



Forced Displacement Literature Review

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Refugee mobilities in East Africa: understanding secondary movements

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This article **examines the mobility aspirations of refugees in Kenya, Uganda, and Ethiopia, and includes an in-depth analysis of the mobility patterns of refugees in Kenya**. The research challenges common assumptions about refugee mobility, that: (1) most refugee secondary movements (the movement of refugees from the first country in which they arrive) are South-North; (2) refugee movements are predominantly irregular; (3) aspirations to move translate into actual movements; and (4) refugees who remain in regions of origin are largely immobile.

The authors study a range of refugee movement, including intra-urban/camp, inter-urban/camp, intra-regional migration, and inter-regional (i.e., international) migration. They consider three phases of mobility-related decision making: hope, expectation, and actual migration, and whether these are conditioned by indicators of capacity such as income levels.

The analysis on hope and expectation draws on quantitative data collected between 2016 and 2017 from refugees and host communities living in Kenya (Kakuma refugee camp and Nairobi), Uganda (Nakivale refugee settlement and Kampala), and Ethiopia (Dollo Ado refugee camps and Addis Ababa). The sample includes 8,970 refugees and 7,638 members of the host populations, with data collected in each context being representative of the main refugee populations and host communities. Additional panel data was collected two to three years later in Kenya to track the movements of all individuals who were interviewed in the baseline surveys. The quantitative analysis was complemented with qualitative research, including focus group discussions and semi-structured interviews.

Main findings:

- **A large majority (more than 60 percent) of refugees expected to leave their host countries for a third country (i.e., not their host or home country)**. The proportion of refugees expecting to move to a third country is particularly large for Somali refugees in Kakuma (93 percent), Nakivale (65 percent), and Kampala (73 percent) due to shrinking business opportunities, police harassment, decreasing food rations, worsening security,

and poor social services such as education and medical facilities. 17 percent of refugees expected to remain where they were living due to limited resources or networks necessary for onward migration.

- **While financial capacity is not a strong determinant of expectations to migrate internationally, having networks abroad do predict expectations to relocate.** Living standards do not predict expectations to migrate internationally, suggesting that financial constraints are not an important determinant of aspirations. Network variables (such as receiving remittances and having family networks in high-income countries) predict expectations to move, especially internationally. Refugees in camp-like contexts who speak English are also more likely to expect to migrate, especially internationally.
- **Refugees are highly mobile.** In Kenya, 23 percent of camp refugees and 37 percent of urban refugees change their primary residence each year. These rates of residency change are much higher than in host communities. This suggests that refugees are not sedentary in their first countries of asylum, despite the common assumption of immobility within research and policy circles. There isn't any evidence that having a network abroad or receiving remittances affects refugees' decision to move.
- **Most refugee movements are internal, including camp-to-urban movement, inter-urban movement, and intra-urban movement.** In Kenya, 6 percent of camp refugees and 24 percent of urban refugees moved internally, the majority within the camp or to a few cities. The most common type of internal movement is intra-urban movement, i.e., local movements within Nairobi. The main reasons for internal movements include the search for new work opportunities and real estate dynamics such as renovation, demolition, and rent increases. The relationship between internal migration and income levels appears to be U-shaped—most refugees in the middle of the wealth distribution appear to be less likely to move internally compared to the very poor or rich.
- **While a large majority hope to migrate internationally, and a smaller majority expect to migrate internationally, actual international migration by refugees in first countries of asylum is rare.** For example, 62 percent of refugees in Kakuma expect to migrate internationally, but only 14 percent actually do. The relationship between international migration and living standards appears to have an inverted U-shaped relationship, i.e., a positive relationship for most refugees, except for the very poor or rich. Additionally, there is some evidence that human capital partly predicts international migration, as individuals with vocational training are more likely to migrate internationally, and individuals with mental health issues are less likely to migrate internationally.
- **Most international migration is to refugees' home countries or to other countries in the Global South.** Somali refugees in Kakuma took advantage of UNHCR's

repatriation program during the study period, citing several reasons for their decision to return including: (a) little hope of resettlement from Kakuma; (b) insecurity in the camp, (c) lack of access to higher education; or (d) repatriation cash benefits. Some South Sudanese refugees returned spontaneously without UNHCR assistance, but back-and-forth movements and family-splitting strategies are common among South Sudanese refugees in Uganda.

- **Few refugees migrate to the Global North.** Refugees have two main routes to migrate to the Global North: migration to Canada, the US, and Australia (through UNHCR's resettlement program) and migration to Europe (through irregular channels). Only 1.2 percent of camp refugees and 4.9 percent of urban refugees move, regularly or irregularly, to rich countries each year. Most of these movements are regular, facilitated through UNHCR resettlement programs; 1.1 percent of camp refugees and 3.7 percent of urban refugees benefit from resettlement opportunities each year.

These findings **challenge the dominant belief that refugee mobility is reducible to irregular secondary movements from poor to rich countries**, specifically: (1) secondary movements are predominantly South-South movements; (2) of the tiny minority of refugees who engage in South-North movement, most move via 'regular' channels to third countries (UNHCR resettlement programs or education visas); and (3) while many refugees may aspire to move to rich countries, few actually do; (4) while a large majority hope to migrate internationally, and a smaller majority expect to migrate internationally, actual international migration by refugees in first countries of asylum is rare; (4) internal migration within the country of first asylum is common.

Syrian Refugees and Human Capital Accumulation of Working-age Native Children in Turkey

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This paper **examines the effect of Syrian refugees on the school enrollment and employment of working-age native children in Turkey**. The authors analyze the distributional effects of the refugee shock for children with various levels of parental education.

The authors exploit the variation in the ratio of refugees to natives across regions in Turkey using a difference-in-difference approach. The analysis is based on data from two main sources: (1) individual data for working aged children (aged 15-17) from the Turkish Household Labor Force Survey (HFLS) published by the Turkish Statistical Institute (TurkStat); and (2) provincial numbers on the ratio of Syrian refugees to natives from the Disaster and Emergency Management Presidency of Turkey (AFAD) and the Ministry of Interior Directorate General of Migration Management of Turkey.

The data reveals that overall, in Turkey:

- Most working-age children (71 percent of boys and 63 percent of girls) are enrolled in school.
- 23 percent of working-age boys and 10 percent of working-age girls are employed, mostly in the informal sector.
- 7 percent of working-age boys (31 percent of employed boys) and 2.7 percent of working-age girls (26 percent of employed girls) combine work with school.
- A large fraction of working-age children is neither in employment nor in education or training (NEET): 14 percent of working-age boys and 29 percent of working-age girls.
- Most household heads (64 percent) have a primary or secondary school degree, 16 percent have no degrees, and 20 percent have a university degree.

Main empirical results:

- **The refugee shock reduced boys' employment and increased their school enrolment.** A 1 percentage-point increase in the migrant-native ratio reduced boys' employment by 0.7 percentage points and increased their enrolment by 0.3 percentage points.
- **The refugee shock reduced girls' employment but did not have any effect on their school enrolment.** A 1 percentage-point increase in the migrant-native ratio reduced girls' employment by about 0.5 percentage points.
- **The informal sector drives the effect on employment of both boys and girls.** The employment effects are larger than those reported for adult natives in the informal sector, presumably because children are likely to be doing the simplest tasks that newly arrived refugees can easily learn.
- **The positive refugee effect on boys' enrolment is stronger for those with more-educated parents,** consistent with the expectation that higher earnings in the formal sector for more-educated parents (resulting from the positive impact of refugees on employment and wages there) reduce the marginal utility of their children's earnings and

increase the demand for education as a consumption good. A 1 percentage-point increase in the migrant-native ratio lowers the informal employment rate by 3.6 percent for boys with less-educated household heads and by 10.2 percent for boys with more-educated household heads.

- **Overall, the arrival of Syrian refugees does not affect the incidence of boys with NEET status (neither in employment nor in education or training) but reduces the incidence of boys with NEET status for households with more educated parents.** The arrival of every ten refugees pushes three boys from work to school and four boys from combining school and work to school only, but it does not increase the incidence of boys with NEET status. However, the arrival of ten refugees eliminates the NEET status of three boys in households with more educated parents, pushing them into education.
- **The arrival of refugees increases the incidence of girls with NEET status.** For every ten incoming refugees, about three native girls do not combine school and work anymore and about three native girls are pushed into NEET status. The increase in girls with NEET status occurs in families with less-educated parents.
- **The Turkish government increased investment in school infrastructure due to the refugee influx.** A 10 percentage-point rise in the migrant-native ratio increased the number of schools by 12 percent. There isn't any evidence of a change in the average class size or the student-teacher ratio due to the refugee influx.

Overall, **the Syrian refugee influx reduced the employment of working-age Turkish youth in the informal labor market.** While both boys and girls are displaced in the informal labor market, there is only an increase in school enrollments for boys. For girls in less educated households, there is an increase in the incidence of NEET status. Consequently, **the arrival of refugees has a more negative effect on the human capital accumulation of working-aged girls than boys, but particularly for girls from less privileged backgrounds.** The authors recommend policy responses that minimize the adverse effects of forced migration on girls, particularly those with less-educated parents.

Inclusive refugee-hosting can improve local development and prevent public backlash

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This paper **examines whether the presence of large numbers of refugees in Uganda affects the provision of public services in nearby host communities, and whether improvements in public services in turn shapes attitudes toward migrants and migration policies.**

Uganda hosts around 1.4 million refugees, making it the fourth-largest refugee-hosting country in the world and the seventh largest on a per capita basis (UNHCR, 2020). Uganda has implemented progressive policies towards refugees including maintaining an open-door policy, allowing refugees to move freely within the country and self-settle, allowing refugees to participate in economic activities, granting plots of land for permanent shelters and farming, providing refugees with access to health and education services, while also ensuring that host communities benefit from refugee-related aid.

The authors exploit the spatial (across parishes) and temporal (annual) variation of refugee settlement within Uganda using a difference-in-difference approach. The analysis draws on several sources of longitudinal, geocoded data including: (a) refugee settlements from UNHCR; (b) citizen attitudes from Afrobarometer; (c) data on primary schools from the Uganda Education Management Information Systems and other sources; (d) data on secondary schools from the Uganda Ministry of Education; (e) data on health facilities from the Uganda Bureau of Statistics and the Ministry of Health; (f) road data from NASA and WFP; and (g) violent events from ACLED.

Main findings:

- **Parishes with a greater refugee presence had worse public goods provision prior to the arrival of refugees.** Therefore, it is unlikely that refugees chose to settle in these areas to access better public goods.
- **Host community parishes with a greater refugee presence have better access to social services.** Access to primary and secondary education, access to health care and health care utilization, and roads significantly improved for Ugandan residents living near refugee settlements, particularly after the 2014 arrival of over 1 million South Sudanese

refugees. This result is consistent across alternative measures of proximity to refugee settlements.

- **The presence of refugees does not lead to a backlash against refugees or refugee policies.** A larger refugee presence does not appear to increase (or decrease) support for restrictive migration policies, although in some years it is associated with a heightened sense of personal insecurity. These fears are unfounded, as no evidence is found of changes in actual likelihood of violence in parishes with greater refugee presence.

The authors conclude that, overall, host communities near refugee settlements in Uganda experience positive spillovers. Even if living near many refugees can make residents feel less safe (and may be associated with other negative externalities not examined in this paper), **resource allocation policies that benefit nearby communities can reduce potential backlash against refugees and improve social cohesion between host communities and refugees.**

The effects of refugees' camps on hosting areas: Social conflicts and economic growth

Nicola Daniele Coniglio, Vitorocco Peragine, and Davide Vurchio

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This article **investigates the effects of refugee camps on the occurrence of social conflicts and on economic growth in the Africa region.** The authors investigate the effect of 140 refugees' camps listed in the UNHCR Camp Mapping Database in 22 African countries, located within 100 km from the border. Most of the camps are in Ethiopia (26 camps), Sudan (22 camps) and Republic of Chad (22 camps), South Sudan (9 camps) and Cameroon (9 camps).

The authors employ a counterfactual approach, comparing 50 x 50 km geographical cells that host a camp with other similar cells that do not host a camp but are equally exposed to shocks in neighboring countries, and conduct a panel event study (difference-in-difference approach). The analysis draws on geo-referenced panel data covering 54 African countries for the period from 2000 to 2014, including: (1) data on the frequency of protests, armed conflicts and other organized violence events from Google Global Database for Events,

Language and Tone (GDELT) and UCDP Georeferenced Event Dataset (GED) databases; and (2) data on the location of camps from the UNHCR Camp Mapping Database.

Main results:

- **Refugee camps increase the occurrence of protests, but the effect is short-lived.** On average, there is an increase in the incidence of protests in the 2 years following the establishment of a camp. In subsequent years, there isn't any evidence of an increase in social conflict or organized violence events. Looking only at the most severe conflicts, i.e., organized violence events resulting in casualties, there isn't any evidence of a significant increase in conflicts in areas with refugee camps at any time.
- **The establishment of camps boosts the growth of host localities.** On average, areas hosting camps (within 10 km of the camps) experienced higher growth of built-up areas compared to areas further away with similar distance from the border and a similar infrastructure endowment. However, there is a high degree of heterogeneity across host localities, with the least-performing areas being highly marginal areas with low population density.

The authors conclude that **a sudden population shock initially increases social tensions with host-communities. Over time, however, the easing of tensions might be related to the increased socio-economic interactions between refugees and hosts and the diffusion of benefits stemming from the proximity of a 'camp-economy' to host communities.**

Economic Impact of Giving Land to Refugees

Heng Zhu, Anubhab Gupta, Mateusz Filipski, Jaakko Valli, and Ernesto Gonzalez-Estrada, J. Edward Taylor

American Journal of Agricultural Economics (2023)

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The authors **examine the impact of giving refugees access to cultivable land on refugee and host community welfare in Uganda.** Cultivable land is allotted randomly to refugees when they arrive in refugee settlements, provided idle land is available at the time of their arrival. On average, refugee households received a plot roughly 0.5 hectares in size.

The authors exploit the quasi-random nature of land allocations to estimate the impact of an initial land endowment on refugee welfare (as measured by household income, the share of

household income that is not aid, quality of dwelling, food security, consumption, and dietary diversity), as well as the spillover effects on income and production in the surrounding host communities.

The analysis is based on a 2016 survey of refugees in Rwamwanja refugee settlement in Kamwenge district of southwestern Uganda. The survey also covered local households and businesses living within 15 kilometers of the settlement. At the time of the survey Rwamwanja settlement had a population of 103,000 refugees, mostly from the Democratic Republic of Congo.

Main results:

- **Land distributions have a significant and positive impact on refugee income, consumption, and welfare.** Taking into account differences in household characteristics, household income is 49 percent higher in households that initially receive cultivable land; and 9 percent more households earned income when they received land. The effects on welfare indicators including per-capita expenditure on consumption items are positive but not statistically significant.
- **Refugees' ability to utilize land for productive activities improves their self-reliance, which translates into higher and more diverse food consumption.** Refugees farm their land intensively, and the food they produce is an important source of nutrition. They sell some of this food in local markets to raise cash, most of which they spend locally, creating new income spillovers. However, the initial land-endowment effects on food security are positive but not significant, likely reflecting the influence of food aid on food security.
- **Refugee households receiving larger plots of cultivable land have better quality dwellings.** Refugee households receiving larger plots of cultivable land scored higher on the index of dwelling characteristics: an additional hectare raises the index by more than one-third of a standard deviation.
- **Refugees create income spillovers by demanding locally supplied goods and services, benefiting households and businesses within 15 kilometers of the settlement.** Increased demand from refugees stimulates local crop and non-crop production and generates positive income spillovers. Additionally, a sizeable number of refugees set up businesses that purchase inputs from host country businesses and households, and many sell their labor to businesses inside or outside the settlements. As local incomes rise, so does demand, and this generates multiple rounds of impacts in the local economy while stimulating trade that transmits benefits to other parts of the

country. The total impact of an additional refugee household on annual real income in the local economy is around US\$1,106 if the household receives food aid in cash and US\$866 if it receives in-kind food aid—amounts that easily exceed the cost of food aid. The income gain is large when compared with average income in host country households around the settlement.

The authors conclude that **refugees can create significant economic benefits for the countries that host them, and these benefits increase the more refugees are able to engage in host country markets. Total production and income impacts are larger when refugees receive assistance in the form of cash spent on locally supplied goods and services, and when they are given access to land.** The potential economic benefits are also larger when governments locate refugee settlements in places where local farmers and other producers can supply refugees' demands and where there is a potential for refugees to supplement their income by working or establishing businesses, generating stronger local linkages.

Impact of Syrian Refugees on Male Immigrants' Labor Market Outcomes in Jordan

Bilal Malaeb and Jackline Wahba

International Migration Review (2023)

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This article **examines whether the Syrian refugee inflow to Jordan has displaced other immigrant workers in the Jordanian labor market.** Since the start of the Syrian war, more than 1.3 million Syrian refugees have settled in Jordan. At the same time, between 2004 and 2015, Jordan received an additional 1.6 million immigrants. Together, refugees and immigrants increased Jordan's population by 45 percent.

The authors compare areas with high and low exposure to refugees to estimate the impact of refugees on the labor market outcomes of male immigrants relative to male natives (aged 15-59 years). The authors address the possibility that refugees choose to settle in places with better labor market opportunities by employing an instrumental variables approach.

The analysis draws on individual and household data from the Jordanian Labor Market Panel Survey (JLMPS) for 2010 (before the Syrian refugee influx) and 2016 (after the Syrian

refugee influx), as well as the number of Syrians at the sub-district level from the 2004 and 2015 Jordanian censuses. Descriptive statistics show that:

- The share of immigrant men (excluding Syrian refugees) increased from 8 percent to 18 percent between 2010 and 2016. Most immigrants are Arabs, and Egyptians are the largest single non-refugee immigrant group, comprising 4 percent in 2010 and 13 percent in 2016.
- Almost three-quarters of working age immigrant men and Jordanian men were active in the labor force, but both groups experienced a drop in labor market participation in 2016.
- Nearly all immigrant men in the labor force were working, and very few were unemployed. Most immigrant men worked in informal jobs, while Jordanian men had much lower levels of informality. Approximately 40 percent of Jordanian men worked in the public sector, while almost no immigrant men did.
- Jordanian men reported higher hourly wages, but similar work hours compared to immigrant men.
- Between 2010 and 2016, there was a substantial increase in the number of immigrants performing agricultural work and a decrease in both construction and manufacturing work, whereas the economic activities performed by Jordanians did not change in this period.
- On average, immigrant men had fewer years of schooling, compared to Jordanian men.

Main empirical results:

- **Immigrant men were more likely to be underemployed in areas with high concentration of Syrian refugees.** The predicted probability of immigrants' inactivity was 35 percent (10 percentage points higher) in areas with high refugee exposure (those above the mean share of refugees), compared to in areas with low refugee density (those below the mean).
- **Immigrant men were more likely to work in the informal sector in areas with high concentration of Syrian refugees.** The predicted probability of immigrants being engaged in informal employment rose to 75 percent from 70 percent in high versus low refugee density areas, whereas the average for Jordanians was 38 percent with no significant difference between high and low refugee density areas.
- **Immigrant men were more likely to work fewer hours in areas with high concentration of Syrian refugees.** In areas with higher refugee concentration, immigrants worked at least 1.5 fewer hours per day than in areas with lower concentration. The impact on hours worked was larger in economic sectors open to refugees. In the agricultural sector, immigrants worked less than 6 hours a day,

compared to over 8.3 hours a day in areas with fewer refugees. In construction, immigrants worked only 6.2 hours per day, rather than 8.1 hours per day.

- **Immigrant men were more likely to earn lower monthly wages in areas with high concentration of Syrian refugees.** Immigrant men earned 9 percent lower monthly wages, due to competition with refugees. The impact on monthly earnings were larger in economic sectors open to refugees; in agriculture, immigrants earned 22 percent less, and in construction 27 percent less, in areas with high refugee concentration.
- These results hold regardless of economic sector or educational attainment of immigrants.
- Immigrant men reacted to the influx of refugees by choosing sub-districts with lower concentration of refugees, however their labor market outcomes were still adversely impacted by refugees.

Overall, **immigrant men experienced negative labor market outcomes in Jordan, relative to Jordanian men, because of the refugee influx.** The authors conclude that the main competition that occurred in the Jordanian Labor Market, between 2010 and 2016, was not between refugees and Jordanian nationals, but between refugees and immigrants. These results are important for policymakers interested in the welfare of immigrants who might become underemployed and potentially worse off because of competition with refugees.

The labor market integration of Syrian refugees in Turkey

Murat Demirci and Murat Güray Kırdar

World Development, Volume 162 (2023), Article 106138

<https://doi.org/10.1016/j.worlddev.2022.106138>

This paper **examines the labor market integration of Syrian refugees in Turkey.** Since 2018, Syrian refugees in Turkey have numbered more than 3.6 million.

The analysis draws on data from the 2018 round of the Turkey Demographic and Health Survey (TDHS), which includes a representative sample of Syrian refugees in Turkey for the first time. Descriptive statistics reveal that:

- On average, refugees are younger and less educated than natives.
- Refugees are more likely to live in southern and southeastern provinces, where employment rates are low.

- Syrian refugees had spent an average of 3.8 years in Turkey.
- Employment rates are higher among natives (69 percent of men, 22 percent of women) compared to Syrian refugees (62 percent of men, 6 percent of women).
- Refugee men are more likely to be employed as wage workers (88 percent) compared to native men (73 percent).
- The proportion of male workers employed in manufacturing is higher among refugees, and the proportion employed in services is lower. Among female workers, the proportion employed in agriculture is higher and the proportion in the service sector is lower.
- Refugees are more likely to be employed informally (99 percent of married men, 98 percent of women) compared to natives (19 percent of married men, 38 percent of native women).

Main empirical results:

- **Overall employment levels are not much lower for refugees than for natives.** Gaps in labor market outcomes (employment, unemployment, and labor-force participation) between natives and Syrian refugees in Turkey narrow considerably (especially for women) once differences in demographic and educational characteristics of natives and refugees are accounted for. The remaining native-refugee gap in paid employment is small: 4.7 percentage points (pp) for men and 4.0 pp for women.
- **Syrian refugees in Turkey lag natives in terms of employment quality.** Gaps in job characteristics persist and display significant heterogeneity, even after differences in demographic and educational characteristics of natives and refugees are accounted for. Refugees are significantly less likely to be employed in most types and sectors of jobs, with the gap being smallest in wage employment, manufacturing for men, and agriculture for women; and larger gaps in self-employment and unpaid family work.
- **Refugees are much more likely to work in the informal sector.** Even after demographic and educational characteristics are accounted for, married refugee men are 58 pp less likely to be formally employed than married native men.
- **There is considerable variation in the labor-market integration of Syrian refugee groups by age, education, mother tongue, and region of residence.** While refugee employment is higher than native employment among young adults (as native youth are more likely to be in education), it is lower among working-aged people. For more educated refugees, particularly women, the employment gap is wider. Language has a significant effect on employment for men, but not for women. Refugee men do better in regions that provide many job opportunities in manufacturing, while refugee women are more likely to find work in regions with many agricultural jobs.

Overall, the findings show a much **smaller native–refugee gap in men’s employment in Turkey (favoring natives) than that reported for most developed countries**. These small gaps conceal the fact that **formal-employment rates are much lower among refugees**. Although many refugees are successful in finding employment in Turkey, they work primarily in the informal sector, where wages are lower on average and job losses more likely.

Child poverty among refugees

World Development, Volume 171 (2023), Article 106340

Theresa P. Beltramo, Rossella Calvi, Giacomo De Giorgi, and Ibrahima Sarr

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This article **estimates the intra-household allocation of consumption in refugee settlements and surrounding communities in Kenya and Uganda, and examines the implications for child poverty**. Uganda is the largest refugee hosting country in Africa, with more than 1.5 million refugees and asylum seekers as of June 2022. Kenya is the third-largest refugee-hosting country in Africa, after Uganda and Ethiopia, with over 555,000 refugees and asylum seekers as of June 2022.

The authors estimate the share of household expenditures for individual household members by identifying personal expenditures that are assignable (exclusively to either men, women, or children) or otherwise allocatable to individual members. Individual shares of household expenditures are then used to compute poverty rates at the individual level. The authors also apply a supervised machine learning algorithm to identify the most critical predictors of child poverty.

The analysis is based on data from: (1) the 2018 Uganda Refugee and Host Communities Household Survey, which covers households in the largest refugee settlements and in surrounding host communities in the West Nile and South West regions of Uganda; (2) the 2018–2019 Kalobeyei Socio-Economic Assessment covering refugee households in the Kalobeyei refugee settlement in Kenya; and (3) the 2015–2016 Kenya Integrated Household Budget Survey covering Kenyan households. Descriptive statistics reveal:

- Refugee households tend to be larger in size relative to host households and have higher youth dependency ratios (share of children to adults).

- In both Uganda and Kenya, refugee households are twice as likely than hosts to have female heads.
- The average per-capita household expenditure is higher in Kalobyei relative to its surrounding host communities, whereas the average per-capita household expenditure in refugee settlements in Uganda is lower relative to host communities.

Main empirical findings:

- **Children in both refugee settlements and host communities are allocated a disproportionately low share of household consumption relative to adults.** In all refugee settlements but with varying intensity, adults' consumption is above the household per-capita consumption, while children's consumption is substantially below. Intra-household consumption inequality (the degree to which household resources are shared unequally within households) is widespread in refugee camps and the surrounding hosts communities and in all regions.
- **Children in both refugee and host communities are more likely to be poorer than adults due to the unequal allocation of resources within households.** The poverty rate among refugee children ranges from 39 percent in Kenya to 69 percent in the South West region of Uganda. Among hosts, child poverty ranges from 27 (in the West Nile region of Uganda) to 69 percent (in the South West region of Uganda).
- **Refugee children suffer a disproportionately high poverty risk compared to children in surrounding host communities.** The total poverty gap for children in refugee settlements is estimated to be as much as five times larger than in the surrounding non-refugee communities.
- **Up to almost half of poor refugee children live in non-poor households.** These children would not be reached by anti-poverty programs that ignore intra-household consumption inequality.
- **A small set of observable traits can predict child poverty in refugee settlements and surrounding host communities.** These include a child's age and gender, household composition (such as the age of the household head, household size, number of children in the household), measures of household food insecurity, the head of household's education and employment status, the number of rooms in the dwelling, and access to sanitation and clean water.

Overall, the results show that **intra-household consumption inequality is widespread in both refugee and host communities in Uganda and Kenya, with children facing a particularly elevated risk of poverty.** The authors conclude that household-level poverty

measures based on per-capita expenditure may be weak proxies for child poverty in and around refugee settlements. Without explicitly accounting for the high incidence of children who are poor in non-poor households, existing humanitarian and development programs targeting assistance to poor households will miss these children, making them especially vulnerable. The authors suggest several econometric approaches to predict and target child poverty.

The Mental Health Costs of Armed Conflicts—A Review of Systematic Reviews Conducted on Refugees, Asylum-Seekers and People Living in War Zones

Bernardo Carpiello

International Journal of Environmental Research and Public Health, Volume 20, Issue 4 (2023)

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This paper investigates **the mental health consequences of war on refugees or those living in war zones** through a review of all systematic reviews and/or meta-analyses published since 2005. The author identified 22 systematic reviews and/or meta-analyses for the review, including 15 studies in adult populations and seven focused on children and adolescents.

Main findings:

- **Adults and children who have been exposed to armed conflict or who have been displaced have much higher rates of mental health disorders.** The prevalence of anxiety, depression, and post-traumatic stress disorder (PTSD) were two to three times higher amongst people exposed to armed conflict or who have been displaced compared to those who had not been exposed. Rates of common mental disorders appear to decrease gradually in post-war periods.
- **Women and children are the most vulnerable to developing mental health disorders following experiences of armed conflict,** with incidence correlated with the degree of trauma and access to physical and emotional support. In women, the higher risk of war-related mental health consequences is related to sexual and physical violence. War-related mental health issues in minors is a complex process relating to the stage of exposure, length of conflict, and other contextual factors
- **A series of war-related, migratory, and post-migratory stressors contribute to short- and long-term mental health issues in displaced populations.** Stressors

include: (1) socioeconomic factors such as unemployment or underemployment, financial restrictions/poverty, or lack of secure housing; (2) social and interpersonal factors such as family separation, change in previous social role, social isolation, discrimination, loss of social identity, lack of social support, or changes in gender role; and (3) factors related to the asylum process and immigration policies, such as mandatory detentions, extended processing times, insecure visa status, lack of access to legal services and representation.

The authors note the limitations in the current literature including the frequent low quality of studies, the scarcity of longitudinal studies, and the scarcity of studies on a wider range of mental health disorders beyond PTSD, depression, and anxiety. Overall, however, the results reveal the **high prevalence of emotional distress experienced by those exposed to armed conflict and forced displacement, including anxiety disorders, depressive disorders, and post-traumatic stress disorders**, which may be attributed both to direct exposure to the distress of war and to a series of displacement-related stressors.

Nowcasting Daily Population Displacement in Ukraine through Social Media Advertising Data

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The Russian invasion of Ukraine in February 2022 triggered the rapid displacement of millions of refugees into neighboring countries and the displacement of millions of Ukrainians within the country. In conflict and crisis situations such as this one, representative survey data quickly become outdated, primary data collection is challenging if not impossible, and the dynamic nature of population changes requires high-frequency measurement not suited to traditional data gathering techniques.

This study **uses aggregate data from Facebook's marketing tools, accessible via its marketing application programming interface (API), to estimate daily population sizes and internally displaced populations within Ukraine**. Facebook's marketing API provides estimates of current audience sizes for targeted advertising on the social media platform,

including counts of daily and monthly active users within specific age-sex demographic groups and subnational geographic areas.

The authors combine Facebook data with pre-conflict population data and daily counts of border crossings out of and into Ukraine to estimate: (1) daily population sizes for age-sex demographic groups within subnational administrative units (Oblasts) of Ukraine; (2) daily net changes in these populations relative to pre-conflict baseline population estimates; and (3) the total number of people internally displaced away from their original Oblast each day.

Results:

- **National total internal displacement increased sharply after the Russian invasion on February 24 reaching 5.3 million people by March 14.** Inter-Oblast displacement fluctuated between 5 million and 6 million thereafter reaching a peak of 6.2 million people on June 21. This national metric of internal displacement was sensitive enough to detect key events, such as the evacuation of Khersonska Oblast and mass returns of people to their home Oblasts during Orthodox Easter.
- Sub-national displacement and demographic patterns quantify large-scale evacuations of major cities in the first few weeks of the conflict, such as Kyiv and Kherson, and east-to-west movements of displaced persons during this period. They also capture the **distinct movements of women and children and of men in the initial months following the invasion.**
- Demographic patterns of internal displacement reveal (1) areas subject to large-scale evacuations where there were reductions in all or most age-sex demographic groups; (2) refugee staging areas (Oblasts with preferred international border crossings) where there were population increases across all demographic groups, but particularly women and children; (3) internal safe havens for nonrefugees (Oblasts with relatively few conflict events but without preferred international border crossings) where men and retirees tended to increase while women and children decreased or remained constant; and (4) irregular dynamics in some Oblasts.

This work highlights the value of nontraditional data for nowcasting (i.e., estimating in near real-time) population dynamics at high frequency to complement existing data sources and support targeted humanitarian assistance in response to a crisis.

Mapping of nighttime light trends and refugee population changes in Ukraine during the Russian–Ukrainian War

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This study **uses nighttime light measurements to quantify changes in nighttime lighting and the refugee population in Ukraine before and after Russia’s invasion**. The authors also evaluate the effectiveness of these new methods for estimating refugee population changes during the war.

The authors employed a logistic equation to construct a model of nighttime lights and refugee population fluctuations. Nighttime light data were obtained from the Day–Night Band (DNB) sensor of the VIIRS onboard the S-NPP and Joint Polar Satellite System (JPSS) satellite platforms and were analyzed in combination with UNHCR data on Ukrainian refugees.

Main results:

- **One week after the Russian invasion of Ukraine, the nighttime light area and the average nighttime light in Ukraine declined steeply.** In the first week following the outbreak of the war in Ukraine, the national nighttime light area fell by 50 percent, and by the fifth week, the nighttime light area had fallen by 75 percent, indicating widespread destruction. Various measures of the intensity of nighttime light also declined substantially. The changes in nighttime lights were especially pronounced in and around Kyiv and the northern and eastern regions.
- **Changes in the refugee population calculated through models and nighttime light data were mostly consistent with UNHCR data.** The authors found a strong correlation between the registered refugee population and nighttime lights.

The analysis reveals a substantial decline in nighttime light area and intensity across Ukraine, which is correlated with increases in the refugee population. Estimates of changes in the refugee population based on nighttime lights data were largely consistent with actual UNHCR data, suggesting that **nighttime light data could be used to complement or triangulate traditional sources of data on refugee flows**.