugees who escape conflict and persecution.

• These patterns hold whether analyzing individual responses to the “main reason to emigrate” in FMS, when comparing migrants from major conflict countries (most likely refugees) with migrants from minor or no conflict countries, and when conducting the analysis at the sub-regional level.

• Even male irregular migrants from the poorest major conflict countries are negatively self-selected. This result suggests that liquidity constraints are not driving differences in self-selection.

The authors conclude that the positive self-selection of refugees benefits host countries, especially if they support the integration of refugees into the labor market (e.g. through language training and job assistance programs), but represents a human capital drain for origin countries that undermines their post-conflict reconstruction and economic growth.

Marriage outcomes of displaced women

Frances Lu, Sameem Siddiqui, and Prashant Bharadwaj

Journal of Development Economics, Volume 152
This paper examines the marriage outcomes of displaced women. Early marriage has been shown in the literature to have detrimental effects on women by lowering educational attainment and increasing fertility rates.

The authors document marriage patterns among displaced and non-displaced women using 12 representative survey datasets from seven countries (Armenia, Cambodia, Colombia, India, Iraq, Kyrgyz Republic, and Nepal). The data shows that, across countries and over time, young displaced women are more likely to marry early compared with young women who are not displaced, while displaced and non-displaced men, regardless of age, appear to marry at similar rates.

The authors then focus their analysis on the particular case of Muslim refugees who were forcibly displaced from Indian Punjab to Pakistani Punjab following the partition of India and formation of Pakistan in 1947. Using a ‘difference-in-differences’ approach, the authors compare the age at which young displaced women married relative to two groups: (1) native-born women in the same age cohort; and (2) older displaced women (aged 30 to 32 at partition) who were married before partition. The analysis draws on data from Pakistan’s 1973 Housing, Economic, Demographic Characteristics (HED).

Main findings:
- Compared to native-born women of the same age group, displaced women who were adolescents (aged 13 to 17) at the time of partition married 0.28 years earlier, were 3.8 percentage points more likely to marry before the age of 18, and were 5.3 percentage points more likely to be married during partition (1947–1949). For displaced women who were very young children (aged 1 to 5) at the time of partition, there were only small negative and statistically insignificant effects on age of marriage and likelihood of marriage before age 18, when compared with native born women of the same age cohort.
- Displaced women who were adolescents (aged 13 to 17) at the time of partition were less likely than native-born women of the same age to continue their education and had higher fertility. However, displaced women who were much younger (aged 1 to 5) at partition were 3.5 percentage points more likely to be literate, 3.1 percentage points more likely to have completed primary school, and had more surviving children than native born women of the same age.
Displaced women don’t appear to have “lower spousal quality” than native-born women. In comparison to native-born women who were ages 30 to 32 at partition, young children at the time of partition appear to have married more educated and younger men, while for adolescent women at the time of partition there were no effects on the characteristics of spouses.

The authors conclude that displaced women tend to marry earlier than non-displaced women, but that these impacts depend on the timing of displacement during their lifetime. The authors suggest several potential mechanisms that might explain these results: (a) the threat of gender-based violence towards displaced women may have induced families to marry off daughters in order to afford them the protection of a male spouse; (b) the negative income and wealth shock precipitated by displacement may have induced families to marry off daughters to alleviate financial pressures; or (c) the displaced population in Pakistan had a higher share of males than the non-displaced population, which would have differentially increased the demand for women among the displaced population, leading to earlier marriage of displaced women.

Segregation of Syrian Refugees in Turkey: Evidence from Mobile Phone Data

Simone Bertoli, Caglar Ozden, and Michael Packard

*Journal of Development Economics*, Volume 152


This paper examines patterns of spatial segregation of Syrian refugees in Turkey, and how patterns of spatial segregation influence internal mobility decisions of refugees and natives as they move to other regions within the country. The analysis is based on anonymized Call Detail Records (CDRs) from Turk Telekom for their Syrian customers and for a large sample of Turkish customers, covering the period from January 1 to December 31, 2017. The database includes phone activity for a sample of nearly one million customers, out of which approximately 185,000 are tagged as refugees. The granularity of the data permits the analysis of calls made/received by refugees and natives at a geographically disaggregated level (i.e. for each cell phone tower) for each hour in 2017.

Using call volumes for refugees and natives at each cell phone tower as a proxy for the population distribution, the authors construct two indices (widely used in academia):
• A dissimilarity index measuring the share of refugees that would have to move from high to low concentration regions to match their average distribution across the country, i.e. to achieve full integration (an index of 1 implies complete segregation); and
• A normalized isolation index measuring the probability that refugees interact with the native population (an index of 1 implies no interaction).

The authors compare these indices over time, across regions of Turkey that have been differently exposed to the inflow of refugees, and across hours of the day. They then estimate gravity models of internal mobility between provinces to understand the determinants of refugees’ and natives’ mobility decisions during 2017. Using Istanbul as a case study to investigate the factors associated with internal mobility within provinces, the authors also estimate gravity models for internal migration between 41 districts in Istanbul.

Key results:
• **Dissimilarity is generally stable over time, while isolation tends to increase over time.** The dissimilarity index is relatively stable over time both at the national and provincial levels while the isolation index gradually increases over time, possibly due to increases in the market share of Turk Telekom or cell phone penetration among Syrian refugees (since the specification of the isolation index is sensitive to the share of Syrian refugees in the sample).
• **There is more segregation in provinces with a smaller share of refugees.** Provinces with a higher share of refugees tend to have significantly lower levels of dissimilarity and isolation, i.e. these provinces tend to be more integrated and there is more interaction between refugees and natives. Conversely, provinces with a lower share of refugees tend to have higher levels of dissimilarity and isolation, i.e. these provinces tend to be more segregated and there is less interaction between refugees and natives.
• **Refugees tend to move to provinces that host a larger number of refugees and lower levels of segregation, while levels of segregation do not influence natives’ mobility decisions.** Refugees tend to move to provinces that have large overall populations, high income per capita, larger numbers of refugees, and lower measures of segregation. Similar economic factors influence the mobility decisions of natives, but segregation has no effect.
• **Economic factors and diaspora networks are the key determinants of intra-provincial mobility within Istanbul.** Refugees tend to move to districts that have larger numbers of refugees, but segregation has no effect.
• **Residential segregation appears to be higher than labor market segregation.** Both dissimilarity and isolation indices dip during the day, especially in early afternoon and
increase in the evening. These patterns imply that there is large variation between where refugees live and work. This finding may explain why segregation has no impact on intra-provincial mobility decisions.

Cooperation in a fragmented society: Experimental evidence on Syrian refugees and natives in Lebanon

Michalis Drouvelis, Bilal Malaeb, Michael Vlassopoulos, and Jackline Wahba

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This paper examines intra- and inter-group cooperation of Syrian refugees and host communities in Lebanon. While Syrian refugees share similar ethnic, linguistic and cultural backgrounds with Lebanese nationals, there are tensions between the two groups due to historical tensions and economic pressures.

The authors carry out a ‘lab-in-the-field experiment’ in Lebanon with Syrian refugees and Lebanese nationals to evaluate levels of cooperation between and within the two groups and the extent to which punishments applied to enforce cooperation are effective in increasing cooperation. Cooperation is measured in a social dilemma game—first without and then with punishment opportunities, as follows:

- In the game without punishment, each participant is given 10 tokens and has to decide how many of them to keep and how many to contribute to ‘a project’ (a public good). Each token a participant keeps increases their own payoff by 1 experimental currency unit (ECU), while each token contributed to the public good increases the payoff of both players in the pair by 0.75 ECUs.
- In the game with punishment, participants can see the contribution of the other player in the pair and are given the opportunity to assign up to 5 punishment points to the other player. Each punishment point costs the punisher 1 ECU and the recipient of the punishment 3 ECUs.
- In the game with punishment, facilitators elicited each participant’s beliefs about the other player’s contribution behavior and expected punishment. Accurate beliefs were paid 1 Experimental Point exchanged at a pre-specified rate mentioned at the beginning of the instructions.

The 312 participants were randomly assigned to Lebanese-only, Syrian-only, or mixed sessions. At the beginning of each session, the facilitators conducted an ‘icebreaker’ that
revealed subtle differences in spoken Arabic to make the nationalities of the participants clear, without explicitly stating the nationalities of the participants. The participants were assigned to randomly formed pairs and played, anonymously, three rounds of the game without punishment and three rounds with punishment.

Main findings:

- **Contributions to the public good are higher in homogeneous groups than in mixed groups.** On average, randomly formed pairs in homogeneous sessions contribute more than those in mixed sessions, suggesting in-group cooperation is stronger. The reduction in cooperation in the mixed sessions is driven by the behavior of Lebanese participants, who tended to reduce their contributions in mixed sessions.

- **Homogenous groups have higher expectations of contributions to the public good.** In homogeneous sessions, participants have similar beliefs about the other player’s contribution, and expect the other player to contribute a larger amount of tokens to the public good compared to mixed sessions. Compared to participants in the homogeneous sessions, participants in the mixed sessions expect that the other player in the pair will contribute less. This effect is primarily driven by the behavior of Lebanese participants.

- **There is a higher tendency for participants in mixed groups to condition their cooperation on how much they believe the other player in the pair will cooperate than in homogeneous groups.** In the homogeneous sessions, cooperation appears to be driven more by an unconditional relationship between contribution and beliefs, which could be attributed to altruistic motives. In contrast, participants’ contribution behavior in the mixed sessions is more strongly conditioned on their beliefs about the other player’s behavior, suggesting a pattern of reciprocal behavior.

- **Mixed groups punish significantly less than homogenous groups.** Participants punished both negative and positive deviations from their own contribution. There was a substantial degree of antisocial punishment (i.e. the sanctioning of players who behave prosocially), especially in Lebanese-only sessions. On average, randomly formed pairs in homogeneous sessions punished significantly more than those in mixed sessions, a result that is driven by Lebanese participants. This suggests that for the Lebanese participants, there is a lower willingness to punish out-group defectors and an inclination to punish in-group cooperators.

- **There were no differences in average net earnings between homogenous and mixed groups, when the cost of punishment is taken into account.** Average earnings were significantly lower in mixed sessions compared to homogeneous sessions in the public goods game with punishment, but only at the contribution stage. There were
no differences between homogeneous and mixed groups, when adjusting total earnings for the costs of punishment.

The authors conclude that the mixing of the two groups leads to lower contributions to the public good, and sanctions are not able to redress this lack of cooperation. They note that behavior is not symmetric across the two groups, as it is the host community that shows less cooperation toward the refugees. The authors call for future research to assess whether interventions aimed at increasing intergroup contact, trust and co-operation would help to reduce outgroup biases and increase public good provision, which are important for the well-being of refugees and host communities.

**Migration shocks and housing: Short-run impact of the Syrian refugee crisis in Jordan**

Ibrahim Alhawarin, Ragui Assaad, and Ahmed Elsayed


This paper evaluates the impact of inflows of Syrian refugees into Jordan on housing conditions and rental incomes for Jordanian nationals. By the end of 2019, when this paper was written, Jordan hosted 660,000 registered Syrian refugees, of whom 80 percent lived outside official refugee camps. The 2015 Population Census of Jordan put the number of Syrians in Jordan much higher at 1.3 million, of which 953,000 were recorded as refugees.

The authors employ a ‘difference-in-differences’ approach to evaluate the change in housing conditions and rental prices in areas with relatively higher flows of Syrian refugees compared to areas with relatively lower flows of Syrian refugees. The analysis is based on three main sources of data: (1) data on numbers of Syrian refugees by locality (and districts) from the 2004 and 2015 population censuses; (b) data on housing and living conditions from the 2010 and 2016 waves of the Jordan Labor Market Panel Survey (JLMPS); and (3) data on housing conditions and rent from the 2006 and 2013 rounds of the Jordan Household Expenditure and Income Survey (HEIS).

To measure housing quality, the authors draw on data from JLMPS to construct a housing quality index (HQI), taking into account: floor type, water facility type (public, well, tanker or other), type of heating (central heating, gas, kerosene, electric, solar, wood and coal or
Main findings:

- **The Syrian refugee influx had a negative impact on housing quality.** A one standard deviation increase in the change of the share of Syrian households at the locality level decreases the housing quality index (HQI) by 0.18 standard deviations. There is, however, no significant effect of refugees on dwelling area per person or on the probability of home ownership.

- **The refugee influx led to increases in rental prices.** A one standard deviation increase in the change of the share of Syrian households at the district level, raised real rents by 13 percent.

- **These effects are more pronounced among poorer and lower-educated households,** i.e. groups who may be in competition with refugees for housing. The low educated (and to a lesser extent the poor) are also affected negatively by the influx of refugees in terms of number of rooms per household member.

- **The refugee influx induces locals to move across localities.** The probability that individuals change their locality during or after 2011 (the beginning of the Syrian civil war) increased more significantly in localities that received above median inflows of refugees. Residential mobility from these localities increased by about 1.7 percentage point relative to localities that received below median inflows of refugees.

The analysis suggests that poorer Jordanians are in direct competition with refugees over access to affordable housing. The authors argue that this effect could be mitigated through more inclusive housing finance or greater incentives to increase the supply of low-end rental housing.

**Reexamining the Effect of Refugees on Civil Conflict: A Global Subnational Analysis**

Yang-Yang Zhou and Andrew Shaver

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This paper examines whether the presence of refugees increases the likelihood of civil conflict in host countries.
The analysis exploits global data on geocoded sites of refugee communities (including both formal camps and informal settlements), which are combined with geocoded data on conflict outcomes and other development-related indicators at the subnational (provincial) level from 1990 to 2018.

Main findings:

- **Areas hosting refugee communities do not experience more conflict compared to areas without refugees.** The presence of refugees does not lead to new conflict, prolong ongoing conflict, or increase the intensity of conflict (as measured by the number of violent events and number of battle deaths).

- **Under certain conditions, refugee settlement has negative effects on conflict likelihood.** Specifically, if refugee sites are geographically concentrated in a country, have had time to become more established, and accommodate large numbers of refugees, then hosting provinces experience large decreases in conflict risk and intensity.

- **There is suggestive evidence that this ‘conditional risk reduction’ effect is due to increased development and state capacity resulting from economic activity, aid, and infrastructure within these areas.** An analysis of night-time lights data as a proxy for development, indicates that these hosting provinces benefit from increased development, reflecting the increased presence of humanitarian organizations around such sites.

Overall, the results demonstrate that refugee hosting generally has no effect on conflict risk, and in some cases, a substantial negative effect. The authors argue that the potential stabilizing effects of refugee communities are both underappreciated and potentially more important than the destabilizing ones.