Multidimensional Poverty, Gender, and Forced Displacement

A Multi-Country, Intrahousehold Analysis in Sub-Saharan Africa

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Abstract

This paper examines multidimensional poverty among forcibly displaced populations, using a gendered lens. Although past studies have explored poverty in forcibly displaced contexts, and others have looked at the relationship between multidimensional poverty and gender, none has brought together these three issues—multidimensional poverty, forcibly displaced persons, and gender. A tailored measure of multidimensional poverty is developed and applied for refugees and internally displaced populations in five Sub-Saharan African settings substantially affected by forced displacement—Ethiopia, Nigeria, Somalia, South Sudan, and Sudan. The gendered analysis builds on prior analysis of the Multidimensional Poverty Index (MPI) by examining individual-level deprivations of women and men in forcibly displaced households and host communities, as well as synthesizing intrahousehold dynamics of multidimensional poverty in forcibly displaced communities. The results provide insights into the educational constraints of boys and girls living in forcibly displaced households, the labor market inequalities experienced by men and women in these communities, and their differential access to legal documentation and employment as part and parcel of the forced displacement experience.
Multidimensional Poverty, Gender, and Forced Displacement: A Multi-Country, Intrahousehold Analysis in Sub-Saharan Africa

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Data availability: The data that support the findings of this study are openly available at the World Bank Microdata Library at https://microdata.worldbank.org/index.php/home.
1 Introduction

Recent figures from the Internal Displacement Monitoring Centre (IDMC) estimate that in 2019, 24.9 million people across the world were newly displaced due to natural disasters, with another 8.5 million people forcibly displaced due to conflict and violence (IDMC 2020). Currently close to 46 million people are internally displaced in their home country, with 26 million living as refugees in a host country (UNHCR 2020). Some have moved for short periods, while others have been forcibly displaced for years or decades. In 2019, fewer than half a million forcibly displaced individuals had returned to their homes – signaling the protracted nature of displacement that has increased throughout the last decade, partly due to ongoing political instability in North Africa and the Middle East, and Sub-Saharan Africa (IDMC 2020). And while the displaced population amounts to only 1% of the global population, they are disproportionately affected by deprivation, often chronic. For instance, over 80% of all displaced people reside in countries and areas affected by acute food insecurity and malnutrition (UNHCR 2020), and many of the internally displaced and refugee families live in temporary housing or camps with basic living conditions and have limited access to services and employment.

Existing gendered analyses of forcibly displaced persons tend to center gender-based violence as the organizing vulnerability in people’s lives, rather than poverty status (Fiddian-Qasmiyeh 2014). Admasu et al.’s (2021) inclusion of the MPI as an element of examining gender difference added a new dimension to this field, finding that women were more likely to head multidimensionally poor households than men in most of the five countries studied here – Ethiopia, Nigeria, Somalia, South Sudan, and Sudan. As the MPI is a household-level measure of multidimensional poverty, strictly reporting the MPI headline results obscures the divergent experience of individuals within the household. This paper builds on the work of Alkire, Ul Haq, and Alim (2019) with its focus on individual deprivations and intrahousehold analysis using the gender-sensitive refugee

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MPI, constructed in Admasu et al. (2021), to capture the deprivations of forcibly displaced individuals and their gendered lives.

The paper proceeds as follows. Section 2 reviews the existing literature to provide the background and motivation for the analysis, including a summary of the different country contexts covered by the case studies in this paper. Section 3 outlines the measurement strategy for deconstructing the MPI used for analysis and its limitations, followed by Section 4, which introduces the data. Section 5 presents the findings, first for deprivation results at the individual level and then results evaluating intrahousehold inequalities. Concluding remarks are discussed in Section 6.

2 Background and Literature Review

2.1 Individual-level measures of gender and multidimensional poverty

Individual-level analyses of multidimensional poverty have mostly centered around children, with various studies analyzing the relevance of indicators for children (aged 0-17 years),² as well as other age ranges. The MPI has also been used to better understand gender issues, for example, Batana (2008) implemented a women’s MPI in Sub-Saharan Africa. Bhutan’s Gross National Happiness measures (2010, 2015), Vijaya et al. (2014), and Klasen and Lahoti (2016) are implemented at the individual level. The Women’s Empowerment in Agriculture Index (WEAI) (Alkire et al. 2012) uses individual-level data, and the linked Gender Parity Index reflects inequalities across women and men’s deprivation scores within the same household. Alkire, Apablaza and Jung (2014) design and implement an exploratory individual-level MPI for 31 European countries over six waves of data using EU-SILC data sets, finding no cases in which are women significantly less poor than men, and in many cases, they are significantly poorer. Espinoza-Delgado and Klasen (2018) create an individual-level MPI to understand differences in poverty between women and men in Nicaragua, finding similar overall incidence, but much higher intensity of poverty among women. Bessell (2015) and Pogge and Wisor (2016) explore deeply contextual gendered poverty measures and elucidate the ways that participatory consultations can inform the design and uses of gendered measures. Rogan (2016) uses the global MPI to analyze the gender poverty gap in South Africa. Alkire, Ul Haq, and Alim (2019) use individual-level data alongside MPI data to expose gendered and intrahousehold differences among MPI poor and non-poor children.
In this study, we apply their techniques to understand gender differences among adults as well.

2.2 Intrahousehold analyses of multidimensional poverty

The literature on multidimensional poverty measurement and intrahousehold analysis is limited. Espinoza-Delgado and Klasen (2018) propose an individual-based multidimensional poverty measure for Nicaragua and estimate gender gaps in headline statistics. Klasen and Lahoti (2016) question the neglect of intrahousehold inequality in multidimensional poverty indices by comparing a standard household-level MPI and an individual-level MPI to the MPIs proposed by Alkire and Santos (2014) and UNDP (2014), finding that females recorded a far higher poverty rate when using the individual measure and that age differentials in poverty were also larger. We follow their work of investigating poverty in the indicators for which individual data is available and compare the achievements of men and women and boys and girls living together. This allows us to avoid relying on gender of the head to derive conclusions about gender gaps, while also recognizing the high prevalence of female-headed households among the displaced and large differences across countries between households based on the gender of the head (Admasu et al. 2021).

2.3 Country contexts

Sub-Saharan Africa is one of the most conflict-affected regions in the world, with one-third of the total number of conflicts taking place in the region (Pape et al. 2018). At the end of 2018, IDMC estimated that 16.8 million people in Africa were internally displaced because of conflicts and violence, which amounts to 40% of the global number. All five countries included in this study are among the most conflict-affected in the region and rank in the top 12 countries with the highest number of conflict-induced displaced population (Pape et al. 2018). East Africa (which includes four of the five countries considered in this study) is the sub-region with the largest number of internally displaced people and refugees, accounting for 22% of the global number. Ethiopia, Somalia, and South Sudan are three of the top five countries in the region with the greatest number of new displacements since 2019 (IDMC 2020).
Ethiopia is known for its open-door policy towards refugees, and thus is one of the largest refugee-hosting countries in the world. According to UNHCR, at the start of 2020, the country hosted 735,204 refugees. Most come from Eritrea, Somalia, South Sudan, and Sudan, driven by conflict, drought, political instability, and military conscription. Ethiopia also had more than 1.8 million IDPs in 2020 (IDMC 2020, IOM 2020), due to ethnic and border-based disputes, and drought and floods. More recently, the conflict in the Northern part of Ethiopia has produced many IDPs and refugees, and a full-scale humanitarian crisis is unfolding at the time of writing in 2021.

Nigeria had more than 2.7 million displaced people at the end of 2019 (IDMC 2020), many fleeing the Boko Haram insurgency in the Northeast region, which has compounded climate change and complex ethnic and political factors, leading to conflicts between pastoralists and local farmers (Pape et al. 2018).

Somalia is one of the poorest countries in Sub-Saharan Africa, with more than 2.7 million IDPs – about one-fifth of the population – in 2019 (IDMC 2020), of a total population of 14.32 million. There are many interlinked drivers of displacement in Somalia, including Al-Shabaab attacks, prolonged conflicts and violence, drought, food insecurity, and human rights violations. Recent crop losses due to locusts and flooding have triggered further large-scale displacement. The overlapping crises have created a massive humanitarian and development challenge (IOM 2020).

In South Sudan there is widespread internal displacement after a major conflict in 2013, as well as intercommunal conflicts, drought, and floods. In 2019, there were more than 1.6 million IDPs – more than 10 percent of the population (IDMC 2020) – while many have also fled to neighboring countries. The combined effect of conflicts, flooding, and economic crises leaves many displaced South Sudanese in protracted situations.

Sudan has a long history of internal displacement, following the longest conflict on the continent, the conflict in Darfur, as well as floods and droughts. There were about 2.3 million IDPs in 2019 (IDMC 2020), many of whom live in protracted situations. Sudan also hosts refugees from neighboring countries like South Sudan and Eritrea.
3 Methodology

3.1 The A-F method and individual deprivations

The Multidimensional Poverty Index (MPI) used in this paper was first presented, with a full methodological discussion, in Admasu et al. (2021). Here we present a general overview of the measure for the individual-level and intrahousehold analyses.

The MPI is constructed based on the Alkire-Foster (AF) method of multidimensional poverty measurement (Alkire and Foster 2011). Three key statistics characterize any MPI: incidence or headcount ratio ($H$), which is the proportion of the population who are multidimensionally poor; intensity ($A$), which is the average share of weighted indicators in which multidimensionally poor people are deprived; and adjusted headcount ratio ($M_0$ or MPI), which is the product of the incidence and intensity ($\text{MPI} = H \times A$). The AF method uses a dual-cutoff counting approach to poverty measurement. Having fixed relative weights across indicators that sum to 100%, it first identifies who is deprived in each indicator, then sums up the weighted deprivations each person experiences into a deprivation score. A person is identified as poor if their deprivation score meets or exceeds a cross-dimensional poverty cutoff that is greater than 0 and less than or equal to 100%. It then aggregates this information to compute society-level MPI, incidence, and intensity. The MPI can be decomposed by any groups for which the data are representative and broken down by indicator to show the composition of multidimensional poverty, adding to the policy relevance of the analysis.

To tackle individual-level and intrahousehold analyses, we build on the work of Alkire, Ul Haq and Alim (2019). The focus is on individual deprivations, and we call the persons with individual-level data in each indicator the eligible household members. For example, children aged 6-16 years might be eligible for deprivations in terms of school attendance, but not those older or younger. For individual-level indicators, we identify who and how many household members are deprived: their gender and their age, and what proportion of eligible household members are deprived. This is a powerful and potentially informative steppingstone for analysis.

Consider two households, each of which has five eligible members with data on nutrition. The aggregation rule in this example is that if any household member is undernourished then the household is undernourished. So, both households are deprived in terms of
nutrition. But in Household A, 2/5 eligible persons are deprived, whereas in Household B, it is 4/5. Furthermore, in terms of gender, in Household A both deprived persons are female, and no males are deprived. But in Household B, the only non-deprived person is female. Household-level information would code both situations as identical, but we can use the underlying microdata to go further. The matrix below illustrates this example.

|       | HH-A |       | HH-B |       |
|-------|------|-------|------|-------|
| Deprived | D    | D     | ND   | ND    |
| Gender | F    | F     | M    | M     |

When both individual and household metrics are analyzed in tandem, this rather simple methodology creates very powerful information for policy design. The MPI analysis can show what proportion of eligible individuals who are deprived in that indicator are MPI poor, meaning this deprivation is compounded by other simultaneous predicaments. It also shows which deprived individuals live in non-poor households, thus unmasking individual deprivations within the household. More broadly, the MPI also provides information on the composition of deprivations that individually deprived persons experience, and whether there are different regularized patterns or clusters among deprivations, and how these vary across household types. This can inform policy responses. By way of comparison, if one only knows the gendered patterns of nutrition but does not know the multidimensional profile of deprivations, the depth of understanding of deprived persons’ conditions is more limited.

### 3.2 The MPI structure

The AF method allows flexibility around the selection of dimensions, indicators, deprivation cut-offs, weights, and poverty cut-off to reflect different contexts and priorities. After discussion with experts in both multidimensional poverty and forced displacement and testing of several trial measures, the structure shown in Table 1 was selected. This MPI measures deprivations in education, health, living standards, and financial security, with 15 indicators across these four dimensions. All dimensions are weighted equally, receiving a quarter of the total weight, with indicators within each dimension also receiving equal weights. The poverty cut-off is defined as $k=50\%$, with
those deprived in at least half of the weighted indicators considered multidimensionally poor.

*Table 1: Structure of the measure*

| Dimension         | Indicator                  | Household is Deprived if…                                                                 | Weight |
|-------------------|----------------------------|------------------------------------------------------------------------------------------|--------|
| **Education**     | Years of Schooling         | No eligible household member has completed at least 6 years of schooling.                 | 1/8    |
|                   | School Attendance          | Any child of primary school age is not attending school up to class 6.                     | 1/8    |
| **Health**        | Food Security              | In the past 7 days, there was ever a time when there was not enough food or money for food. | 1/16   |
|                   | Pregnancy Care             | A woman who gave birth in the last 2 years did not visit a clinic while pregnant or have a trained assistant during delivery. | 1/16   |
|                   | Physical Safety            | Any member feels unsafe at home or walking alone.                                         | 1/16   |
|                   | Early Marriage             | A member was married before age 19.                                                       | 1/16   |
| **Living Standards** | Garbage Disposal      | Main method of solid waste disposal is dumping, burying in own compound, burning, or other. | 1/24   |
|                   | Drinking Water             | Main source of drinking water is unsafe, or it takes more than 20 minutes (round-trip) to get water. | 1/24   |
|                   | Electricity                | It does not have electricity.                                                              | 1/24   |
|                   | Cooking Fuel               | Main energy source for cooking is solid fuels.                                            | 1/24   |
|                   | Housing                    | It is an unimproved housing type.                                                          | 1/24   |
|                   | Sanitation                 | Main toilet facility is unimproved or shared with other households.                        | 1/24   |
| **Financial Security** | Unemployment               | Any member 15 or older is unemployed and looking for work.                                 | 1/12   |
|                   | Legal Identification       | No member has a form of legal identification.                                              | 1/12   |
Many of the indicators align with goals identified in the 2030 Agenda for Sustainable Development, such as no hunger, good health, access to quality education, clean water and sanitation, and decent work, as well as indicators that are especially relevant for displaced people, such as possession of legal identification, physical safety, and food security. The focus on gendered dynamics justifies health indicators related to pregnancy care, combining information on prenatal care, assisted delivery, and early marriage. A full discussion of the MPI’s indicator selection can be found in Admasu et al. (2021).

We focus on six of these 15 indicators that use individual-level data – viz years of schooling, school attendance, pregnancy care, early marriage, legal identification, and unemployment. Our intrahousehold analysis drops the two health indicators due to data limitations; the question about age at marriage was only asked to the household head in Ethiopia, Nigeria, and South Sudan, whereas in Somalia and Sudan, it was applied to more members than the head. The pregnancy care indicator is also excluded from the intrahousehold inequalities analysis as the reference populations for the analysis did not permit rigorous statistical testing.

3.3 Limitations

With a few exceptions, gendered MPIs have been designed using indicators that are present in standard survey instruments, which themselves struggle with normative challenges (Alkire 2018). To create improved gendered MPIs, in which people’s poverty can be compared across gender and age or the life cycle, research must develop “comparable” definitions of capability deprivation that matter to people in different age cohorts or different life situations. Reliable indicators comparing men and women’s income, ownership of assets, and decision-making powers in the same household are difficult, as are those measuring decent work. Health indicators also differ by gender, change across the life cycle, and vary across family structures and disability status.

The MPI constructed in Admasu et al. (2021) has the same weaknesses as these measurement paradoxes, but it remains a step in the right direction. We aim to mitigate the limitations of this household-level measure by unpacking the deprivations of indicators available at the individual level, disaggregating those deprivations by gender.
and age, and reporting on the intrahousehold inequalities in deprivation status for individuals in MPI poor households, following from the strategy set forth in Alkire, Ul Haq, and Alim (2019). This paper is the first such study to apply this MPI measurement strategy to adults.

Furthermore, because several criteria are applied – e.g., an individual’s displacement status, gender, residence in an MPI poor household, and eligibility for the relevant indicator’s deprivation cutoff – the number of observations used for cell size comparisons can become small. Point estimates where the $n < 25$ is noted with ‘NA’, and if $n \leq 50$, brackets ‘[]’ – this follows the reporting criterion established by DHS (Croft et al. 2018: p.1.65) and cautions against strong interpretation of those results.

4 Data

4.1 Data sources

The five household surveys conducted in Sub-Saharan Africa and selected for the purpose of analyzing the MPI constructed in Admasu et al. (2021) are presented in Table 2. These surveys differ in population and geographic coverage, as well as sample design and size, limiting the possibilities for comparisons across countries. A full analysis of these data sources can be found in Admasu et al. (2021).

Table 2: Summary of the datasets

| Country  | Survey                   | Sample Design                          | Geographical coverage                                      | Population coverage | Retained sample |
|----------|--------------------------|----------------------------------------|------------------------------------------------------------|---------------------|-----------------|
| Ethiopia | Skills Profile Survey (2017) | Multi-stage stratified random sample | Refugee camps and proximity in Tigray Afar, Gambella, Benishangul Gumuz, and Somali regions | Refugees from Eritrean, South Sudanese, and Somali and hosts | 26,517 (96.5%)   |
| Northeast Nigeria | IDP Survey (2018) | Multi-stage stratified random sample | Six Northeastern states (Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe) | IDPs and host communities | 17,543 (97.7%)  |
| Country       | Survey Description                                      | Survey Design                           | Sampling Areas                                                                 | IDPs and host communities | Sample Size  |
|--------------|----------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------|---------------------------|--------------|
| Somalia      | High Frequency Survey (2017)                             | Multi-stage stratified random sample    | Somalia (within secure areas)                                                  | IDPs and host communities | 27,287       |
|              |                                                          |                                         |                                                                               | (82.3%)                   |              |
| Sudan        | IDP Profiling Survey (2018)                              | Stratified cluster sampling             | Abu Shouk and El Salam camps, and neighboring and non-neighboring Al-Fashir    | IDPs and host communities | 17,645       |
|              |                                                          |                                         |                                                                               | (95.2%)                   |              |
| South Sudan  | High Frequency Survey Wave 4 (2017)                       | Stratified two-stage cluster design     | Urban areas of seven of the ten pre-war states (Western Equatoria,              | IDPs and host communities | 4,554        |
|              |                                                          |                                         | Central Equatoria, Eastern Equatoria, Northern Bahr-El-Ghazl, Western           | (92.8%)                   |              |
|              |                                                          |                                         | Bahr-El-Ghazal, Warrap, and Lakes state).                                      |                           |              |

Data were available for all selected MPI indicators in every country, except for access to a bank account in South Sudan, where the remaining indicators in the financial security dimension are re-weighted accordingly.

### 4.2 Description of the data

The relative sizes of different comparator groups – displaced and non-displaced populations, adults and children, and displacement status groups by gender – are shown in Figure 1 and Table 3.

*Figure 1: Population shares by age and displacement status by country*
Table 3: Sex ratios

| Country          | Sex Ratio (%) | Population | Children (0-17) | Adults (18+) | IDP/Refugee | Non-IDP/Host |
|------------------|---------------|------------|----------------|--------------|-------------|--------------|
| Ethiopia         | Male          | 48.9       | 52.0           | 43.2         | 49.0        | 48.3         |
|                  | Female        | 51.1       | 48.0           | 56.8         | 51.0        | 51.7         |
| N.E. Nigeria     | Male          | 49.8       | 50.3           | 47.0         | 53.0        | 47.1         |
|                  | Female        | 51.1       | 49.7           | 53.0         | 50.0        | 52.9         |
| Somalia          | Male          | 50.4       | 52.1           | 48.2         | 49.9        | 50.6         |
|                  | Female        | 49.7       | 51.8           | 51.0         | 50.2        | 53.4         |
| South Sudan      | Male          | 46.8       | 45.0           | 45.0         | 47.4        | 49.7         |
|                  | Female        | 53.2       | 55.0           | 55.0         | 52.6        | 50.3         |
| Sudan            | Male          | 50.0       | 49.6           | 49.6         | 50.7        | 50.0         |
|                  | Female        | 50.0       | 49.4           | 49.4         | 50.3        | 50.3         |

Table 4 describes the difference in means for several key household characteristics. In Ethiopia, South Sudan, and Sudan, female-headed households are more common among the forcibly displaced population. For other aspects of household compositions – age of the household head, household size, one-adult households, one-adult households with children, two-or-more-adult households with children – there are significant differences among the countries by displacement status, but the variation in absolute terms is minor.
In Ethiopia, Northeast Nigeria, South Sudan, and Sudan, the dependency ratio is somewhat higher among the forcibly displaced population, whereas in Somalia, the reverse is true.

Table 4: Simple t test of means for household characteristics

|                      | Ethiopia | N.E. Nigeria | Somalia | South Sudan | Sudan |
|----------------------|----------|--------------|---------|-------------|-------|
|                      | Host     | Host         | IDP     | Non-IDP     | IDP   |
| Host vs. Refugee    | 0.26     | 0.52***      | 0.31    | 0.5         | 0.47***|
|                      |          |              | 0.39    | 0.47***     | 0.29   |
|                      |          |              | 0.44*** |             |       |
| Age of the HH Head  | 42.94    | 36.24***     | 44.17   | 43.27***    | 39.99***|
|                      | 39.39    | 39.42***     | 42.49   | 41.87       | 45.16  |
|                      | 43.70*** |             |         |             |       |
| Household Size      | 5.7      | 6.60***      | 7.47    | 7.03***     | 6.48   |
|                      | 6.13***  |             | 7.28    | 7.1         | 7.11   |
|                      | 7.12***  |             |         |             |       |
| Number of Adults    | 2.16     | 2.17         | 2.9     | 2.47***     | 2.54   |
|                      | 2.55     |              | 3.91    | 3.7         | 3.64   |
|                      | 3.17***  |              |         |             |       |
| One Adult Household | 0.02     | 0.01***      | 0       | 0           | 0      |
|                      | 0.02     |              | 0.02    | 0.02        | 0.01***|
| One Adult with Children | 0.16   | 0.23***      | 0.08    | 0.11***     | 0.08   |
|                      | 0.06***  |              | 0.06    | 0.08        | 0.02   |
|                      | 0.04***  |              |         |             |       |
| Two or More Adults  | 0.76     | 0.69***      | 0.87    | 0.85***     | 0.86   |
| with Children       |          |              | 0.85*** | 0.73        | 0.73   |
|                      |          |              | 0.73    | 0.88        | 0.87*  |
| Dependency Ratio    | 1.91     | 2.57***      | 2.02    | 2.16***     | 1.93   |
|                      | 1.75***  |              | 1.16    | 1.37***     | 1.48   |
|                      | 1.61***  |              |         |             |       |
| Access to Land      | 0.61     | 0.08***      | 0.67    | 0.64***     | 0.85   |
|                      | 0.87**   |              | 0.43    | 0.65***     | 0.36   |
|                      | 0.31***  |              |         |             |       |
| Individual          |          |              |         |             |       |
| Literate            | 0.58     | 0.54***      | 0.66    | 0.53***     | 0.53   |
|                      | 0.53     |              | 0.39*** | 0.59        | 0.54   |
|                      | 0.67     |              | 0.69**  |             |       |
| Married             | 0.86     | 0.75***      | 0.89    | 0.87***     | 0.91   |
|                      | 0.91     |              | 0.82    | 0.81        | 0.88   |
|                      | 0.89     |              |         |             |       |
| Divorced or Separated | 0.07    | 0.11***      | 0.02    | 0.03***     | 0.01   |
|                      | 0.01     |              | 0.05    | 0.06        | 0.02   |
| Widowed             | 0.06     | 0.05         | 0.06    | 0.08***     | 0.03   |
|                      | 0.03     |              | 0.1     | 0.11        | 0.05   |
| Single              | 0.01     | 0.09***      | 0.04    | 0.02***     | 0.06*  |
|                      | 0.06     |              | 0.03    | 0.02        | 0.04*  |

Source: Authors’ calculations using the Ethiopia SPS (2017), Nigeria IDP Survey (2018), Somalia HFS (2017), South Sudan HFS (2017), and Sudan IDP Profiling Survey (2018). Significance at 1% *** , 5% **, and 10% * levels.

Overall, while statistically significant differences do exist in the household composition of forcibly displaced and non-displaced households, the magnitude of these differences is mostly minor. The fact that the household composition is similar across the populations suggests that any relationships we observe regarding gender and displacement at the individual level are not confounded by individuals living in different household types.

4.3 Hypotheses

Several hypotheses interrogate the intersection of gender, displacement, and multidimensional poverty to extend our household-level analysis to the individual arena.

The first set of hypotheses are among women only:
**H1:** Forcibly displaced women and girls are deprived more often than non-displaced women and girls.

**H2:** Forcibly displaced women and girls are deprived and MPI poor more often than non-displaced women and girls.

The second set of hypotheses concern gender gaps:

**H3:** Gender gaps between men and women are larger for forcibly displaced persons than non-displaced persons.

**H4:** Gender gaps between boys and girls are larger for forcibly displaced children than non-displaced children.

The final hypothesis examines intrahousehold inequality by displacement status:

**H5:** Intrahousehold inequalities will be more common for forcibly displaced individuals than non-displaced individuals.

## 5 Findings

We present the key multidimensional poverty statistics, individual-level deprivations, and intrahousehold inequalities of the MPI poor for forcibly displaced populations and host communities in turn. The final section presents the relationships among gender, displacement, and multidimensional poverty for intrahousehold inequalities.

### 5.1 Headline MPI results

Admasu et al. (2021) found that displaced households were on average MPI poorer in the same set of countries, with large variation in the poverty gaps between the displaced and non-displaced populations. We take these overall findings a step further by zooming into the individual deprivations experienced by men and women, and boys and girls, living in displaced and non-displaced households.

The MPI headcount and intensity by displacement status, by gender, are presented in Table 5. Note that the individual’s poverty status is still determined by the household, as the MPI is a household-level measure. For example, an incidence of 40.1% for male IDPs
in Ethiopia means that, on average, male IDPs in Ethiopia live in MPI poor households with those characteristics, compared to female IDPs in Ethiopia, who live in MPI poor households that experience, on average, an incidence of 45.8%. The individual-level analysis below interrogates the deprivations faced by the individual regardless of their household-level poverty status.

Table 5: MPI, H, and A by displacement status and gender

| Country     | Displacement Status | Status by Gender | Population Share (%) | (n)   | (decimal) | (c.i.) | H (incidence) (%) | (c.i.) | A (intensity) (%) | (c.i.) |
|-------------|---------------------|------------------|----------------------|-------|-----------|--------|------------------|--------|------------------|--------|
| Ethiopia    | IDP Population      | Male             | 43.12                | 11,435| 0.238     | (0.199, 0.278) | 40.1   | (33.2, 47.1)    | 59.3   | (58.2, 60.4)    |
|             |                     | Female           | 44.86                | 11,897| 0.277     | (0.232, 0.322) | 45.8   | (38.4, 53.3)    | 60.4   | (59.6, 61.2)    |
|             | Non-IDP Population  | Male             | 5.80                 | 1,538 | 0.060     | (0.046, 0.073) | 10.2   | (7.8, 12.7)     | 58.1   | (56.7, 59.5)    |
|             |                     | Female           | 6.21                 | 1,648 | 0.070     | (0.048, 0.091) | 11.9   | (8.5, 15.4)     | 58.6   | (56.5, 60.7)    |
| N.E. Nigeria| IDP Population      | Male             | 15.23                | 2,673 | 0.127     | (0.090, 0.163) | 21.1   | (15.4, 26.8)    | 60.1   | (58.3, 61.9)    |
|             |                     | Female           | 13.28                | 2,330 | 0.154     | (0.118, 0.190) | 25.9   | (20.4, 31.3)    | 59.5   | (56.9, 62.0)    |
|             | Non-IDP Population  | Male             | 33.69                | 5,910 | 0.111     | (0.045, 0.177) | 17.8   | (7.1, 28.5)     | 62.3   | (60.3, 64.3)    |
|             |                     | Female           | 37.79                | 6,630 | 0.103     | (0.042, 0.163) | 16.3   | (6.5, 26.1)     | 63.0   | (60.9, 65.2)    |
| Somalia     | IDP Population      | Male             | 17.77                | 4,850 | 0.404     | (0.352, 0.455) | 64.5   | (56.3, 72.7)    | 62.5   | (61.1, 63.9)    |
|             |                     | Female           | 17.88                | 4,880 | 0.388     | (0.319, 0.456) | 62.0   | (50.9, 73.0)    | 62.6   | (60.8, 64.3)    |
|             | Non-IDP Population  | Male             | 32.57                | 8,888 | 0.295     | (0.251, 0.339) | 46.1   | (39.5, 52.8)    | 63.9   | (62.8, 65.0)    |
|             |                     | Female           | 31.77                | 8,670 | 0.277     | (0.236, 0.317) | 43.4   | (37.3, 49.5)    | 63.7   | (62.6, 64.9)    |
| South Sudan | IDP Population      | Male             | 6.29                 | 286   | 0.183     | (0.079, 0.287) | 30.9   | (12.9, 48.9)    | 59.2   | (55.5, 63.0)    |
|             |                     | Female           | 6.99                 | 318   | 0.221     | (0.113, 0.329) | 37.0   | (18.3, 55.6)    | 59.8   | (57.0, 62.6)    |
|             | Non-IDP Population  | Male             | 40.42                | 1,840 | 0.112     | (0.077, 0.147) | 18.4   | (12.9, 23.9)    | 60.8   | (58.9, 62.6)    |
|             |                     | Female           | 46.30                | 2,107 | 0.125     | (0.092, 0.157) | 20.4   | (15.3, 25.6)    | 60.9   | (59.5, 62.4)    |
There is large variation in the MPI incidence and intensity within and across the five countries, both in terms of gender and displacement status. In Sudan, for example, male and female IDPs report an incidence of poverty nearly five times higher than their non-displaced counterparts, while in Nigeria, the differences are far smaller in magnitude. Still, the displaced populations always experience higher incidence of multidimensional poverty, although in Nigeria, Somalia, and South Sudan, the intensity of poverty is higher among the non-displaced population. Table 6 checks the significance of the differences using an adjusted Wald test of means on the female populations by displacement status (Table 6).

Table 6: Adjusted Wald test of means by displacement status and gender

| Country      | Female | IDPs | Non-IDPs |
|--------------|--------|------|----------|
|              | Male v non-IDPs | Female v Male | Male v non-IDPs | Female v Male | Male v non-IDPs | Female v Male |
|              | MPI | H  | A   | MPI | H  | A   | MPI | H  | A   | MPI | H  | A   |
| Ethiopia     | 63.75*** | 63.39*** | 2.46 | 10.52*** | 8.60*** | 5.97** | 0.87 | 0.87 | 2.46 |
| N.E. Nigeria | 2.00  | 2.78*  | 4.31** | 9.05*** | 8.27*** | 0.70  | 0.34 | 0.45 | 4.31** |
| Somalia      | 7.47*** | 8.25*** | 1.20  | 1.04  | 1.03  | 0.00  | 3.29* | 3.04* | 1.20 |
| South Sudan  | 2.61  | 2.55  | 0.67  | 1.34  | 1.22  | 0.72  | 1.22 | 1.20 | 0.67 |
| Sudan        | 163.27*** | 162.53*** | 5.67** | 1.50  | 1.09  | 4.31** | 0.74 | 0.61 | 5.67** |

Source: Authors’ calculations using the Ethiopia SPS (2017), Nigeria IDP Survey (2018), Somalia HFS (2017), South Sudan HFS (2017), and Sudan IDP Profiling Survey (2018). Significance at 1% ***, 5% **, and 10% * levels.

In both Ethiopia and Somalia, women and girls who are forcibly displaced experience a significantly higher rate of multidimensional poverty, on average, than their non-displaced counterparts, both in MPI and incidence; however, intensity of poverty is not significantly different between these two populations in either country. In Sudan, forcibly displaced women and girls see significantly higher rates of multidimensional poverty –
both in incidence and intensity – than their non-displaced counterparts in all key statistics. By way of contrast, in Nigeria, the differences in MPI and H are insignificant for the two female populations, although non-displaced women and girls face significantly higher rates of intensity of poverty, at 63.0%, compared to their displaced peers at 59.5%. South Sudan sees no significant differences between the displaced and non-displaced female populations, which may be partly due to the small sample size.

Looking at gender differences among the displaced population, women and girls in Ethiopia and Nigeria experience higher rates of multidimensional poverty compared to men and boys, although this is not the case in Somalia, South Sudan, and Sudan. Nor are there significant gender differences in multidimensional poverty rates among the non-displaced population.

Further disaggregating by age shows that in Ethiopia, Nigeria, and Somalia, forcibly displaced children do not see a significant difference in multidimensional poverty rates according to gender, but gender is a major disadvantage for women (Tables A.1 and A.2). In Ethiopia, nearly half of women refugees face multidimensional poverty compared to only a quarter of men refugees. We do not see gender gaps among the non-displaced children and adults in Ethiopia. In South Sudan, the intersection of age, gender, and displacement status does not reveal any significant differences except for the non-displaced populations, where boys are poorer than girls and women are poorer than men. Gender clearly plays a role in the experience of poverty among the host community of South Sudan. In Sudan, displacement appears to be the larger driver of poverty differences than gender, as significant differences are observed among women and girls when comparing displaced and non-displaced individuals, but gender gaps are not evident in the IDP population.

Overall, the gendered breakdown of the key statistics of the MPI exposes important, varied stories of displacement and age at the household level that we will now explore by explicating the results of individual-level deprivations.

5.2 Analysis of individual-level deprivations

We now turn to compare gendered differences in deprivations, as well as multidimensional poverty, by displacement status. These indicators span three of the four
dimensions: education, health, and financial security.

5.2.1 Ethiopia

In Ethiopia (Table 7), deprivations in education are high, with around eight in ten poor children not attending school, regardless of displacement status (Table 7). Gender gaps in school attendance are significant only for the refugee community, where girls are more deprived than boys (3-percentage points among the wider population, and 5-percentage points among the poor). Meanwhile there are no significant gender differences in years of schooling, by displacement or poverty status. Most refugee in Ethiopia children attend NGO schools, although some attend public schools, and they also have higher enrollment rates than the national average of their country of origin (Pape et al. 2018).

Table 7: Proportion of deprived individuals across displacement status by gender, Ethiopia

|                       | Refugees                | Hosts                |
|-----------------------|-------------------------|----------------------|
|                       | Male | Female | Difference | Male | Female | Difference |
| All households        |      |        |            |      |        |            |
| Years of schooling    | 0.66 | 0.68   | -0.02      | 0.37 | 0.33   | 0.04       |
| School attendance     | 0.16 | 0.19   | -0.03**    | 0.11 | 0.11   | 0.00       |
| Unemployment          | 0.20 | 0.17   | 0.03       | 0.02 | 0.02   | 0.00       |
| Legal identification  | 0.38 | 0.38   | 0.00       | 0.54 | 0.64   | -0.11***   |
| Early marriage        | 0.19 | 0.72   | -0.53***   | 0.18 | 0.60   | -0.42***   |
| MPI poor households   |      |        |            |      |        |            |
| Years of schooling    | 0.83 | 0.86   | -0.03      | 0.78 | 0.77   | 0.01       |
| School attendance     | 0.23 | 0.28   | -0.05**    | 0.36 | 0.40   | -0.04      |
| Unemployment          | 0.40 | 0.28   | 0.12***    | 0.04 | 0.04   | 0.01       |
| Legal identification  | 0.56 | 0.56   | 0.01       | 0.76 | 0.81   | -0.05*     |
| Early marriage        | 0.36 | 0.84   | -0.48***   | 0.41 | 0.62   | -0.21**    |

Source: Authors’ calculations using the Ethiopia SPS (2017). Significance at 1% ***, 5% **, and 10% * levels.

The only significant gender gap in legal identification is in the wider population (an 11-percentage points gap), where women are more deprived than men in the host community. Meanwhile, the only significant gender gap in unemployment is in the poor population (a 12-percentage points gap), where men are more deprived than women in the refugee community, although this may reflect women’s overall inactive labor status. Early marriage rates are significantly higher among women across the board.
5.2.2 Nigeria

In Nigeria (Table 8), while there are no significant gender gaps in education, among the poor or the wider population, the deprivation levels do vary by displacement status. This may be because many IDP children have been out of school for at least three years since initial displacement (Pape et. al 2018). For more than half of displaced households, lack of financial resources is a main reason for not sending children to school, despite the provision for universal basic education in Nigeria and free primary schooling in the Northeast region.

Table 8: Proportion of deprived individuals across displacement status by gender, Nigeria

|                      | IDPs          | Hosts         |
|----------------------|---------------|---------------|
|                      | Male | Female | Difference | Male | Female | Difference |
| **All households**   |      |        |            |      |        |            |
| Years of schooling   | 0.54 | 0.56   | -0.02      | 0.39 | 0.45   | -0.06*     |
| School attendance    | 0.31 | 0.34   | -0.03      | 0.20 | 0.21   | -0.01      |
| Unemployment         | 0.05 | 0.11   | -0.06***   | 0.05 | 0.11   | -0.06***   |
| Legal identification | 0.70 | 0.74   | -0.05***   | 0.54 | 0.59   | -0.05***   |
| Early marriage       | 0.13 | 0.59   | -0.46***   | 0.10 | 0.53   | -0.43***   |
| **MPI poor households**|      |        |            |      |        |            |
| Years of schooling   | 0.81 | 0.86   | -0.05      | 0.85 | 0.88   | -0.03      |
| School attendance    | 0.64 | 0.71   | -0.06*     | 0.68 | 0.62   | 0.06       |
| Unemployment         | 0.10 | 0.21   | -0.11***   | 0.14 | 0.16   | -0.02      |
| Legal identification | 0.87 | 0.89   | -0.01      | 0.83 | 0.86   | -0.03      |
| Early marriage       | 0.21 | 0.67   | -0.46***   | 0.22 | 0.64   | -0.42***   |

Source: Authors’ calculations using the Nigeria IDP Survey (2018). Significance at 1% ***, 5% **, and 10% * levels.

Among the wider population, women are more likely to be deprived in employment regardless of their displacement status, but among the poor, this gender gap only holds for displaced women. Women are more deprived in legal identification only among the wider population, although it is a serious issue among the poor, too, with eight in ten individuals lacking identification across the board. Furthermore, women report being married early more often than men in all permutations, although host women see smaller gender gaps than displaced women.
5.2.3 Somalia

Like Nigeria, there are no significant gender gaps in education in Somalia, but the differences in deprivation levels by displacement status are stark (Table 9). For example, over 95% of displaced individuals, poor or otherwise, are deprived in the years of schooling indicator, compared to six out of ten non-displaced individuals in the wider population. Meanwhile, women are more deprived in employment only among the non-displaced population, and the gap is larger among the poor. The gender gaps in legal identification are significant only among the wider population, where women are more deprived overall.

Table 9: Proportion of deprived individuals across displacement status by gender, Somalia

| IDPs                  | Non-IDPs               |
|-----------------------|------------------------|
| **All households**    |                        |
| Years of schooling    | 0.97 0.97 0.00 0.60 0.63 -0.03 |
| School attendance     | 0.64 0.68 -0.04 0.59 0.63 -0.03* |
| Unemployment          | 0.08 0.10 -0.01 0.06 0.11 -0.05*** |
| Legal identification  | 0.83 0.86 -0.03** 0.83 0.86 -0.03*** |
| Early marriage        | 0.24 0.55 -0.31*** 0.17 0.53 -0.35*** |
| MPI poor households   |                        |
| Years of schooling    | 1.00 0.99 0.01 0.83 0.87 -0.04 |
| School attendance     | 0.72 0.75 -0.03 0.81 0.84 -0.03* |
| Unemployment          | 0.11 0.13 -0.01 0.10 0.17 -0.07*** |
| Legal identification  | 0.90 0.92 -0.02 0.97 0.97 -0.01 |
| Early marriage        | 0.26 0.59 -0.33*** 0.21 0.67 -0.46*** |

Source: Authors’ calculations using the Somalia HFS (2017). Significance at 1% ***, 5% **, and 10% * levels.

Early marriage rates are significantly higher among women than men in both displaced and non-displaced communities, although the gender gaps are larger among the non-displaced. Among the MPI poor, non-displaced women also see higher levels of deprivation than their displaced peers.

5.2.4 South Sudan

In South Sudan (Table 10), the gender gaps in education are significant only for the host community, when comparing men and women’s rates of primary school completion.
among the wider population and school attendance among poor children. Females are more deprived in both instances. The employment indicator, meanwhile, sees no significant gender differences, while the gender gaps in legal identification are significant in all cases. The gender gaps are also larger among the displaced community, with the gap nearly five times as large among the displaced than non-displaced poor (24-percentage point and 5-percentage point differences, respectively).

Table 10: Proportion of deprived individuals across displacement status by gender, South Sudan

|                              | IDPs         |             | Hosts        |             |
|------------------------------|--------------|-------------|--------------|-------------|
|                              | Male      | Female     | Difference   | Male      | Female     | Difference   |
| All households               |            |             |              |            |             |              |
| Years of schooling           | 0.43      | 0.48       | -0.05        | 0.40      | 0.52       | -0.12**      |
| School attendance            | 0.20      | 0.25       | -0.05        | 0.25      | 0.29       | -0.03        |
| Unemployment                 | 0.05      | 0.00       | 0.05*        | 0.02      | 0.03       | -0.01        |
| Legal identification         | 0.48      | 0.74       | -0.26***     | 0.60      | 0.74       | -0.14***     |
| Early marriage               | 0.08      | 0.75       | -0.67***     | 0.10      | 0.53       | -0.43***     |
| MPI poor households          |            |             |              |            |             |              |
| Years of schooling           | 0.71      | 0.78       | -0.06        | 0.72      | 0.65       | 0.07         |
| School attendance            | 0.39      | 0.42       | -0.03        | 0.47      | 0.67       | -0.20**      |
| Unemployment                 | 0.07      | 0.00       | 0.07         | 0.06      | 0.06       | 0.00         |
| Legal identification         | 0.75      | 0.99       | -0.24***     | 0.86      | 0.91       | -0.05**      |
| Early marriage               | 0.20      | 0.90       | -0.70***     | 0.19      | 0.66       | -0.47***     |

Source: Authors’ calculations using the South Sudan HFS (2017). Significance at 1% ***, 5% **, and 10% * levels.

South Sudan sees the largest gender gap of all countries for displaced women, among the poor and population-wide (70- and 67-percentage points, respectively). Displaced women are also more deprived than host women, although the differences are larger among the wider population.

5.2.5 Sudan

In Sudan (table 11), the gender gaps in education and financial security are significant only among the wider population. Deprivations are higher for male hosts in primary school completion and female hosts in legal identification, whereas females face higher deprivations in employment in both displaced and host communities. Deprivation levels in education are low given the displacement situation. This may be due to good access to
education in camps, where more than 80% of IDPs state that better access to education is what makes them want to stay in camps.

Table 11: Proportion of deprived individuals across displacement status by gender, Sudan

|                              | IDPs | Hosts |
|------------------------------|------|-------|
|                              | Male | Female | Difference | Male | Female | Difference |
| All households               | 0.28 | 0.29   | -0.01      | 0.26 | 0.19   | 0.07**     |
| Years of schooling           | 0.22 | 0.21   | 0.00       | 0.15 | 0.12   | 0.02       |
| School attendance            | 0.08 | 0.10   | -0.02***   | 0.07 | 0.18   | -0.11***   |
| Unemployment                 | 0.10 | 0.10   | 0.00       | 0.07 | 0.10   | -0.02***   |
| Legal identification         | 0.06 | 0.50   | -0.43***   | 0.07 | 0.42   | -0.35***   |
| Early marriage               | 0.38 | 0.43   | -0.05      | 0.42 | 0.26   | 0.15       |
| MPI poor households          | 0.36 | 0.36   | 0.00       | 0.29 | 0.39   | -0.10      |
| Years of schooling           | 0.14 | 0.17   | -0.03      | 0.17 | 0.29   | -0.12*     |
| School attendance            | 0.13 | 0.14   | -0.01      | 0.18 | 0.21   | -0.03      |
| Unemployment                 | 0.09 | 0.64   | -0.56***   | 0.14 | 0.63   | -0.50***   |
| Legal identification         | 0.08 | 0.29   | -0.20      | 0.18 | 0.37   | -0.19      |
| Early marriage               | 0.14 | 0.63   | -0.49      | 0.22 | 0.53   | -0.32      |

Source: Authors’ calculations using the Sudan IDP Profiling Survey (2018). Significance at 1% ***, 5% **, and 10% * levels.

Early marriage remains an important issue for both displaced and non-displaced females, as it displays the highest deprivation rate among women and exhibits the lowest deprivation rate among men. The results show a substantial gender gap in early marriage among the displaced population (43-percentage points) and hosts (35-percentage points). Among MPI poor households, the highest gender gap is also observed in early marriage, for both groups.

5.3 Intrahousehold inequalities

Our final hypothesis investigates whether forcibly displaced households have higher rates of intrahousehold inequality than their non-displaced peers, and whether girls are more likely to be disadvantaged. We focus on four individual-level indicators – school attendance, primary school completion, unemployment, and legal identification. Displaced people experience multidimensional deprivations that result both from their current circumstances and the disadvantages they may have accumulated in their home country. For example, refugees fleeing long-term conflicts may not have completed
primary education due to chronic disruptions, reducing years of schooling. Meanwhile, deprivations in the current school attendance indicator reflect the individual’s present circumstances. Both accumulated and contemporaneous disadvantages shape the lived realities of forcibly displaced populations.

5.3.1 Results of intrahousehold inequalities among the MPI poor, education

As observed in Alkire, Ul Haq, and Alim (2019), girls’ education affects various life-course outcomes, from consequences for human dignity to human capital for economic development to child survival (Currie and Moretti 2003, Mare and Maralani 2006, Send 2009, Hong et al. 2019). Table 12 evaluates intrahousehold inequalities for education by gender and displacement status, while Figures A.1 and A.2 in the Annex present the population shares for the eligible populations.

Table 12: Intrahousehold inequality in the education dimension

| Country | Population Share of School-age Children (n) | School-age children who reside in an MPI poor household where they attend school, and another does not (%) | Chi-squared test for gender | Chi-squared test for IDP status |
|---------|---------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------|
|         | Boys Girls Boys Girls | IDP | Non-IDP | IDP | Non-IDP |
| ETH     | 3,880 3,111 401 418 | 54.60 | 41.76 | *** | N/A |
| NGA     | 888 649 1,781 2,003 | 28.00 | [13.56] | 27.63 | 30.81 | *** | *** |
| SOM     | 1,296 1,229 2,481 2,157 | 39.15 | 24.33 | 18.60 | 17.92 | ** | *** |
| SSD     | 70 75 413 387 | [44.75] | 27.63 | 30.81 | *** | N/A | [***] |
| SUD     | 825 767 1,512 1,533 | 31.78 | 32.98 | 25.80 | 9.45 | *** | N/A |

| Country | Population Share of Primary School-age Household Members (13+) (n) | Members have completed at least 6 years of schooling, and another has not (%) | Chi-squared test for gender | Chi-squared test for IDP status |
|---------|---------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------|---------------------------------|
|         | Males Females Males Females | IDP | Non-IDP | IDP | Non-IDP |
| ETH     | 5,819 6,409 918 1,035 | 58.23 | 40.71 | *** | N/A |
| NGA     | 1,287 1,231 3,484 3,692 | [18.30] | 63.45 | [***] | N/A |
| SOM     | 2,698 2,761 5,162 5,182 | [7.31] | 48.47 | 44.09 | *** | [***] |
| SSD     | 198 230 1,368 1,595 | 42.78 | [34.31] | *** | N/A |
| SUD     | 1,869 1,837 3,933 4,030 | 35.41 | 28.18 | 18.83 | 17.58 | *** | * |

Source: Authors’ calculations using the Ethiopia SPS (2017), Nigeria IDP Survey (2018), Somalia HFS (2017), South Sudan HFS (2017), and Sudan IDP Profiling Survey (2018). Significance at 1% ***, 5% **, and 10% * levels.
According to Table 12, all countries but Sudan show a significant relationship for school-age children’s experience of intrahousehold inequality and their displacement status, although sample sizes mean that only Nigeria and Somalia’s results are robust. In Nigeria, most children experiencing intrahousehold inequality reside in non-displaced households – although it is crucial to note that these children constitute most of the school-age children (71.1%), and the levels of intrahousehold inequality are nonetheless far higher than anticipated if displacement status had no effect. In Somalia, displaced children are significantly more likely to experience intrahousehold inequality in school attendance, as they constitute 63.5% of school-age children experiencing intrahousehold inequality even though they only make up 35.3% of the school-age children population in the sample. For the years of schooling indicator, the overall lack of intrahousehold inequality among the MPI poor in years of schooling obscures meaningful or robust differences by displacement status.

Gender and displacement status appear to jointly have significant impacts in school attendance in Ethiopia, Somalia, and South Sudan. In Northeast Nigeria, it appears that displacement status has larger effects than gender. In Somalia, forcibly displaced school children experience intrahousehold inequality more often than non-displaced children, to the disadvantage of girls. This holds in both IDP and non-IDP households, although the gender gaps observed are larger for children in displaced households is some 15-percentage points, compared to only a 1-percentage point difference among children in non-displaced households.

Gender affects intrahousehold inequality and primary school completion, and in all countries, males more often than females live in households where they have completed primary education and another household member has not – suggesting that men and boys’ educational careers are the priority. However, the displacement differences are significant only in Somalia, where outcomes are worse for girls in displaced households.

### 5.3.2 Results of intrahousehold inequalities, financial security

Displacement can boost female employment rates if women in the household take on traditionally male tasks (e.g., as breadwinner), and/or as norms around women’s paid work outside the home relax, although these opportunities may not arise. Table 13 evaluates intrahousehold inequalities for financial security by gender and displacement
status, while Figures A.3 and A.4 in the Annex present the population shares for the eligible populations.

Table 13: Intrahousehold inequality in the financial security dimension

| Country | Population Share of Working-Age Population (n) | Working-age persons who reside in an MPI poor household where they are employed, and at least one other working-age person is unemployed and looking for work (%) | Chi-squared test for gender | Chi-squared test for IDP status |
|---------|----------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|
|         | IDP | Non-IDP | IDP | Non-IDP | IDP | Non-IDP | IDP | Non-IDP |
|         | Males | Females | Males | Females | Males | Females | Males | Females |
| ETH     | 4,751 | 5,687 | 808 | 934 | 46.45 | 51.52 |         |         |
| NGA     | 1,068 | 1,095 | 2,905 | 3,166 | [16.02] | [12.95] | [13.95] | 57.08 |
| SOM     | 2,371 | 2,432 | 4,268 | 4,535 | 19.95 | 17.15 | 28.86 | 34.05 |
| SSD     | 173 | 209 | 1,226 | 1,475 | 45.63 | 42.56 |        |        |
| SUD     | 1,598 | 1,578 | 3,416 | 3,537 | 26.34 | 24.45 | 25.44 | 23.77 |

| Country | Population Share of Individuals (n) | Individuals who reside in an MPI poor household and have a form of legal identification, and another does not (%) | | |
|---------|----------------------------------|-------------------------------------------------------------------------------------------------|---|---|
|         | IDP | Non-IDP | IDP | Non-IDP | IDP | Non-IDP | IDP | Non-IDP |
|         | Males | Females | Males | Females | Males | Females | Males | Females |
| ETH     | 11,435 | 11,897 | 1,538 | 1,648 | 48.14 | 42.33 | [4.87] | [4.66] |
| NGA     | 2,673 | 2,330 | 5,910 | 6,630 | [9.68] | [7.37] | 48.97 | 33.97 |
| SOM     | 4,850 | 4,880 | 8,888 | 8,670 | [45.66] | [35.27] | 10.24 | [8.84] |
| SSD     | 286 | 318 | 1,840 | 2,107 | [23.52] | [42.50] | [31.72] |        |
| SUD     | 2,911 | 2,832 | 5,916 | 5,986 | 32.75 | 33.52 | 17.02 | 16.71 |

Source: Authors’ calculations using the Ethiopia SPS (2017), Nigeria IDP Survey (2018), Somalia HFS (2017), South Sudan HFS (2017), and Sudan IDP Profiling Survey (2018). Significance at 1% ***, 5% **, and 10% * levels.

According to Table 13, intrahousehold inequality in unemployment is relatively infrequent among the multidimensionally poor populations, and thus displacement status does not significantly correlate with intrahousehold inequality for unemployment. The exception is Sudan, where displaced persons are significantly more likely to live in MPI poor households where at least one working-age member is employed, and another is unemployed and looking for work, although there are no significant differences by
gender. On legal identification, we see mixed patterns: in Nigeria, non-displaced persons are significantly overrepresented in MPI poor households with intrahousehold inequality, whereas this is true for the displaced in Somalia.

Gender does not reveal any significant differences in intrahousehold inequality for employment in the countries, except for Nigeria, where men are more likely than women to live in MPI poor households where they are employed, and another adult is unemployed and looking for work. As Nigeria’s results for differences by displacement were insignificant, we can rest assured that of the two traits, gender is the primary characteristic driving those differences. Moreover, in the legal identification indicator, the test for gender records robust significant differences in intrahousehold inequality only among the MPI poor of Somalia, where men more commonly have a form of legal identification when another household member does not.

6 Policy Implications and Conclusions

As leaders and policy makers reckon with the backwards slide of progress in the wake of the global pandemic, they must consider the disparate and varied experiences of boys and girls, and men and women, within the household, as questions of building back better turn into policies and programs directed at leaving no one behind.

The decomposability afforded by the MPI’s individual-level indicators is a step towards informing better policies. The indicators analyzed in the individual and intrahousehold analysis – school attendance, primary school completion, unemployment, and legal identification – can be targeted by government policies and programs to improve the situation for those who are multidimensionally poor.

Our comparisons of the household and individual-level deprivations and intrahousehold analyses suggest that displacement status most affects household status, whereas gender drives differences within households. The individual deprivations reflect aspects of both displacement and gender. More broadly, the analysis underlines the importance of going behind household-level outcomes, especially in education.

Among the multidimensionally poor, children in displaced households, and especially girls, face greater barriers to educational equity than those of their host community peers.
As these children already bear the burden of living in households with overlapping deprivations in education, health, living standards, and financial security, their educational disadvantages further erode their prospects. While displacement status affected intrahousehold inequality in school attendance, gender was more important for the completion of primary school, reflecting accumulated disadvantage over time. These educational findings predate the global pandemic and highlight potential long-term repercussions of school closures among the poor both for the generation already out of school and for the children who will have become deprived in school attendance in the last year (OECD 2021).

Forcibly displaced individuals do experience higher levels of intrahousehold inequality than their non-displaced peers in deprivations like school attendance and legal identification, but gender may be the more important predicting factor in chronic deprivations. Note that households experiencing intrahousehold disparities around legal documentation will be recorded as non-deprived in the indicator, as at least one household member holds ID. This intrahousehold analysis therefore unveils a gendered experience otherwise omitted by the household-level measure’s censored headcount ratios. Without unpacking the MPI at the individual level, we would have overlooked these important findings.

Future research and measurement tools should usefully prioritize intrahousehold breakdowns if they are to serve the most vulnerable. Further analysis of each MPI by country – their geographic regions, rural/urban divides, and administrative divisions, as the samples allow – would inform policy makers where to deploy those programs. Further research on the intra-country level would also be valuable.

Notes

1. Throughout the paper we refer to refugees as inclusive of refugees and people in refugee-like situation, as per the classification by UNHCR.
2. Notten and Roelen, 2012; Omotoso and Koch, 2018; SAHRC and UNICEF, 2014; and Vasquez, 2016.
3. Eligibility is determined by primary school starting age in the country. Those aged 6 years or older than the starting age are eligible. For starting age in each country, see http://uis.unesco.org/.

4. A household is deprived if the respondent reports feeling moderately or very unsafe when alone at home, walking alone after dark, or walking around during the day. In Sudan, the indicator on the ‘feeling safe from crime and violence when at home’ was not available, and the indicator only considers answers to the questions on safety when walking alone.

5. Unprotected dug well, unprotected spring, carts with tank, tanker-truck, surface water, or other are considered as unsafe waters sources according to international guidelines. See https://washdata.org/monitoring/drinking-water.

6. Pit latrine without slab, bucket, hanging toilet, no facility (open defecation) facilities are considered as unimproved sanitation facilities according to international guidelines. See https://washdata.org/monitoring/sanitation.

7. According to the ILO definition, those who did not participate in employment in the last four weeks (and have no work to return to), are actively looking for work and are available to start, or those currently waiting to start work are classed as unemployed. See https://www.ilo.org/ilostat-files/Documents/description_UR_EN.pdf.

8. For more information on survey coverage, design and the data for each survey, see https://microdata.worldbank.org/index.php/catalog.

9. The chi² test for school attendance features a null hypothesis that no relationship exists between displacement status and achievement for those who are not deprived in attendance yet living in multidimensionally poor households with another child who is deprived. The following chi² tests feature as well a null hypothesis that no relationship exists between an interaction of gender by displacement status and achievement for those who are not deprived in attendance yet living in multidimensionally poor households with another child who is deprived, as well as one simply for gender. Likewise, the chi² tests for years of schooling replace school attendance with years of schooling as the variable of interest, and so on and so forth for the additional indicators.

References

Admasu, Y., Alkire, S., Ekhatour-Mobayode, U.E., Kovesdi, F., Mitchell, C., Santamaria, J., and Scharlin-Pettee, S. (2021). ‘A Multi-Country Analysis of Multidimensional Poverty in Contexts of Forced Displacement.’ Forthcoming.
Alkire, S. (2018). ‘The research agenda on multidimensional poverty measurement: important and as-yet unanswered questions’, *OPHI Working Paper 119*, University of Oxford.

Alkire, S. and Apablaza, M. (2016). “Multidimensional poverty in Europe 2006–2012: Illustrating a methodology.” *OPHI Working Paper 74*, University of Oxford.

Alkire, S. and Santos, M. E. (2014). ‘Measuring acute poverty in the developing world: Robustness and scope of the multidimensional poverty index,’ *World Development*, 59, 251-274.

Alkire, S., Apablaza, M., and Jung, E. (2014). ‘Multidimensional Poverty Measurement for EU-SILC Countries.’ *OPHI Research in Progress 36c*, University of Oxford.

Alkire, S. and Foster, J. (2011). ‘Counting and multidimensional poverty measurement’, *Journal of Public Economics*, vol. 95(7–8), pp. 476–487.

Alkire, S., Foster, J. E., Seth, S., Santos, M. E., Roche, J. M., and Ballon, P. (2015). *Multidimensional Poverty Measurement and Analysis*. Oxford: Oxford University Press.

Alkire, S., Meinzen-Dick, R. S., Peterman, A., Quisumbing, A., Seymour, G., and Vaz, A. (2012). The Women’s Empowerment in Agriculture Index. *IPRI Discussion Paper 01240*. International Food Policy Research Institute.

Alkire, S., Ul Haq, R. and Alim, A. (2019). ‘The state of multidimensional child poverty in South Asia: a contextual and gendered view’, OPHI Working Paper 127, University of Oxford.

Batana, Y. (2008). ‘Multidimensional Measurement of Poverty in Sub-Saharan Africa’. (2013) *Social Indicators Research*, 112(2), 337-362.

Bessell, S. (2015) The Individual Deprivation Measure: measuring poverty as if gender and inequality matter, *Gender & Development*, 23:2, 223-240.
Bradshaw, S., Chant, S., and Linneker, B. (2017a). Knowing gendered poverty in the global south: A protracted path to progress? Retrieved from *Spazio Filosofico*, 20 (2), 265–286. [http://eprints.lse.ac.uk/id/eprint/85657](http://eprints.lse.ac.uk/id/eprint/85657).

Bradshaw, S., Chant, S., and Linneker, B. (2017b). Gender and poverty: What we know, don’t know, and need to know for Agenda 2030. *Gender, Place & Culture*, 24(12), 1667–1688. [https://doi.org/10.1080/0966369X.2017.1395821](https://doi.org/10.1080/0966369X.2017.1395821).

Breman, J. (2010). ‘A poor deal’ *Indian Journal of Human Development*, 4(1): 133-42.

Buvinic, M., Lycette, M. and McGreevey W.P., (eds.) (1983). *Women and Poverty in the Third World*. Baltimore, Maryland: The Johns Hopkins University Press.

Burzynska, K. and Contreras, G. (2020). ‘Gendered effects of school closures during the COVID-19 pandemic,’ *Lancet* 395(10242): 1968.

Callander, E. J., Schofield, D. J., and Shrestha, R.N. (2012). ‘Capacity for freedom: A new way of measuring poverty amongst Australian children’, *Child Indicators Research*, 5(1), pp. 179–98.

Croft, T. N., Marshall, A. M. J., and Allen, C. K., et al. (2018). *Guide to DHS Statistics*. Rockville, Maryland, USA: ICF. Retrieved from: [https://www.dhsprogram.com/pubs/pdf/DHG1/Guide_to_DHS_Statistics_DHS-7.pdf](https://www.dhsprogram.com/pubs/pdf/DHG1/Guide_to_DHS_Statistics_DHS-7.pdf).

Currie, J. and Moretti, E. (2003). ‘Mother’s Education and Intergenerational Transmission of Human Capital. Evidence from College Openings’, *Quarterly Journal of Economics*, Vol. 118, No. 4: 1495-1532.

De Lannoy, A., Frame, E., Koka, P., Leibbrandt, M. (2016b). ‘Multidimensional youth poverty: Estimating the youth MPI in South Africa at ward level’, A Southern Africa Labour and Development Research Unit Working Paper 189. Cape Town: SALDRU, University of Cape Town.
Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., and Hess, J. (2018). The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. Washington, DC: World Bank.

Espinoza-Delgado, J. and Klasen, S. (2018). ‘Gender and Multidimensional Poverty in Nicaragua. An Individual Based Approach’, World Development, Vol. 110: 466-91.

Fiddian-Qasmiyeh, E. (2014). ‘Gender and Forced Migration’, in Loescher, G., Long, K., Sigona, N., and Fiddian-Qasmiyeh, E. (eds.) The Oxford Handbook of Refugee and Forced Migration Studies. Oxford: Oxford University Press.

Fukuda-Parr, S. (1999). ‘What does feminization of poverty mean? It isn’t just lack of income.’ Feminist Economics, 5(2), 99–103. https://doi.org/10.1080/135457099337996.

García, S. and Ritterbusch, A. (2015). ‘Child poverty in Colombia: Construction of a multidimensional measure using a Mixed-Method approach’, Child Indicators Research, 8(4), pp. 801–823.

Hong, G., Kim, S., Park, G., and Sim, S-G. (2019). ‘Female Education. Externality and Inclusive Growth’, Sustainability, Vol. 11, No. 12: 3344.

IDMC. (2020). Global Report on Internal Displacement: GRID 2020. Geneva: Internal Displacement Monitoring Centre.

ILO. (2020). Employment and decent work in refugee and other forced displacement contexts: Compendium of ILO’s lessons learned, emerging good practices and policy guidance. Geneva: International Labour Office.

ILO. (2018). World Employment Social Outlook: Trends for Women 2018, Global snapshot. Geneva: International Labour Office.

International Organization for Migration. (2020). Ethiopia — National Displacement Report 5 (June — July 2020). Retrieved from
Klasen, S. and Lahoti, R. (2016). ‘How Serious is the Neglect of Intra-Household Inequality in Multi-dimensional Poverty Indices?’, available online at: https://www.aeaweb.org/conference/2017/preliminary/1740.

Klasen, S., Lechtenfeld, T., & Povel, F. (2015). ‘A feminization of vulnerability? Female headship, poverty, and vulnerability in Thailand and Vietnam’. *World Development*, 71, 36–53. https://doi.org/10.1016/j.worlddev.2013.11.003.

Marc, R.D. and Maralani, V. (2006). ‘The Intergenerational Effects of Changes in Women’s Educational Attainments’, *American Sociological Review*, Vol. 71, No. 4: 542-64.

Mishra, A., Ray, R., and Risse, L. (2016). ‘The multidimensional disadvantage of Australian children with a comparison between indigenous and non-indigenous children’, Discussion Paper 19, 2016, Monash University, Department of Economics.

Notten, G. and Roelen, K. (2012). ‘A new tool for monitoring (child) poverty: Measures of cumulative D deprivation’, *Child Indicators Research*, 5(2), pp. 335–55.

OECD. (2021). *The State of School Education: One Year into the COVID Pandemic*. Paris: OECD.

Omotoso, K. and Koch, S. (2018). ‘Exploring child poverty and inequality in post-apartheid South Africa: A multidimensional perspective’, *Journal of Poverty and Social Justice*, 26(3), pp.417–437.

Pape, U. J., Petrini, B., and Iqbal, S. A. (2018). *Informing Durable Solutions by Micro-data: A Skills Survey for Refugees in Ethiopia* (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/996221531249711200/Informing-durable-solutions-by-micro-data-a-skills-survey-for-refugees-in-Ethiopia.
Pogge, T. and Wisor, S. (2016). ‘Measuring Poverty: A Proposal’, In: M. Adler and M. Fleurbaey (eds.), The Oxford Handbook of Well-Being and Public Policy. Oxford: Oxford University Press.

Roelen, K. (2018). ‘Poor children in rich households and vice versa: A blurred picture or hidden realities?’, European Journal of Development Research, 30, pp. 320–341.

Roelen, K., Gassmann, F., and de Neubourg, C. (2010). ‘Child poverty in Vietnam: Providing insights using a country-specific and multidimensional model’, Social Indicators Research, 98(1), pp. 129–145.

Rogan, M. (2016). Gender and Multidimensional Poverty in South Africa: Applying the Global Multidimensional Poverty Index (MPI). Social Indicators Research, 126: p.987-1006.

Scott, J., Crompton, R. and Lyonette C. (eds) (2010). Gender Inequalities in the 21st Century. Cheltenham: Edward Elgar.

Sen, A. (2009). The Idea of Justice. Cambridge, Mass.: Belknap.

South African Human Rights Commission (SAHRC) and UNICEF. (2014). Poverty Traps and Social Exclusion among Children in South Africa 2014. Pretoria: SAHRC and UNICEF.

Trani, J.-F. and Cannings, T. I. (2013). ‘Child poverty in an emergency and conflict context: A multidimensional profile and an identification of the poorest children in Western Darfur’, World Development, 48(C), pp. 48–70.

UNDP. (2014). UNDP’s Multidimensional Poverty Index: 2014 Specifications. New York: Human Development Report Office.

UNHCR. (2020). Ethiopia country refugee response. Retrieved from https://reliefweb.int/report/ethiopia/ethiopia-country-refugee-response-plan-2020-2021.

Ura, K., Alkire, S., Zangmo, T. and Wangdi, K. (2012). An Extensive Analysis of the Gross National Happiness Index. Thimphu: Centre of Bhutan Studies.
Ura, K., Alkire, S., Zangmo, T., and Wangdi, K. (2015). *Preliminary Analysis of the Gross National Happiness Index 2015*. Thimphu: Centre of Bhutan Studies.

Vasquez, E. (2016). ‘Social policy and programs focused on children in Peru (2010-2014): An evaluation based on the Multidimensional Poverty Index’, *Sociology and Anthropology*, 4(10), pp. 887-909.

Vijaya, R. M., Lahoti, R., and Swaminathan, H. (2014). ‘Moving from the household to the individual: Multidimensional poverty analysis.’ *World Development*, 59: 70-81.

Youseff, N. and Hetler, C. (1983). ‘Establishing the economic condition of woman-headed households in the Third World: A new approach,’ in Buvinic, Lycette, and McGreevey (eds.), pp. 216-243.
Annex:

Table A.1. MPI, H, and A by displacement status and gender, for age groups

| Country     | Displacement Status by Gender | Children Population (0-17) |
|-------------|--------------------------------|---------------------------|
|             |                                | Population Share | MPI (decimal) | H (incidence) (c.i.) | A (intensity) (c.i.) |
|             |                                | (%) | (n)  |           | (%) |           |
| Ethiopia    | IDP Population                 | Boys | 46.90 | 7,477 | 0.275 | (0.228, 0.322) | 46.1 | (37.9, 54.3) | 59.6 | (58.5, 60.6) |
|             |                                | Girls| 42.95 | 6,848 | 0.286 | (0.242, 0.331) | 47.3 | (39.9, 54.6) | 60.5 | (59.7, 61.4) |
|             | Non-IDP                        | Boys | 5.14  | 820  | 0.070 | (0.043, 0.096) | 12.0 | (7.2, 16.8)  | 58.0 | (56.6, 59.4) |
|             |                                | Girls| 5.01  | 799  | 0.084 | (0.057, 0.111) | 14.3 | (10.1, 18.5) | 59.0 | (56.4, 61.6) |
| Nigeria     | IDP Population                 | Boys | 17.82 | 1,858 | 0.137 | (0.099, 0.175) | 22.8 | (17.0, 28.6) | 60.1 | (58.3, 61.9) |
|             |                                | Girls| 13.32 | 1,388 | 0.162 | (0.127, 0.198) | 27.3 | (22.1, 32.5) | 59.4 | (56.3, 62.5) |
|             | Non-IDP                        | Boys | 32.46 | 3,384 | 0.126 | (0.055, 0.197) | 20.1 | (8.7, 31.5)  | 62.5 | (60.5, 64.5) |
|             |                                | Girls| 36.40 | 3,794 | 0.123 | (0.054, 0.191) | 19.5 | (8.3, 30.7)  | 63.0 | (60.6, 65.4) |
| Somalia     | IDP Population                 | Boys | 18.06 | 2,768 | 0.433 | (0.377, 0.489) | 68.8 | (60.1, 77.5) | 62.9 | (61.5, 64.3) |
|             |                                | Girls| 17.67 | 2,708 | 0.426 | (0.347, 0.505) | 67.5 | (55.0, 80.1) | 63.1 | (61.1, 65.2) |
|             | Non-IDP                        | Boys | 33.99 | 5,208 | 0.333 | (0.285, 0.381) | 51.7 | (44.4, 59.0) | 64.4 | (63.3, 65.5) |
|             |                                | Girls| 30.27 | 4,638 | 0.318 | (0.274, 0.363) | 49.5 | (42.9, 56.0) | 64.3 | (63.1, 65.6) |
| South Sudan | IDP Population                 | Boys | 7.32  | 133  | 0.266 | (0.120, 0.413) | 44.3 | (19.5, 69.2) | 60.1 | (55.9, 64.3) |
|             |                                | Girls| 7.75  | 141  | 0.243 | (0.118, 0.369) | 41.6 | (19.6, 63.5) | 58.6 | (54.4, 62.8) |
|             | Non-IDP                        | Boys | 42.04 | 765  | 0.174 | (0.118, 0.231) | 28.2 | (19.2, 37.1) | 61.9 | (60.2, 63.7) |
|             |                                | Girls| 42.89 | 780  | 0.133 | (0.096, 0.170) | 21.4 | (15.6, 27.2) | 62.1 | (60.4, 63.7) |
| Sudan       | IDP Population                 | Boys | 17.44 | 1,536 | 0.285 | (0.258, 0.312) | 48.4 | (43.9, 52.9) | 58.9 | (58.1, 59.7) |
|             |                                | Girls| 16.73 | 1,473 | 0.292 | (0.263, 0.322) | 49.4 | (44.6, 54.1) | 59.2 | (58.5, 60.0) |
|             |                                | Boys | 33.04 | 2,908 | 0.071 | (0.047, 0.095) | 12.4 | (8.3, 16.6)  | 57.0 | (55.3, 58.7) |
| Country | Displacement Status by Gender | Adult Population (18+) | |
|---------|-------------------------------|------------------------|---|
|         | Population Share             | MPI (decimal)          | H (incidence) (%) (c.i.) | A (intensity) (%) (c.i.) |
|         | (%) | (n) | (%) |
|---------|-----|-----|-----|
| **Ethiopia** | | | | |
| IDP Population | Men | 36.22 | 3,829 | 0.151 | (0.129, 0.173) | 25.9 | (22.2, 29.7) | 58.3 | (56.6, 59.9) |
|             | Women | 48.37 | 5,114 | 0.261 | (0.215, 0.308) | 43.5 | (35.8, 51.2) | 60.1 | (59.2, 60.9) |
| Non-IDP Population | Men | 7.00 | 740 | 0.046 | (0.028, 0.064) | 7.9 | (4.9, 10.9) | 58.3 | (56.8, 59.8) |
|             | Women | 8.42 | 890 | 0.054 | (0.039, 0.069) | 9.3 | (6.8, 11.9) | 57.8 | (56.6, 59.0) |
| **Nigeria** | | | | |
| IDP Population | Men | 11.62 | 827 | 0.105 | (0.062, 0.148) | 17.4 | (10.4, 24.4) | 60.2 | (57.8, 62.6) |
|             | Women | 13.22 | 941 | 0.142 | (0.102, 0.182) | 23.8 | (17.3, 30.4) | 59.6 | (57.6, 61.5) |
| Non-IDP Population | Men | 35.41 | 2,521 | 0.092 | (0.030, 0.154) | 14.9 | (4.6, 25.1) | 62.0 | (59.8, 64.1) |
|             | Women | 39.75 | 2,830 | 0.077 | (0.025, 0.130) | 12.3 | (3.9, 20.7) | 63.1 | (61.2, 65.0) |
| **Somalia** | | | | |
| IDP Population | Men | 17.41 | 2,083 | 0.366 | (0.315, 0.416) | 59.0 | (50.7, 67.3) | 61.9 | (60.5, 63.4) |
|             | Women | 18.14 | 2,170 | 0.341 | (0.280, 0.402) | 55.2 | (45.2, 65.3) | 61.7 | (60.2, 63.3) |
| Non-IDP Population | Men | 30.80 | 3,685 | 0.242 | (0.203, 0.282) | 38.5 | (32.3, 44.6) | 63.1 | (61.9, 64.2) |
|             | Women | 33.64 | 4,025 | 0.230 | (0.191, 0.268) | 36.6 | (30.5, 42.6) | 62.8 | (61.7, 64.0) |
| **South Sudan** | | | | |
| IDP Population | Men | 5.61 | 153 | 0.110 | (0.041, 0.179) | 19.2 | (6.9, 31.5) | 57.5 | (54.0, 61.0) |
|             | Women | 6.48 | 177 | 0.203 | (0.094, 0.312) | 33.3 | (15.5, 51.1) | 61.0 | (58.9, 63.1) |
| Non-IDP Population | Men | 39.34 | 1,075 | 0.067 | (0.045, 0.089) | 11.4 | (7.8, 15.0) | 58.7 | (56.4, 61.0) |
|             | Women | 48.58 | 1,327 | 0.120 | (0.088, 0.151) | 19.9 | (14.7, 25.0) | 60.2 | (58.6, 61.8) |
| **Sudan** | | | | |
| IDP Population | Men | 15.63 | 1,382 | 0.214 | (0.189, 0.239) | 37.3 | (33.1, 41.6) | 57.4 | (56.7, 58.1) |
|             | Women | 15.42 | 1,363 | 0.226 | (0.206, 0.247) | 39.1 | (35.6, 42.6) | 58.0 | (57.3, 58.7) |
| Non-IDP Population | Men | 33.95 | 3,001 | 0.043 | (0.024, 0.063) | 7.5 | (4.2, 10.8) | 58.0 | (55.8, 60.3) |
|             | Women | 35.00 | 3,094 | 0.048 | (0.024, 0.072) | 8.5 | (4.3, 12.7) | 56.6 | (55.1, 58.1) |
Table A.2. Adjusted Wald test of means by displacement status and gender, for age groups

| Country       | Children Population (0-17)                      |                      |                      |                      |
|---------------|-----------------------------------------------|----------------------|----------------------|----------------------|
|               | Female IDPs v non-IDPs MPI                  | IDPs MPI            | Non-IDPs MPI         |                      |
|               | **H** | **A** | **MPI** | **H** | **A** | **MPI** | **H** | **A** | **MPI** | **H** | **A** |
| Ethiopia      | 56.06*** | 56.27*** | 1.19 | 0.78 | 0.26 | 4.56** | 0.44 | 0.40 | 1.48 |
| N.E. Nigeria  | 1.00    | 1.53    | 3.16* | 3.30* | 3.14* | 0.52 | 0.04 | 0.06 | 3.25* |
| Somalia       | 5.29**  | 6.01**  | 0.94 | 0.09 | 0.14 | 0.08 | 0.81 | 0.80 | 0.01 |
| South Sudan   | 2.74    | 2.90*   | 2.70 | 0.37 | 0.19 | 2.53 | 5.33** | 5.63** | 0.03 |
| Sudan         | 163.21*** | 162.68*** | 6.37** | 0.39 | 0.25 | 1.03 | 4.88** | 5.16** | 0.41 |

| Country       | Adult Population (18+)                       |                      |                      |                      |
|---------------|----------------------------------------------|----------------------|----------------------|----------------------|
|               | Female IDPs v non-IDPs MPI                  | IDPs MPI            | Non-IDPs MPI         |                      |
|               | **H** | **A** | **MPI** | **H** | **A** | **MPI** | **H** | **A** | **MPI** | **H** | **A** |
| Ethiopia      | 66.42*** | 65.46*** | 8.98*** | 29.13*** | 30.91*** | 5.55** | 2.60 | 2.92** | 4.08** |
| N.E. Nigeria  | 3.63*   | 4.53**  | 6.49** | 33.72*** | 28.83*** | 0.50 | 0.94 | 1.09 | 2.27 |
| Somalia       | 9.36*** | 9.94*** | 1.33 | 3.32* | 2.87* | 0.82 | 2.57 | 2.28 | 0.55 |
| South Sudan   | 1.90    | 1.80    | 0.58 | 4.38** | 4.16** | 5.34** | 15.73*** | 14.90*** | 3.15* |
| Sudan         | 120.59*** | 119.95*** | 2.68 | 2.34 | 1.62 | 4.72** | 0.27 | 0.45 | 3.72* |

Source: Authors’ calculations using the Ethiopia SPS (2017), Nigeria IDP Survey (2018), Somalia HFS (2017), South Sudan HFS (2017), and Sudan IDP Profiling Survey (2018). Significance at 1% ***, 5% **, and 10% * levels.
Figure A.1. Population shares of school-age children (%)

Source: Authors’ calculations using the Ethiopia SPS (2017), Nigeria IDP Survey (2018), Somalia HFS (2017), South Sudan HFS (2017), and Sudan IDP Profiling Survey (2018).

Figure A.2. Population shares of primary school-age household members (13+) (%)

Source: Authors’ calculations using the Ethiopia SPS (2017), Nigeria IDP Survey (2018), Somalia HFS (2017), South Sudan HFS (2017), and Sudan IDP Profiling Survey (2018).

Figure A.3. Population shares of the working-age population (%)
Source: Authors’ calculations using the Ethiopia SPS (2017), Nigeria IDP Survey (2018), Somalia HFS (2017), South Sudan HFS (2017), and Sudan IDP Profiling Survey (2018).

Figure A.4. Population shares of individuals (%)