

G²LM|LIC Working Paper No. 82 | June 2024

The Lives and Livelihoods of the Displaced in Sudan: Internally Displaced Persons and Refugees

Ragui Assaad (University of Minnesota)

Caroline Krafft (St. Catherine University)

Jackline Wahba (University of Southampton)



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ABSTRACT

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As of 2022, Sudan was home to 1.1 million refugees and 3.7 million internally displaced persons (IDPs), along with a substantial population that had previously experienced displacement. The Sudan Labor Market Panel Survey (SLMPS) 2022 over-sampled locations hosting the displaced in order to facilitate research on refugees and IDPs. This paper investigates the geographic distribution of the displaced, their demographics, their labor market and socioeconomic status and outcomes, and their education, health, food security outcomes. It also reviews their experiences of shocks, their coping strategies, and the types of social assistance they receive. Important distinctions are made between current and returned IDPs and refugees and their outcomes are compared to those of Sudanese who were never displaced. Analyses also explore differences by location of residence (in host communities and camps), by sex, and across different age groups.

JEL Classification:

F22, O15, R23, J11, J21, I24, I14

Keywords:

refugees, displacement, internally displaced persons, demographics, labor, education, health, Sudan

Corresponding author:

Ragui Assaad
Humphrey School of Public Affairs
University of Minnesota
301 19th Avenue South
Minneapolis, MN 55455
USA
E-mail: assaad@umn.edu

* The authors appreciate the collaboration of Sudan's Central Bureau of Statistics, the Economic Research Forum, and the participants who responded to the SLMPS. SLMPS 2022 was funded with support from the LSMS+ program at the World Bank and the Growth and Labor Markets | Low Income Countries (GLM | LIC) program at IZA, with underlying support from FCDO. This work has benefited from a financial grant from the Economic Research Forum. The contents and recommendation do not necessarily reflect the views of the Economic Research Forum.

1 Introduction

The new millennium has spawned an increased number of civil wars and conflicts globally, as well as natural disasters (United Nations Environment Program 2023). As a result, millions of people have fled their homes, either as refugees seeking asylum in other countries, or as internally displaced persons (IDPs) within their home country. In 2022, there were 108 million people forcibly displaced worldwide, 35 million refugees and 63 million IDPs (UNHCR 2023).

Sudan has had civil war and conflict for decades, resulting in 3.7 million IDPs in addition to about 1.1 million refugees in 2022 (UNHCR 2022a). This displacement was substantial even before the latest civil war that erupted in 2023. As of February 2024, 1.2 million new refugees had fled Sudan, and there were 6.1 million new IDPs since the outbreak of the conflict in 2023 (UNHCR 2024). Even in 2022, Sudan was a fragile conflict-affected economy. It is a low-income country where an estimated 66 percent of the population was below the poverty line in 2022 (African Development Bank Group 2024). This poverty presents a major challenge where millions are vulnerable and living precarious lives.

In this paper, we draw a profile of the lives and livelihoods of displaced populations in this highly precarious environment, as of 2022. We document the demographic characteristics, labor market and social outcomes and lived experiences of the displaced, distinguishing between current and returned IDPs, as well as refugees and comparing these groups to Sudanese populations that were never displaced. We also compare camp and non-camp populations of IDPs and refugees and take into account the urban/rural location of non-camp populations. We use the Sudan Labor Market Panel Survey (SLMPS) 2022, which over-sampled locations hosting the displaced in order to facilitate research on refugees and IDPs (Krafft, Assaad, and Cheung 2023). Also, the SLMPS 2022 enables us to distinguish between current IDPs and former IDPs and provides rich data on cause of displacement (conflict versus natural disasters), length and timing of displacement.

Although there has been a surge in the literature on forced displacement, most of this literature focuses on the impact of forced displacement, mainly refugees, on the host community (see Becker and Ferrara 2019; Verme and Schuettler 2021 for recent reviews). A few studies examine the impact of displacement on IDPs (see Ruiz and Vargas-Silva (2013) for a review of this literature). Studies focusing on the short- and medium- term effects of displacement in developing countries suggest negative impacts on labor market outcomes as well as lower income and consumption for the displaced (Ruiz and Vargas-Silva 2013). However, studying the impacts of displacement is far from straight forward as those internally displaced are not randomly selected (Ruiz and Vargas-Silva 2013). Similarly, the decision by IDPs to return is also likely to be selective and affected by many factors, including, for example, the relative availability of employment in the origin and destination, and a general comparison of standards of living in the two locations, which may vary across individuals (Assal 2006). In other words, attributing differential outcomes between displaced and non-displaced populations to displacement is challenging at best. At the same time, although displacement disrupts lives, it could also provide new opportunities. Thus, in this paper we refrain from examining the causal impact of displacement, but only document different outcomes between groups of the displaced and non-displaced.

The analyses show that both displaced and non-displaced Sudanese as well as refugees have faced severe challenges during the ongoing political and economic turmoil. Refugees are

disproportionately made up of women and children, with spouses often absent, having either stayed in the countries of origin or moved on to third countries for employment. A fraction of refugees are in camps, and these refugees tend to be highly disadvantaged economically. The majority, however, reside in urban areas in relatively large, often extended households and have comparable socioeconomic outcomes to urban non-displaced Sudanese. While refugee men have slightly higher employment rates than non-displaced Sudanese, employment rates among refugee women are lower, which is partly due to their urban residence, and the generally lower female employment rates in Sudan's urban areas (Assaad, Jamkar, and Krafft 2024). Although educational attainment levels among refugees outside camps are comparable to those of non-displaced Sudanese, refugees in camps have lower educational attainment and their children have substantially lower enrollment rates. There are substantial differences in terms of reported health status and food insecurity among refugees. Overall refugees in camps experience much worse outcomes than refugees living outside camps.

A sizeable fraction of current IDPs reside in IDP camps, and again, like camp-based refugees, they are among the poorest in Sudan. Current IDPs living outside camps are disproportionately urban compared to non-displaced Sudanese, but still mostly rural. Current IDPs tend to have disproportionately large households and higher proportions of female headship than either former IDPs or non-displaced Sudanese, but not as high as refugees. They also have lower male employment rates than non-displaced Sudanese but higher female employment rates. They have the highest fraction of self-employed in agriculture of any group. Current IDPs in camps seem to fare worse than those living outside camps, and they report the lowest rates of good health and the highest rates of food insecurity among all groups. Former IDPs usually fare better than current IDPs on most dimensions of welfare. They tend to have low rates of male employment but relatively high rates of female employment. Overall, the evidence suggests that there are sizeable gaps in economic outcomes between the urban and rural populations and that those populations who live in camps experience much worse outcomes. Current IDPs in camps are the most disadvantaged group even compared to camp-based refugees.

2 Data

2.1 Surveys

2.2 Measuring displacement

The measurement of displacement relies on several different modules of the SLMPS. One is the residential history module of the SLMPS, which asks all individuals aged 5+ about each move¹ lasting six months or more, including the reason for the move. One of the responses in terms of reasons for the move is fleeing violence/persecution or for security. We use this to identify IDPs and refugees as detailed below.² A module for non-Sudanese aged 15+ detects whether individuals are currently refugees and if so, enquires about their refugee experiences. A module for Sudanese aged 15+ detects whether individuals are currently or previously IDPs and if so, enquires about their displacement experiences.

¹ A move is defined as changing municipality (second level of administrative geography) or moving between urban and rural within the same municipality.

² We also reviewed “other” responses and included responses such as “because of war” as fleeing violence.

Because our survey is situated in Sudan, we distinguish among those of non-Sudanese nationality between refugees and other immigrants. Refugees are defined as individuals who are not Sudanese and either (1) fled violence in at least one move in the residential history or (2) self-report they are registered as a refugee. This definition operationalizes the international definition of a refugee as a person who is outside the country of their nationality due to fear of persecution.³ For non-Sudanese individuals, we assume that if at least one member of their household is a refugee, they too are a refugee. Within this paper, we do not analyze the outcomes for the small group of non-Sudanese migrants who are not refugees.

Among those of Sudanese nationality, we distinguish between current IDPs and returned IDPs.⁴ Current IDPs include those who answered in the IDP detection module “yes” to either (1) “Have you ever had to leave a place you lived due to violence?” or (2) “Have you ever had to leave a place you lived due to a natural disaster?”⁵ and “no” to “Have you returned to your original place of residence?” Current IDPs also include those who answered yes to “Are you currently registered as a displaced person?” Additionally, current IDPs include those whose most recent move in the residential mobility module was due to fleeing violence. For Sudanese individuals, we assume that if at least one member of their household is a current IDP, they too are a current IDP.

Former IDPs include those who answered in the IDP detection module “yes” to either (1) “Have you ever had to leave a place you lived due to violence?” or (2) “Have you ever had to leave a place you lived due to a natural disaster?” and “yes” to “Have you returned to your original place of residence?” or “yes” to “Have you ever registered as a displaced person?” but “no” to current registration. Former IDPs are also those who moved inside Sudan due to violence in a past move, but not for their most recent move. Returned thus includes those who returned and those who resettled. For Sudanese individuals, we assume that if at least one member of their household is a former IDP, they too are a former IDP. We thus have two mutually exclusive IDP statuses: current and former IDPs. We compare the outcomes for these groups to Sudanese who have never experienced displacement, as well as to the non-Sudanese refugees. We examine a number of different outcomes, namely: location of residence (in host communities or camps), demographics, labor market, education, health, food security outcomes, experiences of shocks, coping behavior, and social assistance received, which we describe in detail below.

3 Demographics of the displaced

3.1 Number and location of the displaced

Our analyses examine a population we estimate to be made up of 3.8 million current IDPs, 0.9 million former IDPs, and 1.1 million refugees, comparing them to 40.9 million non-displaced Sudanese. Among the Sudanese aged 15+ asked the IDP detection questions, 6.8 percent

³ Per the 1951 Refugee Convention, to which Sudan is a party (UNHCR 2015).

⁴ We explored whether there was an identifiable group of Sudanese who had previously been refugees (fled to another country due to violence) and returned to Sudan; there were only one such individual in the sample and we were therefore unable to analyze this group.

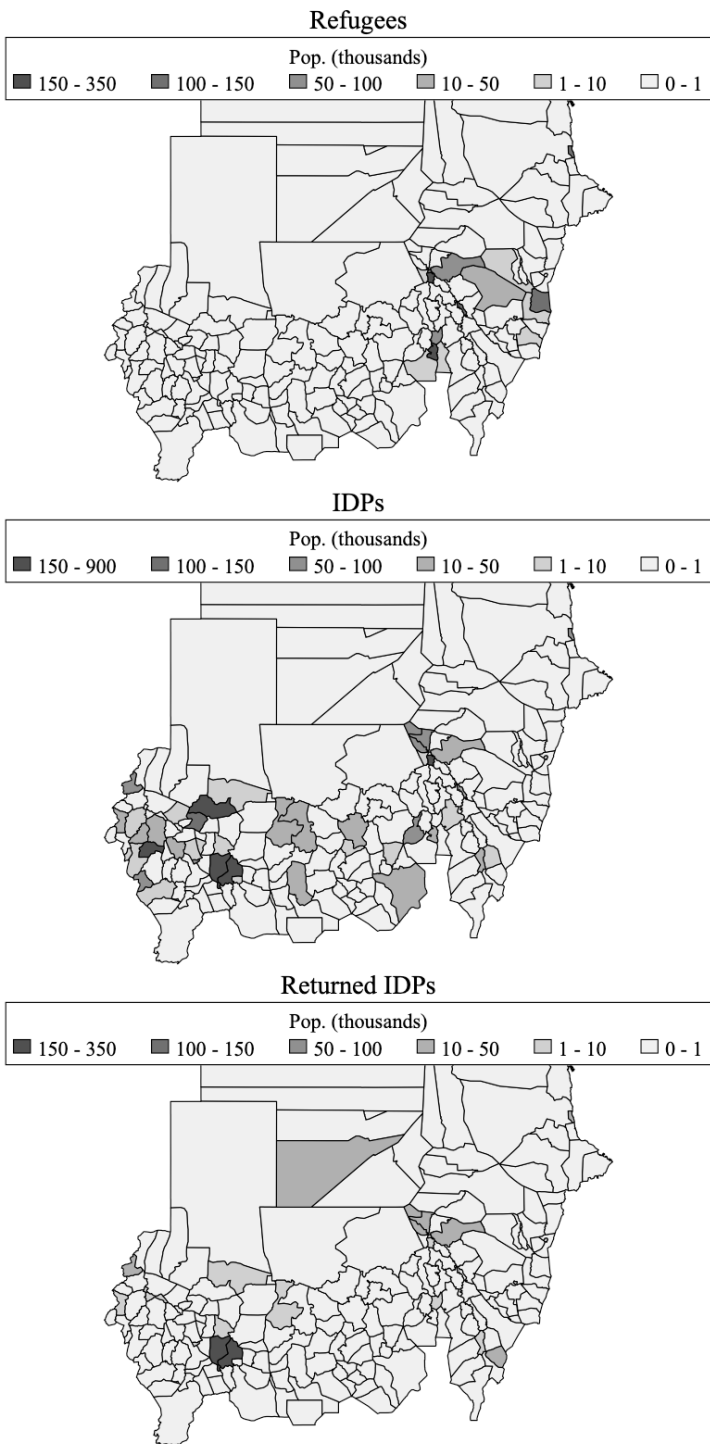
⁵ This operationalization is consistent with the international definition of IDPs as those who fled their homes due to conflict/violence, violations of human rights, or natural disasters (United Nations Economic and Social Council 1998).

reported ever fleeing due to violence (even for just one night) and 2.1 percent due to a natural disaster. Among those who fled due to violence, 27.9 percent had also ever fled a natural disaster. Among those who had fled due to natural disaster, 90.2 percent had also ever had to flee due to violence. The displaced are thus often facing multiple drivers of displacement or have had multiple experiences of displacement. Among those who fled due to violence for at least one night, half (51.6 percent) had a residential move of six months or more due to violence.

Among refugees, the vast majority (77 percent) are from South Sudan, followed by 13 percent from Eritrea and 10 percent from Ethiopia. These shares are similar to those reported by UNHCR (UNHCR 2022a), although the SLMPS does not appear to have captured the refugee population in Sudan from Syria and the Central African Republic, which UNHCR reports are at 3 percent and 2 percent, respectively (UNHCR 2022a).

As shown in Figure 1, the vast majority of refugees are concentrated in the Khartoum region as well as the Eastern States of Kassala and El-Gadaref, bordering Eritrea and Ethiopia. Another concentration can be found in White Nile state near the South Sudan border. IDPs in contrast are concentrated in the Darfur region, particularly the municipalities of Al-Fashir and Tawila in North Darfur, Nyala in South Darfur, Assalaya and Yassin in East Darfur, Kulbus in West Darfur, and Wadi Salih in Central Darfur. To a lesser extent, they are also concentrated in the Kordofan region and also around the capital Khartoum. Returned IDPs are primarily concentrated in a couple of municipalities around Assalaya and Yassin in East Darfur with some concentration north of the capital.

Figure 1. Number of refugees, IDPs, and returned IDPs (in thousands) by municipality



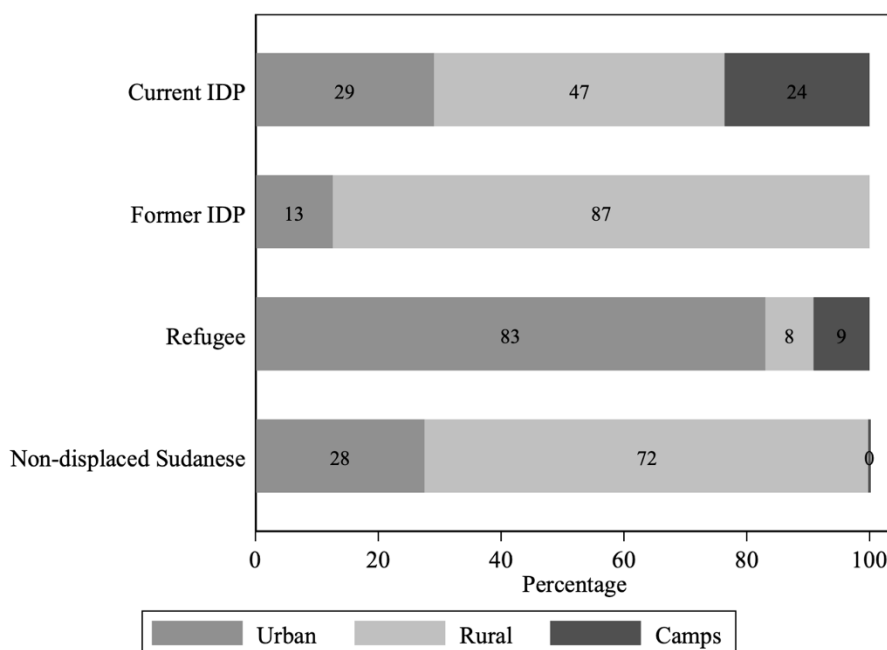
Source: Authors' calculations based on SLMPS 2022

Notes: Sample not designed to be representative on the municipality level

Our data finds relatively more displaced outside of camps as compared to the figures provided by UNHCR. Per UNHCR as of 2022, 39 percent of refugees and 74 percent of IDPs were in formal camps (UNHCR 2022b). We find that only 9 percent of refugees were in camps and 24 percent of current IDPs (Figure 2). This discrepancy may be because we detect additional displaced persons not tracked by UNHCR; it may also be due to inaccuracies in the way enumerators coded this variable or difficulties in fielding and collecting data in the camps (Krafft, Assaad, and Cheung 2023). Individuals may also have resided in camps previously but were no longer doing so. Among those who were displaced and answered the refugee questions, 17 percent report ever staying in a refugee camp. Among those who answered the IDP questions, 78 percent report ever staying in a camp for displaced persons.

As shown in Figure 2, the majority of non-displaced Sudanese (72 percent) and former IDPs (87 percent) live in rural areas reflecting the predominance of rural living in Sudan. In contrast, the vast majority of refugees (83 percent) live in urban areas. Non-camp based current IDPs are also more likely to be urban than non-displaced Sudanese since 38 percent of them are urban, compared to just 28 percent of non-displaced Sudanese. Hereafter, we often distinguish outcomes by place of residence, specifically camp vs. non-camp for current IDPs and refugees, and urban vs. rural for non-displaced Sudanese. We do not further sub-divide former IDPs due to a limited and primarily rural sample.

Figure 2. Place of residence (percentage), by displacement status

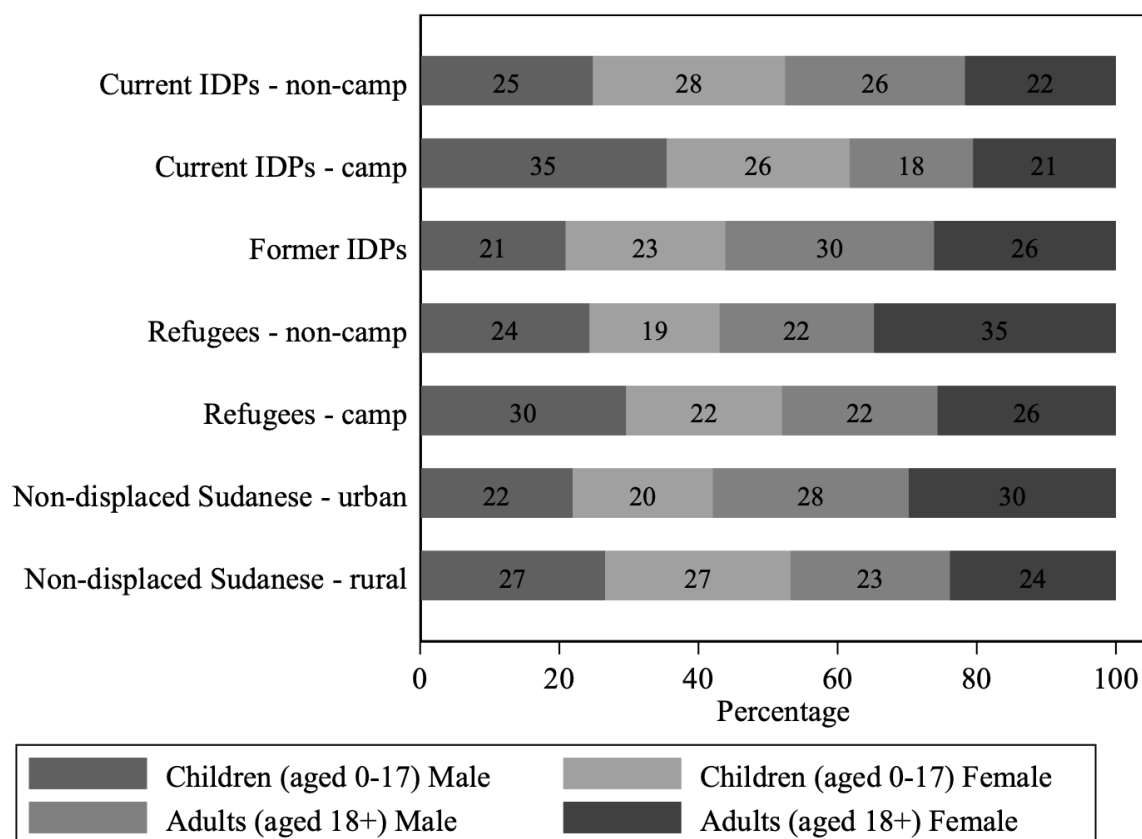


Source: Authors' calculations based on SLMPS 2022

Examining the distributions of all four groups by age group and sex (Figure 3), suggests that more than half of current IDPs are children under 18, though the share of children among current IDPs in camps is higher at around 61 percent. Similarly, the share of children amongst refugees in camps (52 percent) is higher than among refugees outside camps (43 percent). More than half

of the camp populations are children for both IDPs and refugees. The refugee population in Sudan is disproportionately made up of adult women,⁶ in particular among non-camp refugees (35 percent). The opposite appears to be true among former IDPs where adult men are over-represented (30 percent) relative to adult women (26 percent). As we will see below, refugee households are much more likely to be female-headed and have an absent spouse rather than a deceased one, suggesting that men from refugee families are either more likely to stay behind or move on to third countries.

Figure 3. Distribution by sex and age group according to displacement status (percentages)



Source: Authors' calculations based on SLMPS 2022

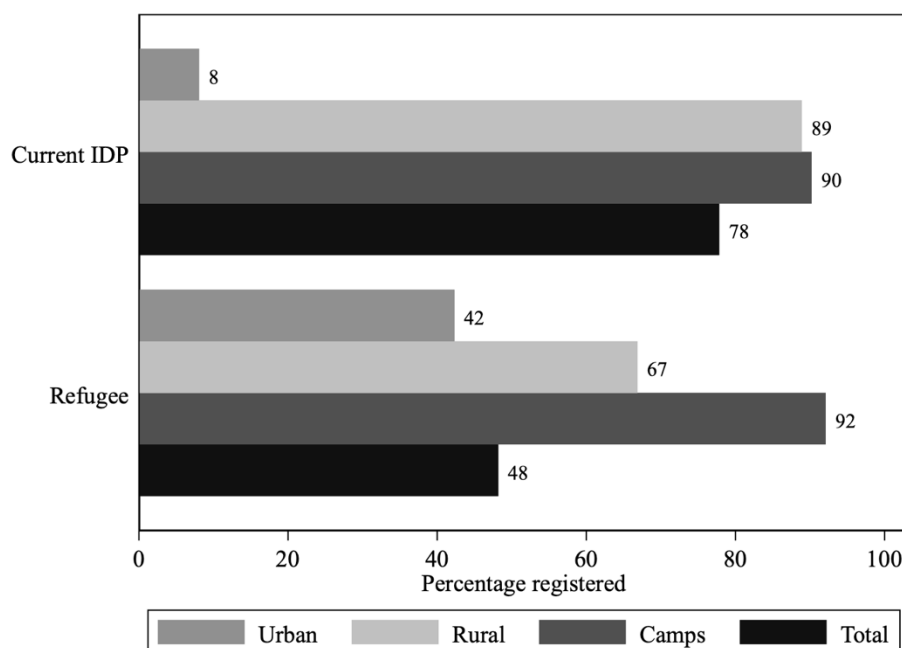
3.2 Experiences of displacement

Among former IDPs, 66 percent had ever registered as a displaced person. Among current IDPs, 81 percent had ever registered as a displaced person and almost all of those were still registered, resulting in 78 percent of current IDPs being currently registered as displaced persons (Figure 4). Only around half of current refugees (48 percent) reported being registered as a refugee, which may explain why we find a larger share of refugees outside of camps than official UNHCR

⁶ Although the extent differs, UNHCR data on refugees likewise find that women are over-represented among adults (UNHCR 2022c).

statistics. Almost all of those refugees who had registered were registered with UNHCR (98 percent), 66 percent with the Sudanese government, and 28 percent with other parties (multiple registrations are possible). Interestingly, not all current IDPs who live in camps report they are registered, but 90 percent do so, along with most rural current IDPs (89 percent) but very few urban current IDPs (8 percent). For refugees, 92 percent of those in camps report being registered, compared to 67 percent in rural areas and 42 percent in urban areas.

Figure 4. Percentage currently registered, current IDPs and refugees, by type of residence

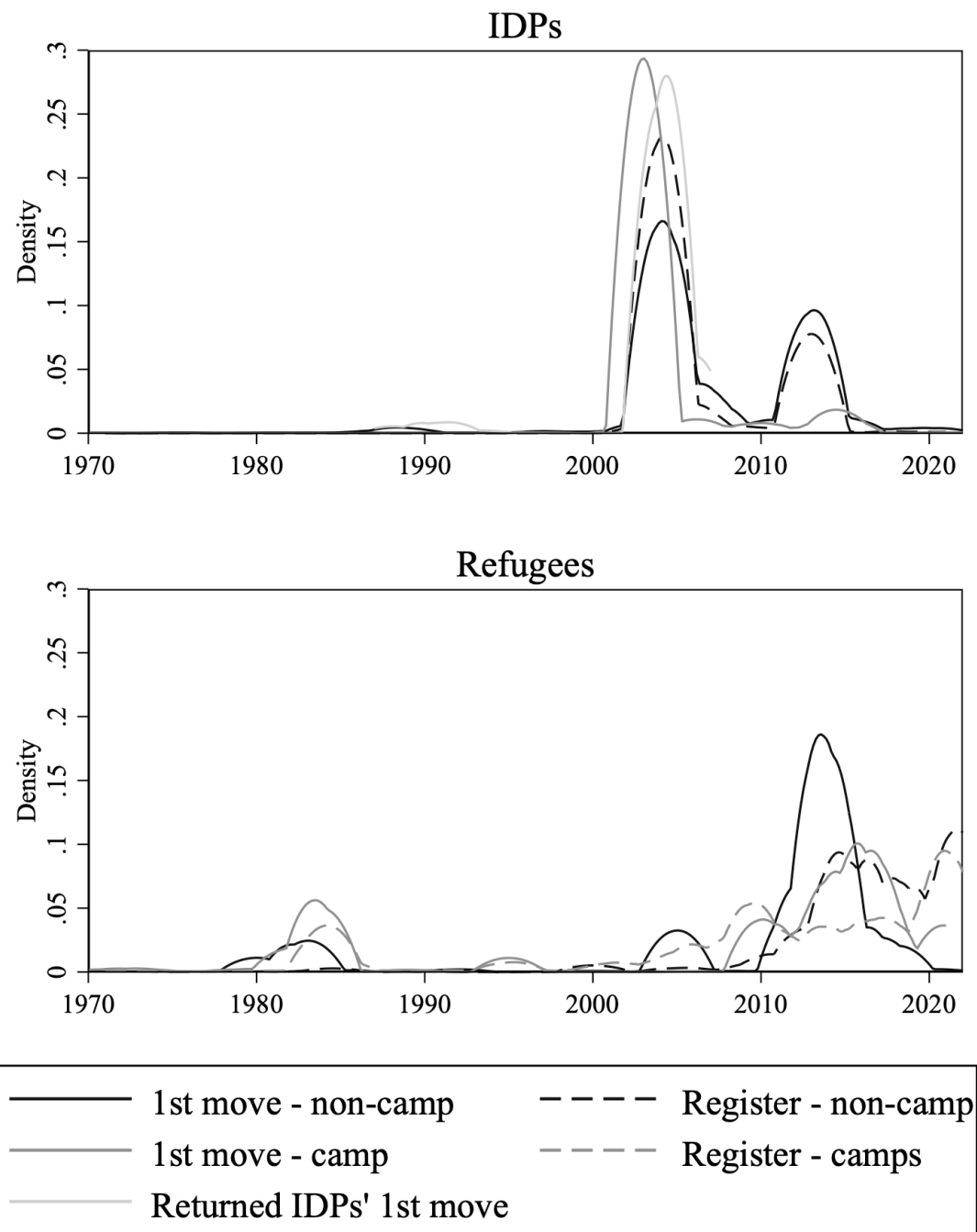


Source: Authors' calculations based on SLMPS 2022

As shown in Figure 5, initial small waves of refugees came into Sudan in the early 1980s, followed by small waves in the mid-2000s. Most refugees arrived during the 2010s, driven by conflicts in the newly independent South Sudan, particularly after 2012. Registered refugees tended to arrive slightly more recently, particularly after 2012, and while around half registered the year they arrived, for others registrations lagged arrival.

By far the largest number of IDPs were displaced in the early to mid-2000s followed by another wave in the first half of the 2010s. For current IDPs who are registered, registration was almost always the same year as displacement. Data from the International Displacement Monitoring Centre, also shows a peak in the number of IDPs in 2012-2014 (Internal Displacement Monitoring Centre 2022). That data shows another peak in 2021 resulting from intercommunal violence in Darfur, but the 2021 peak does not show up in SLMPS 2022 data. When areas were not safe for fieldwork, they were not included in the SLMPS 2022 sample (Krafft, Assaad, and Cheung 2023). Since violence continued in Darfur in 2022 (Internal Displacement Monitoring Centre 2023), this may have precluded fielding in these areas experiencing new conflict and displacement.

Figure 5. Year of first arrival and registration (density), by displacement status

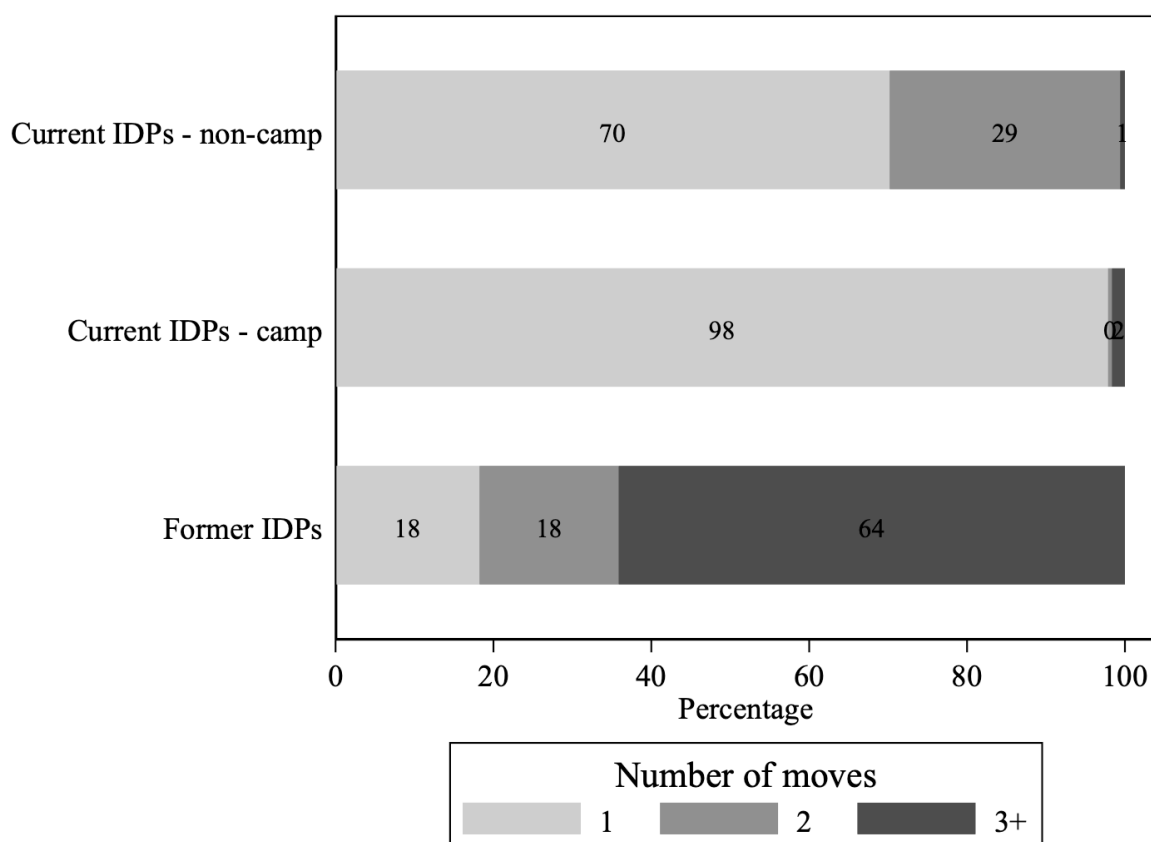


Source: Authors' calculations based on SLMPS 2022

Note: Epanechnikov kernel density with bandwidth one. Dates of first displacement are for those who reported a move due to violence in the residential mobility; dates of registration are for those who reported being registered. Those displaced prior to 1970 recoded to 1970.

Displacement is often a recurring event for the same households. As Figure 6 shows, around two thirds of former IDPs (64 percent) experienced at least three moves since displacement and another 18 percent experienced two moves. Current IDPs in camps tend to be experiencing their first displacement (98 percent), while current IDPs in non-camps were likely to have moved more than once (30 percent had more than one move).

Figure 6. Number of times displaced (percentage), by displacement status

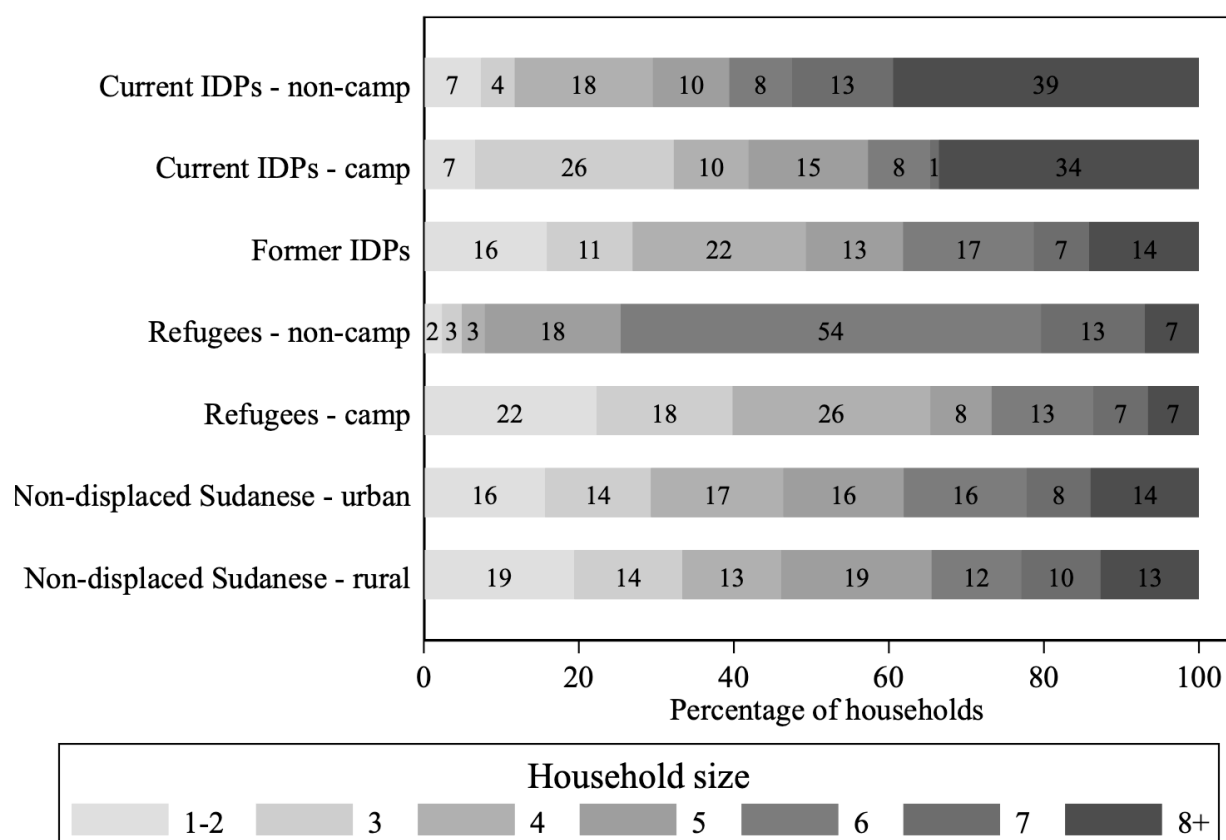


Source: Authors' calculations based on SLMPS 2022

3.3 Household composition

Examining the household size of the displaced suggests that in most cases whole households have been uprooted and not just one or two individuals. As shown in Figure 7, current IDPs living outside camps tend to have large household sizes (61 percent of households have six or more people), along with a sizeable share of current IDPs in camps (43 percent of households are six or more people). Non-camp refugees also have particularly large household sizes with 75 percent of households consisting of six or more people. Camp refugees tend to have relatively smaller households (only 27 percent are six or more people). On the other hand, the distribution of household sizes among former IDPs is similar to that of non-displaced Sudanese in rural and urban areas.

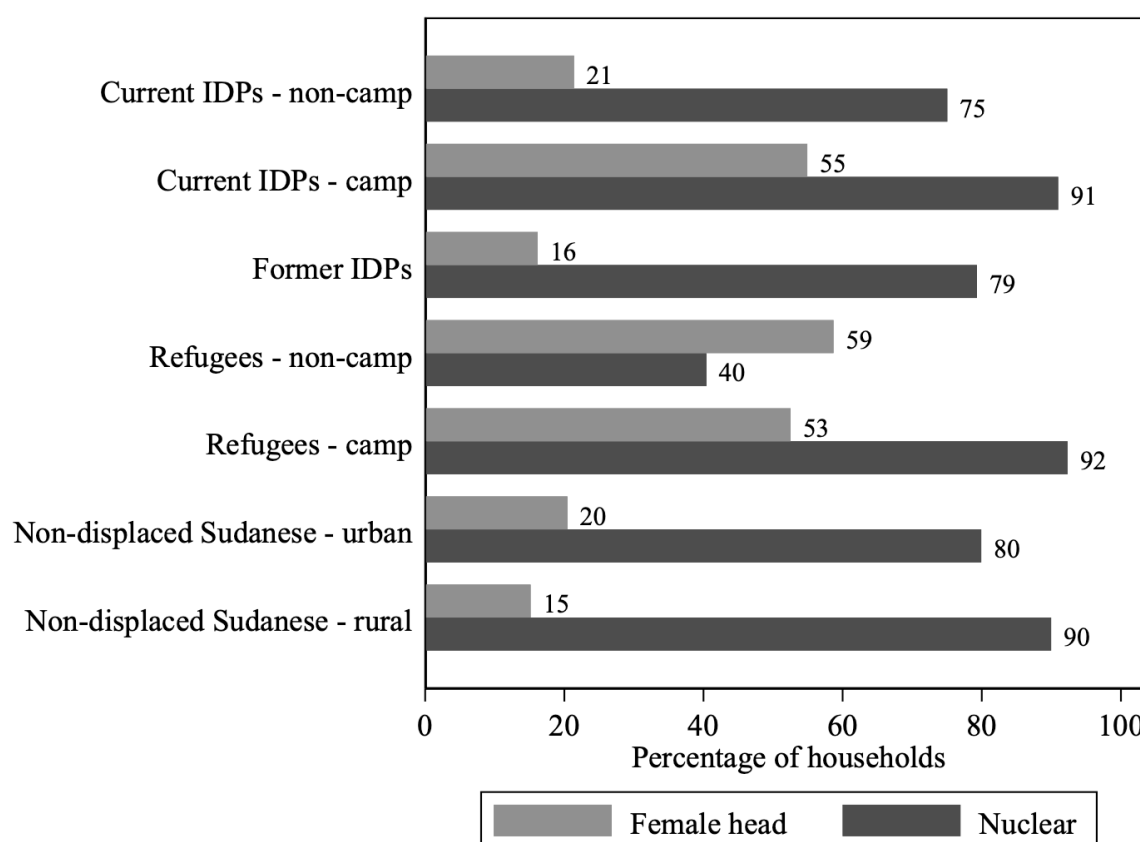
Figure 7. Household size (percentage of households), by displacement status



Source: Authors' calculations based on SLMPS 2022

As shown in Figure 8, less than half (40 percent) of refugee households outside camps are nuclear households compared to the majority of refugees (92 percent) in camps. This together with their large household sizes suggests that in order to leave the camps, refugees must find lodging with relatives so as to make housing more affordable. This explanation could also apply to current IDPs outside camps who also have households that are larger in size and that tend to be disproportionately extended households (25 percent). The large household sizes among current IDPs could also be due to higher fertility rates given the relatively high proportion of nuclear households compared to refugees. Figure 8 also shows that more than half of refugee households (59 percent in camps and 53 percent not in camps) are headed by women as compared to 15 percent (rural) or 20 percent (urban) of non-displaced Sudanese and 16 percent of former IDPs. However, half (55 percent) of the current IDPs who are in camps live in female-headed households compared to only 21 percent among current IDPs outside camps.

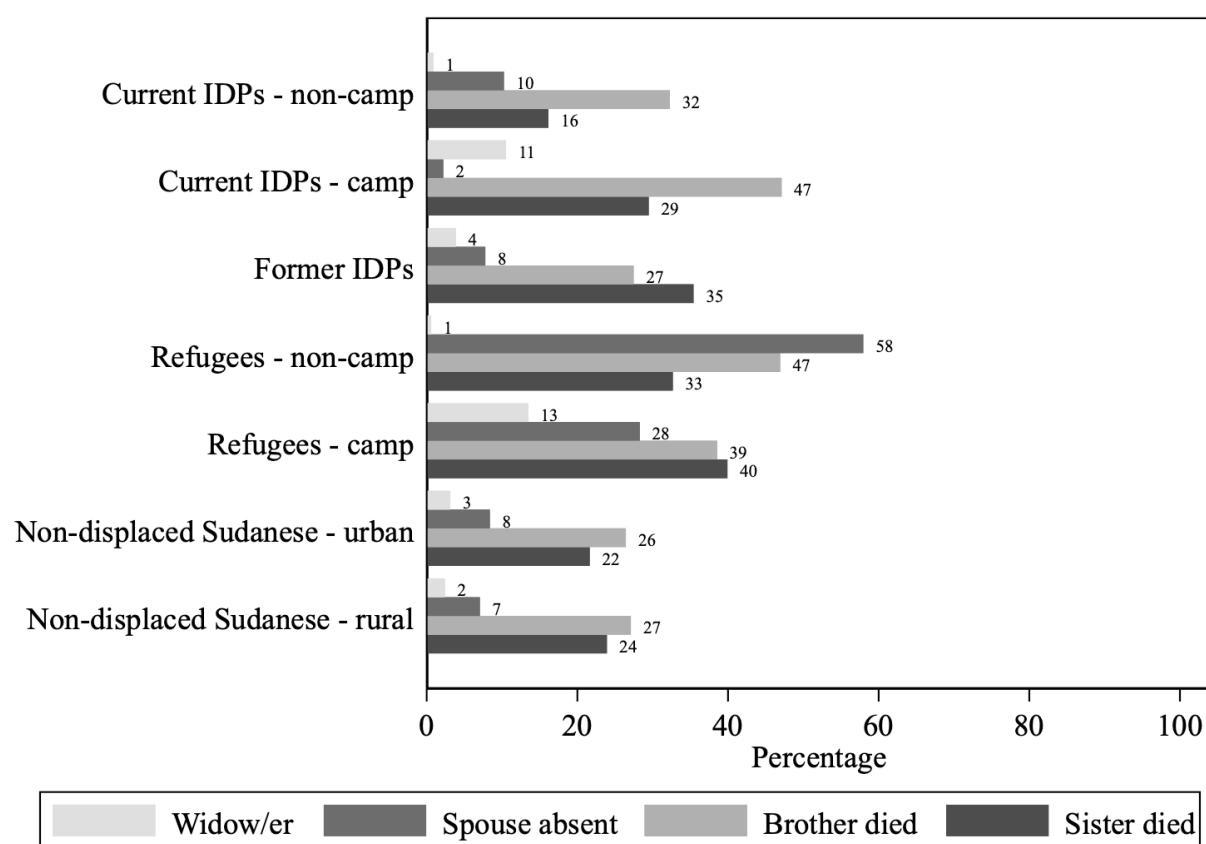
Figure 8. Percentage of households with female heads, percentage of households nuclear, by displacement status



Source: Authors' calculations based on SLMPS 2022

Figure 9 confirms that this high rate of female headship among refugees is due to the spouse being absent (58 percent among refugees in non-camps and 28 percent among refugees in camps), a sign of selective displacement of men and women among refugees. It indicates that husbands have either remained behind, presumably to care for property or livestock or have moved on to third countries, likely for work. However, among refugees and current IDPs living in camps, 11-13 percent are widowed. The high rates of having a sibling, especially a brother, dying shown in Figure 9 does point to the traumas that refugee populations, and also IDPs, experienced. More than a third of refugees and IDPs had lost a brother (as high as 47 percent for current IDPs in camps and non-camp refugees), but only 27 percent of former IDPs and non-displaced Sudanese had experienced such losses.

Figure 9. Widow/er (percentage of those ever married), spouse absent (percentage of those currently married), percentage of brothers/sisters dead, by displacement status, ages 18-64



Source: Authors' calculations based on SLMPS 2022

4 Socioeconomic status and labor market outcomes

In this section, we explore the socioeconomic status of displaced populations as compared to the non-displaced. We specifically explore their position in the wealth distribution and then examine labor market outcomes by displacement status.

4.1 Socioeconomic Status

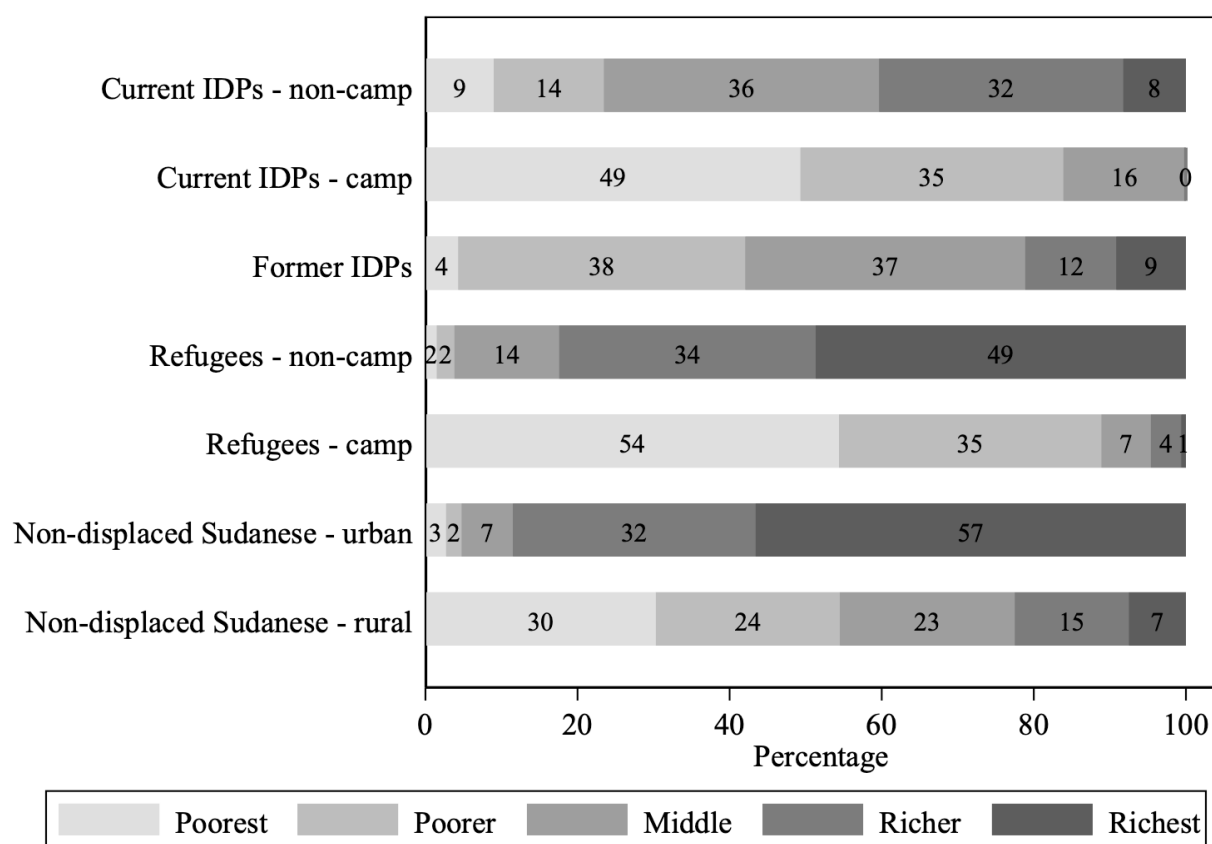
The SLMPS includes a household-level wealth index that is estimated using factor analysis on the basis of variables describing the household's dwelling and ownership of various durable goods.⁷ Households are then classified into wealth quintiles based on their position in the distribution of the wealth index. As shown in Figure 10, displaced populations living in camp settings are disproportionately represented in the lowest wealth quintiles. About half of current IDPs (49 percent) and 54 percent of refugees living in camps are in the lowest wealth quintile and 35 percent of each of the two groups are in the second lowest quintile. This representation in

⁷ The estimation of the wealth index uses a similar methodology as that used in Demographic and Health Survey, which was originally inspired by Filmer and Pritchett (2001) and Montgomery, Gragnolati, Burke & Paredes (2000).

the bottom two quintiles is far higher than for any non-camp population, irrespective of displacement status. Surprisingly, current and former IDPs outside of camps fare better than non-displaced rural Sudanese households, despite the fact that they are mostly rural. Only 23 percent of non-camp current IDPs and 42 percent of former IDPs are in the bottom two quintiles, as compared to 54 percent of rural non-displaced Sudanese. This surprising finding may be due to the selectivity of being able to leave the camps and either move on to other locations, as in the case of current IDPs, or move back to the original location of residence, as is the case for former IDPs. Only those with some means are able to undertake these moves.

Non-camp refugees, who are mostly urban, are comparable in terms of wealth to urban, non-displaced Sudanese. These two groups have low and similar probabilities of being in the bottom two wealth quintiles (2-3 percent per quintile) and the fourth quintile (32-34 percent), but non-camp refugees are more likely to be in the third quintile (14 percent vs. 7 percent for urban non-displaced Sudanese) and less likely to be in the top quintile (49 percent vs. 57 percent for urban non-displaced refugees). It is striking that non-camp refugees have such little representation in the bottom of the wealth distribution. As with IDPs, this may be because the poorest refugees cannot afford to leave the camps.

Figure 10. Household wealth quintiles (percentage of households), by displacement status



Source: Authors' calculations based on SLMPS 2022

4.2 Labor market outcomes

We now proceed to an analysis of labor force participation, employment, and unemployment. Figure 11 shows how the labor force participation rate varies by displacement status and sex. Importantly, men living in camps tend to have lower labor force participation than those from the same group not living in camps. More specifically male current IDPs in camps are much less likely to be economically active (12 percent) compared to their non-camp counterparts (64 percent). Similarly, 53 percent of male refugees in camps are economically active compared to 71 percent outside of camps. Also, at 37 percent, the labor force participation rate of former IDPs seems to be lower than that of either urban or rural non-displaced Sudanese (68 percent in urban areas and 63 percent in rural areas). In terms of male employment rates, current IDPs in non-camps, refugees in non-camps and non-displaced Sudanese in both rural and urban areas tend to have around 60 percent employment rates. On the other hand, the employment rates of male current IDPs in camps (6 percent), male refugees in camps (42 percent) and male former IDPs (31 percent) are much lower.

As expected, female labor force participation and employment rates are much lower than male rates for all groups. As shown in Figure 11, the participation rates of female current IDPs (at 6 percent) and female refugees (at 8 percent) are particularly low compared to 30 percent of female current IDPs outside camps, 20 percent for female refugees outside camps, and 22 percent for female former IDPs. The participation rates of female non-displaced Sudanese are 20 percent in urban areas and 10 percent in rural areas.⁸

With regard to unemployment, male current IDPs in camps have the highest unemployment rate - almost 50 percent followed by male refugees in camps at 20 percent and male former IDPs at 17 percent (Figure 11). Current male IDPs outside camps have the lowest unemployment rates at 2 percent. Male refugees outside camps have similar unemployment rates as male non-displaced Sudanese (9 percent).

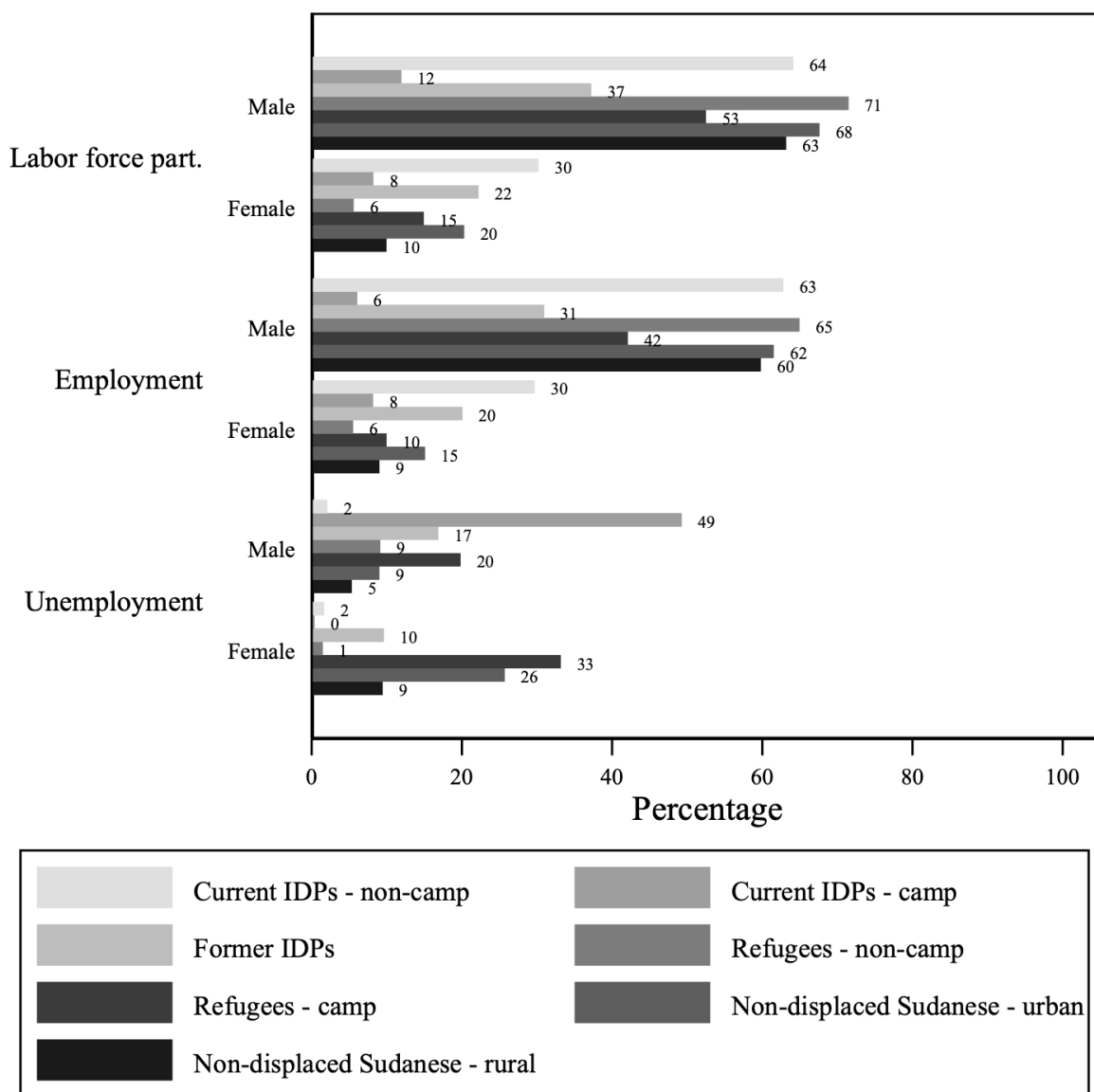
Among women, unemployment rates are highest among refugees outside camps (who are predominately urban) (33 percent) and urban non-displaced Sudanese women (26 percent). This is probably because, as we will see below, educational levels are much lower among internally displaced populations, and female unemployment is mostly limited to educated groups in Sudan (Krafft et al. 2023).

These figures suggest male current IDPs in camps have the worst labor market outcomes among men: the lowest participation and employment rates and the highest unemployment rates. Lack of employment has been found as a key challenge for IDPs in camps in other research as well (Sudanese Government's Joint Mechanism for Durable Solutions and United Nations Country Team Sudan 2019). For women both current IDP and refugees in camps have worse labor market in terms of labor force participation and employment, but refugees outside camps have the highest unemployment rates, probably because of their relatively high education levels. In terms of (relatively) high female participation by IDPs outside of camps, relatively high participation

⁸ Standard employment questions tend to strongly understate the employment rates of rural females in a highly agrarian economy such as Sudan's (see Assaad, Jamkar, and Krafft 2024).

of female IDPs has been observed in other research as well, with the important caveat that even with this employment IDP women are poorer than other groups (Stojetz and Brück 2021).

Figure 11. Labor force participation rate (percentage of the population), employment rate (percentage of the population), unemployment rate (percentage of the labor force), by sex and displacement status, ages 15-64



Source: Authors' calculations based on SLMPs 2022

Notes: 7-day reference period. Standard definition of unemployment (search required)

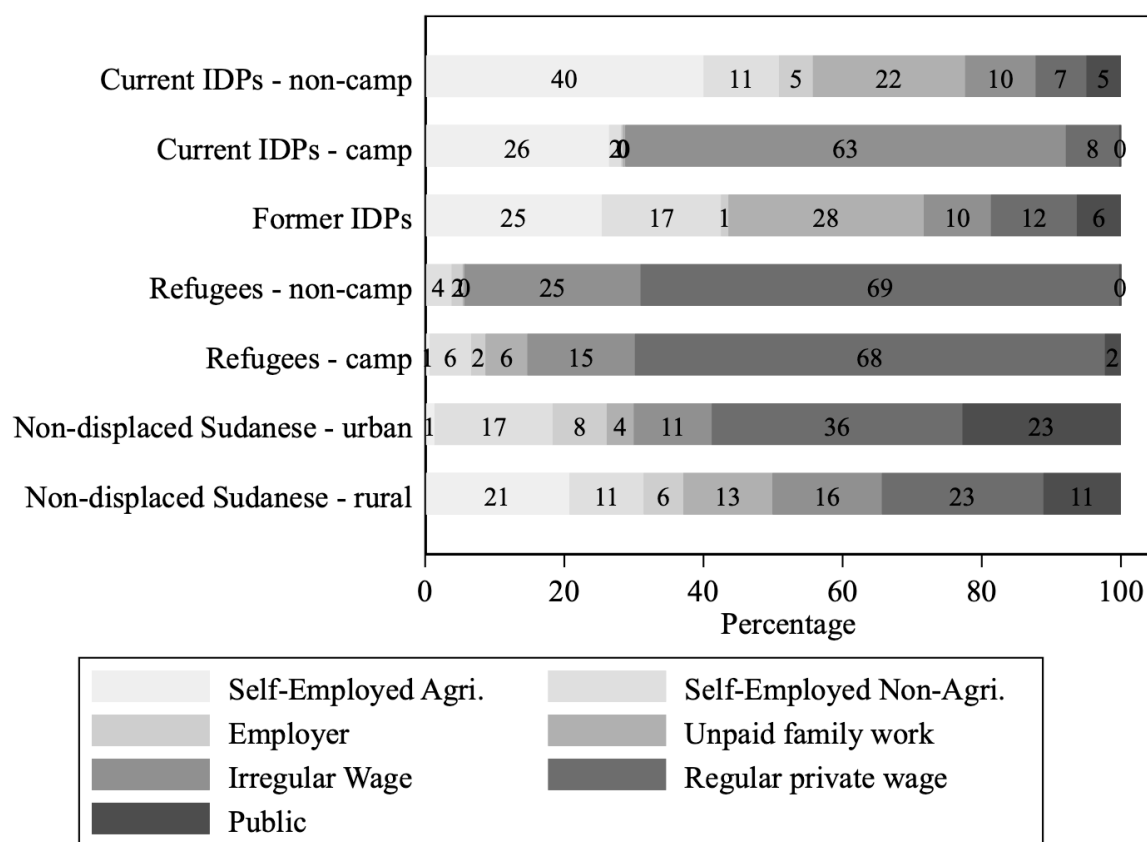
We present, in Figure 12, the distribution of employment by type of work. Among non-wage workers we distinguish between employers, self-employed workers in and out of agriculture, and unpaid family workers. Among wage workers, we distinguish between irregular wage workers,

regular private wage workers and public sector workers.⁹ Current and former IDPs are disproportionately dependent on agriculture for employment. Among employed current IDPs outside of camps, 40 percent are self-employed in agriculture, compared to 26 percent of current IDPs in camps, which is similar to the share among former IDPs (25 percent). This share compares to 21 percent among rural non-displaced rural Sudanese. Around a quarter of employed current IDPs outside camps and employed former IDPs are engaged in unpaid family work (primarily in agriculture), compared to 13 percent of non-displaced Sudanese in rural areas.

A substantial majority of employed current IDPs in camps (63 percent) are in the very precarious employment category of irregular (or casual) wage workers. Interestingly, this is not the case for camp-based refugees, where a large majority (68 percent) are in the more stable regular wage employment, similar to their non-camp counterparts (69 percent). The main difference in poverty status therefore comes from the fact that camp-based refugees are much less likely than their off-camp counterparts to be employed, as shown in Figure 11, rather than difference in the kind of employment they engage in. Refugees, whether camp-based or not, are much less likely than either IDPs or non-displaced Sudanese to be non-wage workers, reflecting their lack of access to productive assets. Access to the most stable form of employment, namely public sector employment, is limited to non-displaced Sudanese and to a much lesser extent current IDPs outside of camps and former IDPs.

⁹ Virtually all private sector wage workers in Sudan are informal, indicated by being covered by social insurance (Krafft et al. 2023).

Figure 12. Type of work (percentage), by displacement status, ages 15-64, employed individuals



Source: Authors' calculations based on SLMPs 2022

Notes: 7-day reference period for employment.

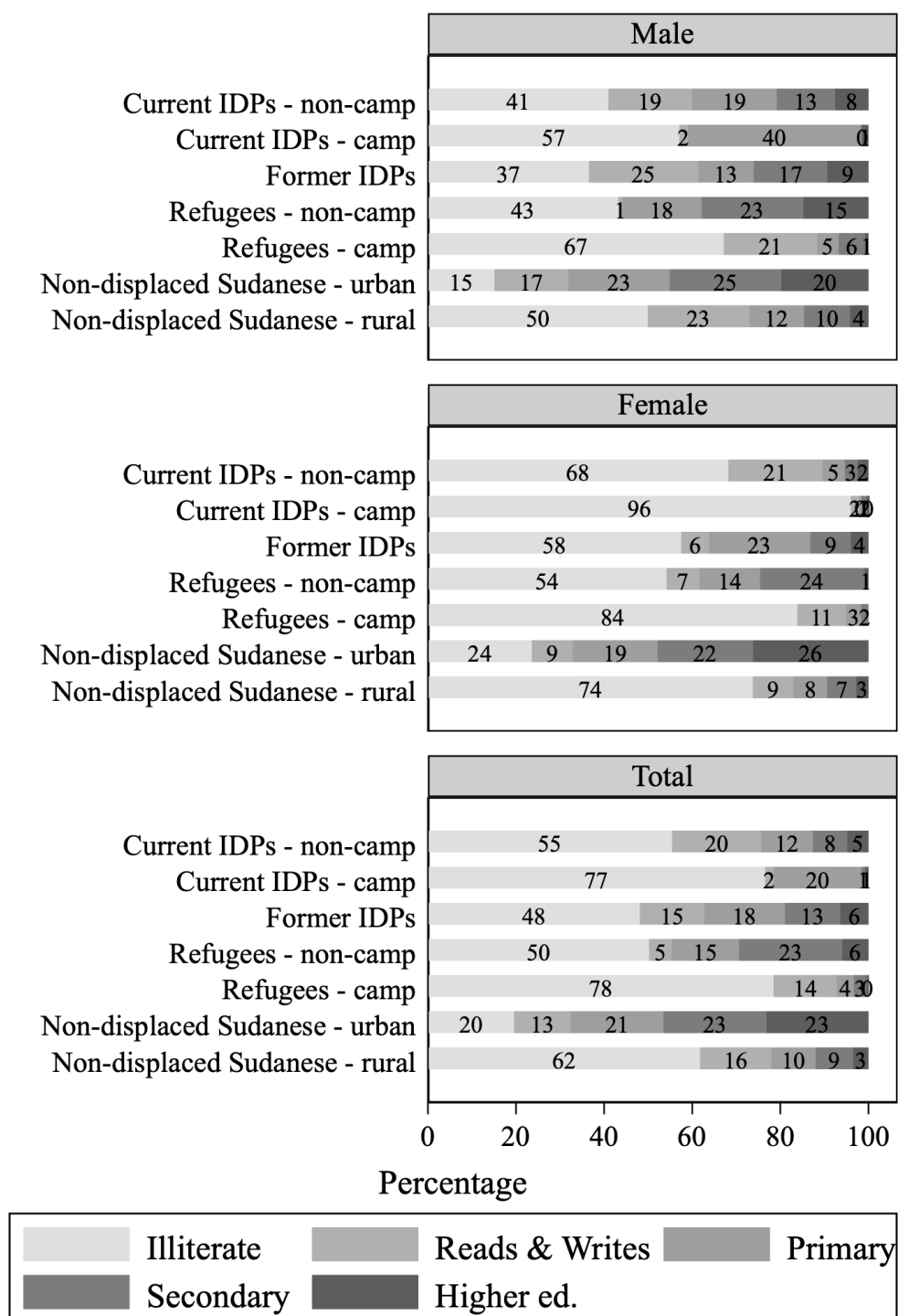
5 Education and Information

5.1 Education and literacy

Examining the educational attainment of adults (aged 15-64) by sex, Figure 13 shows that well over half the population of Sudan, for groups aside from non-displaced urban Sudanese, has no formal educational credentials (being either illiterate or only read and write), with lack of education being more pronounced among women. The least educated groups are current IDPs and refugees in camps, who are 77-78 percent illiterate, as compared to 55 percent for current IDPs outside camps, and 50 percent for refugees outside camps. Non-displaced rural Sudanese have a 62 percent illiteracy rate, higher than any other non-camp group. Interestingly, camp-based male refugees have higher illiteracy rates than their IDPs counterparts (67 vs. 57 percent), whereas camp-based female refugees have lower illiteracy rates than their IDP counterparts (84 percent vs. 96 percent), albeit still very high.

A similar picture emerges at the upper end of the educational distribution, with the share of higher educated individuals being the lowest among camp-based populations of IDPs and refugees (Figure 13). However, it is higher among non-camp IDPs, former IDPs, and refugees (5-6 percent), than among rural non-displaced Sudanese (3 percent), reflecting the selective nature of the ability to leave the camps. Refugees outside camps tend to also have disproportionately high rates of secondary education (23 percent), similar to that of the urban non-displaced Sudanese. This again reflects the selective nature of the ability to leave the camps.

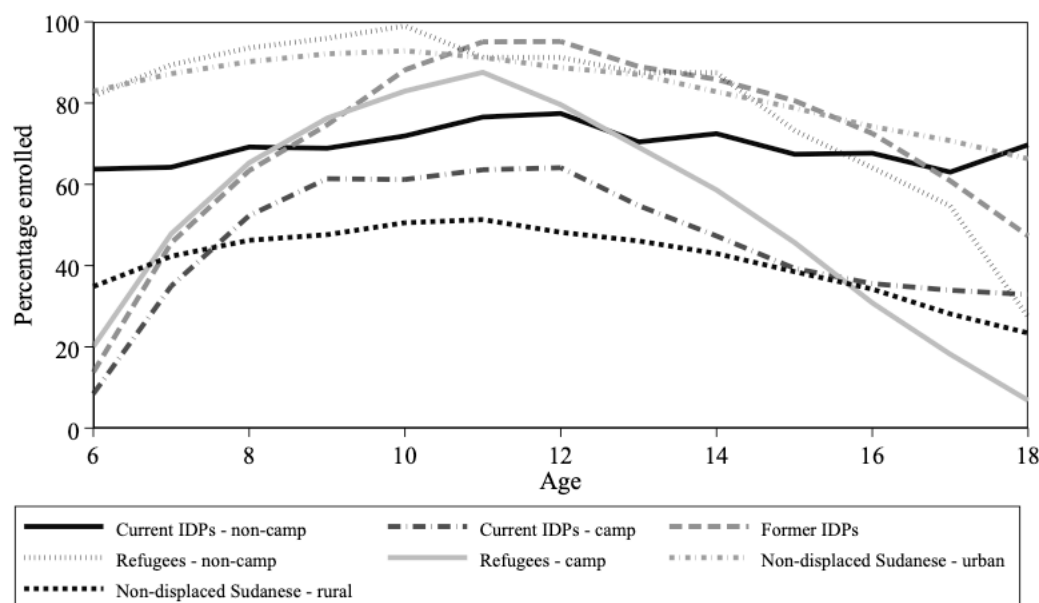
Figure 13. Educational attainment, by displacement status and sex, ages 25-64



Source: Authors' calculations based on SLMPS 2022

Examining school enrollment rates for those 6-24 years old,¹⁰ Figure 14 shows that rural non-displaced Sudanese tend to have the lowest enrollment rates of any group, especially between the crucial ages of 8 to 16. Their enrollment rates peak at a maximum of just above 40 percent at age 11. Other groups such as camp-based refugees and IDPs and former IDPs have delayed enrollments, but eventually catch up and, with the exception of camp-based IDPs, reach relatively high enrollment rates. Camp-based IDPs are also quite disadvantaged in terms of access to education, with enrollment rates never exceeding 60 percent. Camp-based refugees enroll late, reach a peak enrollment rate of 80 percent at age 11, but then experience the fastest drop in enrollment by age, so as to experience the lowest rates of enrollment by age 18. Current IDPs outside camps have intermediate levels of enrollment. Although they appear to start on time, their enrollment rates are fairly flat with age, never exceeding 70 percent, but do not fall off with age as much of those of other groups. The most advantaged groups in terms of educational access are urban non-displaced Sudanese, but also non-camp refugees, who have among the highest enrollment rates until age 15.

Figure 14. School enrollment rates (percentages), by age and displacement status, ages 6-18



Source: Authors' calculations based on SLMPS 2022

Notes: Lowess running-line least squares with bandwidth 0.5

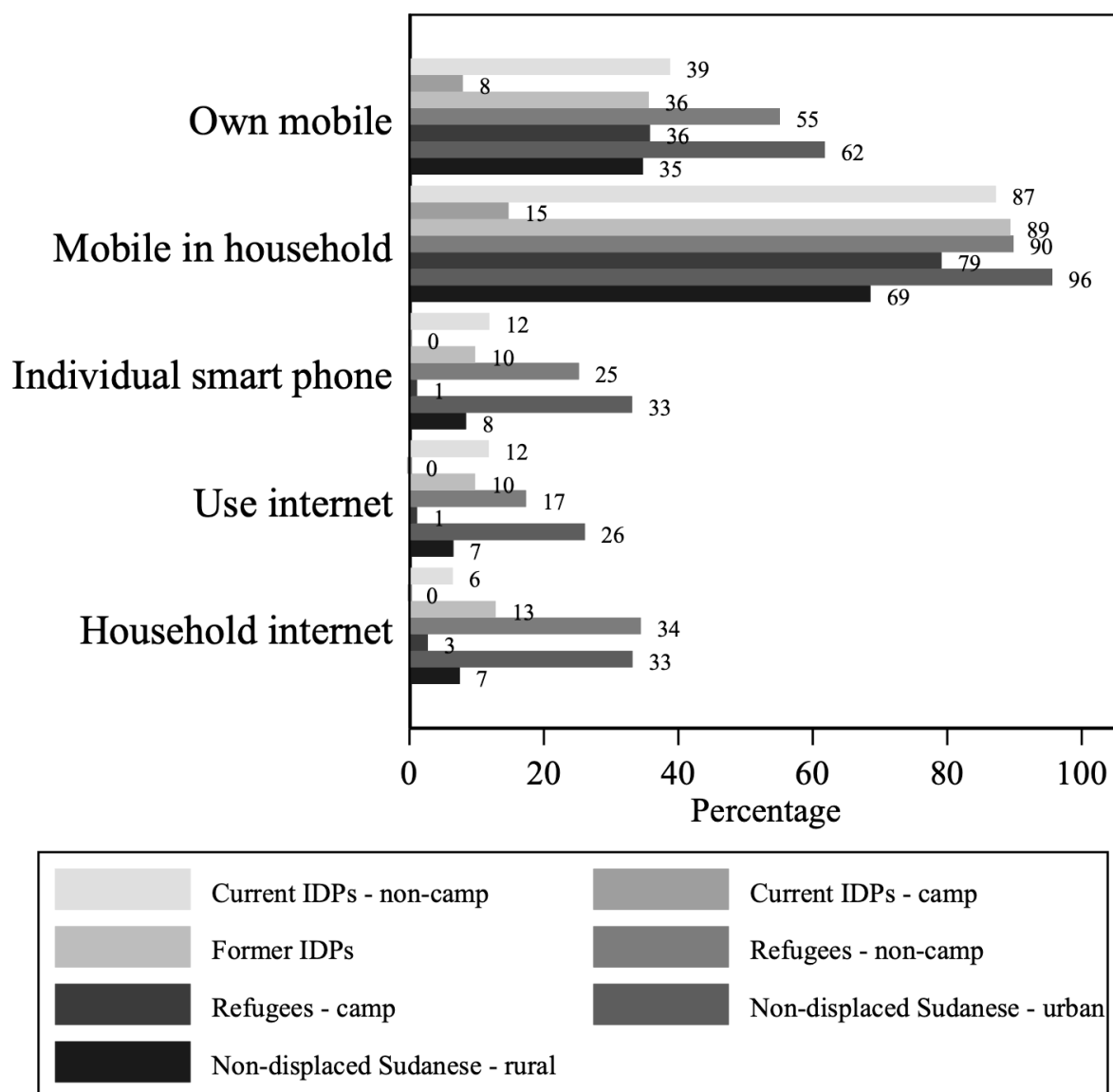
5.2 Access to information technology

Access to digital technology facilitates communication between refugees and their social networks during the migration process (Leurs and Smets 2018; Alencar, Kondova, and Ribbens 2019). In particular, digital technology has become the main channel through which people access information. Figure 15 shows that non-displaced Sudanese in urban areas are the group with the highest share of access to digital technology followed by non-camp refugees. More than

¹⁰ We explored differences in enrollment by sex among the various groups but could not detect systematic differences worth discussing.

half of non-displaced Sudanese (aged 15+) in urban areas (62 percent) and non-camp refugees (55 percent) own mobile phones, and a quarter or more of both groups own smart phones. Similarly, a third of both groups have access to internet in the household, the highest among all groups. Camp-based current IDPs generally have the lowest access to communications and information technology (for example, 8 percent own a mobile phone). Access to mobile phones in the household is common among all groups (69-96 percent), except for the current IDPs in camps (15 percent). Overall, there seems to be a difference in digital access between rural and urban residents which is also compounded by living in camps versus outside camps.

Figure 15. Individual mobile phone ownership, being in a household with a mobile phone, individual smart phone, used internet (past 30 days), household internet (percentages), by displacement status and sex, ages 15+



Source: Authors' calculations based on SLMPs 2022

Notes: Individual mobile phone ownership may be sole or joint.

6 Health and food security

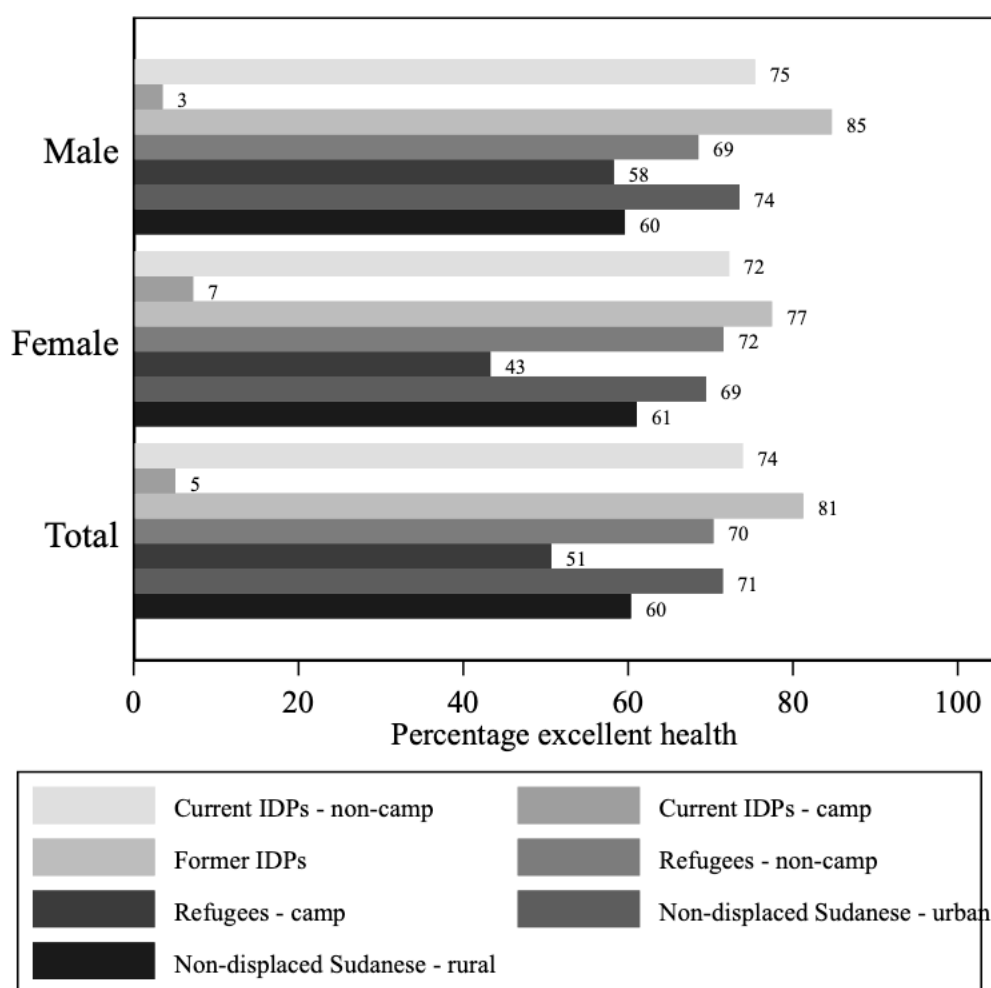
6.1 Health

As shown in Figure 16, current IDPs in camps appear to be highly disadvantaged in terms of health status compared to all other groups. Only 5 percent report being in excellent health

compared to 74 percent for their non-camp counterparts, and 81 percent among former IDPs. Not surprisingly, the group reporting the second lowest share of individuals in excellent health is camp-based refugees, but at 51 percent the difference between them and camp-based IDPs is stark.

There are not substantial differences in the share reporting excellent health by sex, with men generally having slightly higher percentages in most cases. The major exception is in the highly disadvantaged group of camp-based IDPs where men reporting excellent health are a mere 3 percent compared to 7 percent for women. In contrast, camp-based female refugees report appreciably lower rates of excellent health (43 percent) than their male counterparts (58 percent).

Figure 16. Percentage in excellent health by sex and displacement status, ages 6-64



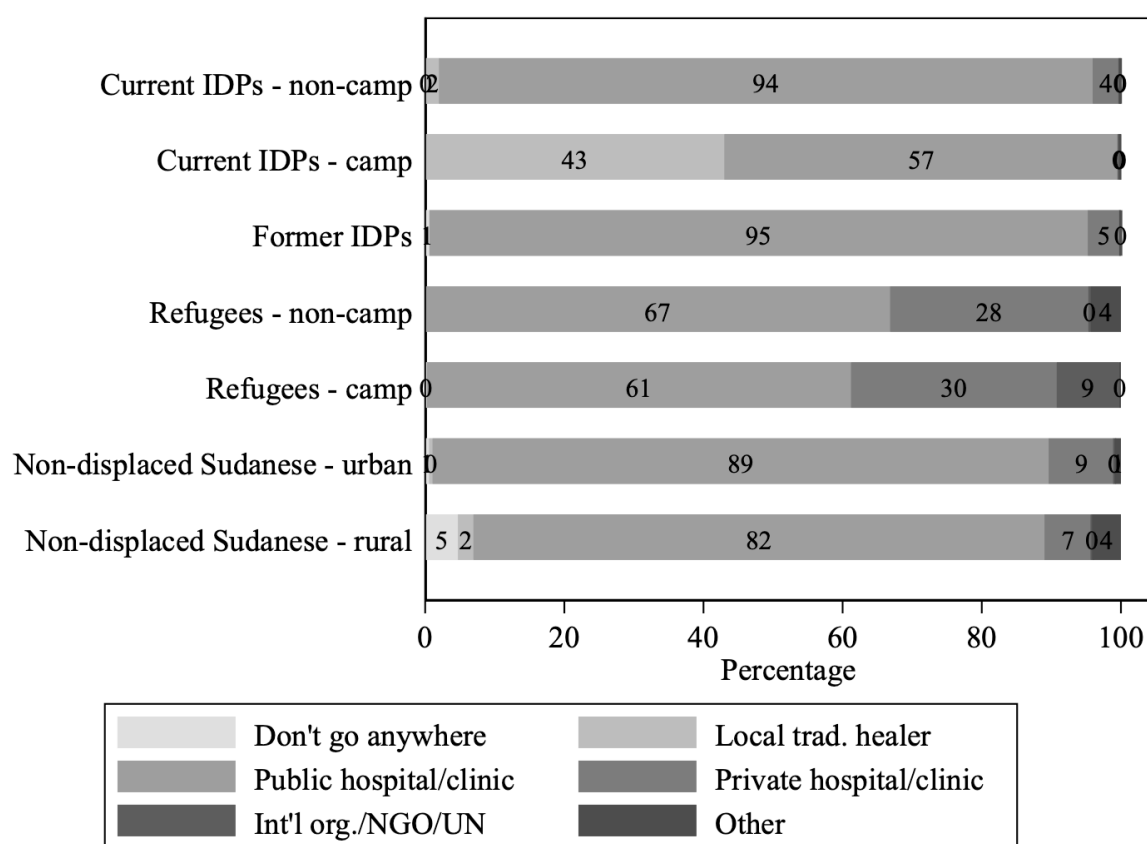
Source: Authors' calculations based on SLMPs 2022

We move next to access to health insurance and source of health care. Among those aged 6-64, refugees were the least likely to have health insurance (just 6 percent outside of camps and 2 percent in camps did so), followed by non-displaced Sudanese (36 percent in rural areas and 46

percent in urban areas had health insurance). Current IDPs (54-55 percent in and out of camps) more often had health insurance, and former IDPs (76 percent).

As shown in Figure 17, the vast majority of all groups go to public hospitals and clinics as their source of health care (57-95 percent). However, current IDPs in camps are the least likely to do so (57 percent) and are the most likely group going to traditional healers (43 percent). Refugees, both those in camps and those outside camps, are the group most likely to go to private health providers (28-30 percent).

Figure 17. Source of health care (percentage), by displacement status, ages 6-64



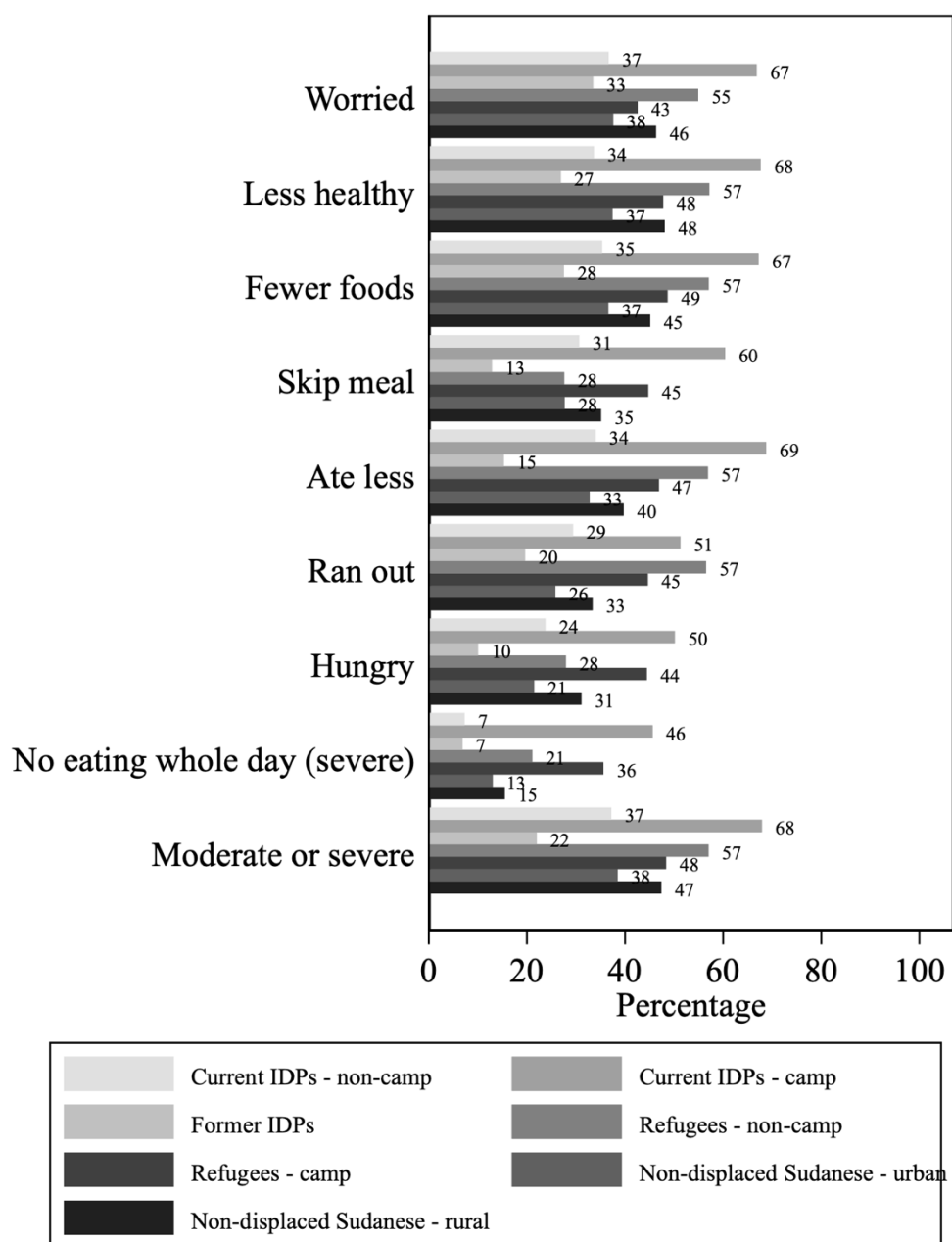
Source: Authors' calculations based on SLMPS 2022

6.2 Food security

A major concern about displacement is its impact on access to food. Indeed, Figure 18 shows that more than two thirds (67 percent) of current IDPs in camps are worried about not having enough to eat because of lack of money. They fare poorly on most food insecurity measures, confirming their extreme disadvantage on other measures of wellbeing that we noted above. Refugees in camps also report relatively high rates of food insecurity on most of the measures (for instance, 55 percent are worried about not having enough to eat due to lack of money). It is important to note, however, that even among non-displaced Sudanese in rural areas, 46 percent are worried about not

having enough food. Overall, 68 percent of current IDPs in camps and 48 percent of refugees in camps, as well as 57 percent of refugees not in camps, report having moderate or severe food insecurity. Importantly, non-displaced Sudanese in rural and urban areas also report moderate or severe food insecurity (47 percent in rural areas and 38 percent in urban areas). Only former IDPs report lower rates of moderate or severe food insecurity (22 percent). On the whole, these results suggest that food insecurity is widespread in Sudan and affects displaced and non-displaced populations alike.

Figure 18. Food insecurity experience scale (percentages), by displacement status



Source: Authors' calculations based on SLMPS 2022

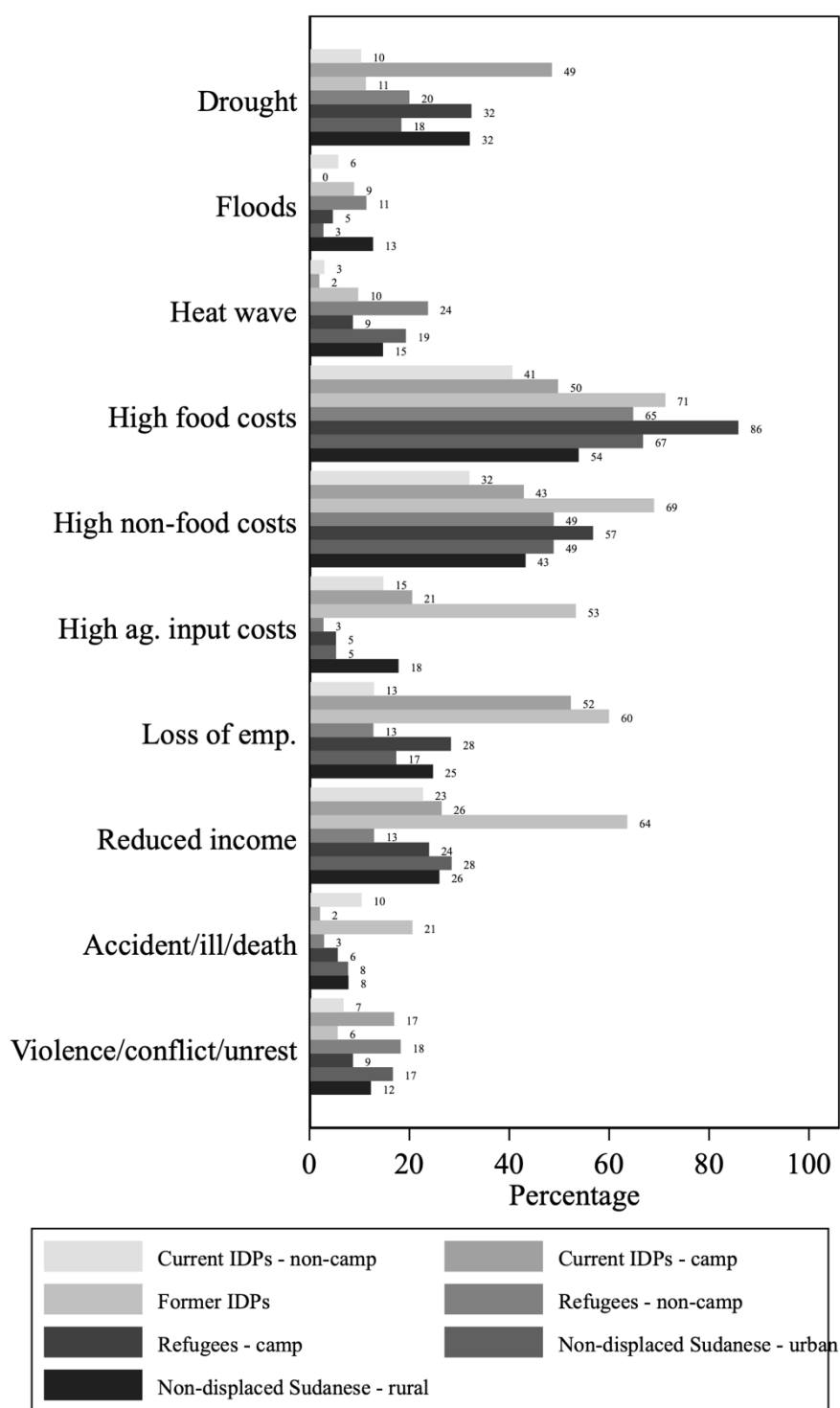
Notes: Questions: 1- Household worried about not having enough to eat because of a lack of money? 2- Unable to eat healthy and nutritious food because of a lack of money? 3- Ate only a few kinds of foods because of a lack of money? 4- Had to skip a meal because there was not enough money to get food? 5- Ate less than you thought you should because of a lack of money? 6- Ran out of food because of a lack of money or other resources? 7- Hungry but did not eat because there was not enough money? 8- Went without eating for a whole day because of a lack of money? The food insecurity experience scale (FIES) classifies as moderate or severely food insecure those who skip meals, eat less, ran out of food, went hungry, or did not eat for a whole day.

7 Shocks, coping, social assistance, and assets

7.1 Shocks and coping

Households in Sudan have experienced a variety of political, economic, social, and environmental shocks. Figure 19 presents various types of shocks that households faced in the previous 12 months by displacement status. High food costs were reported by a large share of all groups (41-86 percent). Former IDPs report much higher rates of exposure to employment and income shocks, and they also report higher rates of exposure to electricity and fuel cuts. Also, half of current IDPs in camps reported exposure to drought and loss of employment. Around 18 percent of refugees in camps and 17 percent of current IDPs in camps experienced violence, conflict, or unrest but importantly, 17 percent of non-displaced Sudanese in urban areas also experienced violence, conflict, or unrest suggesting that not just displaced groups have had experience of violence and conflict.

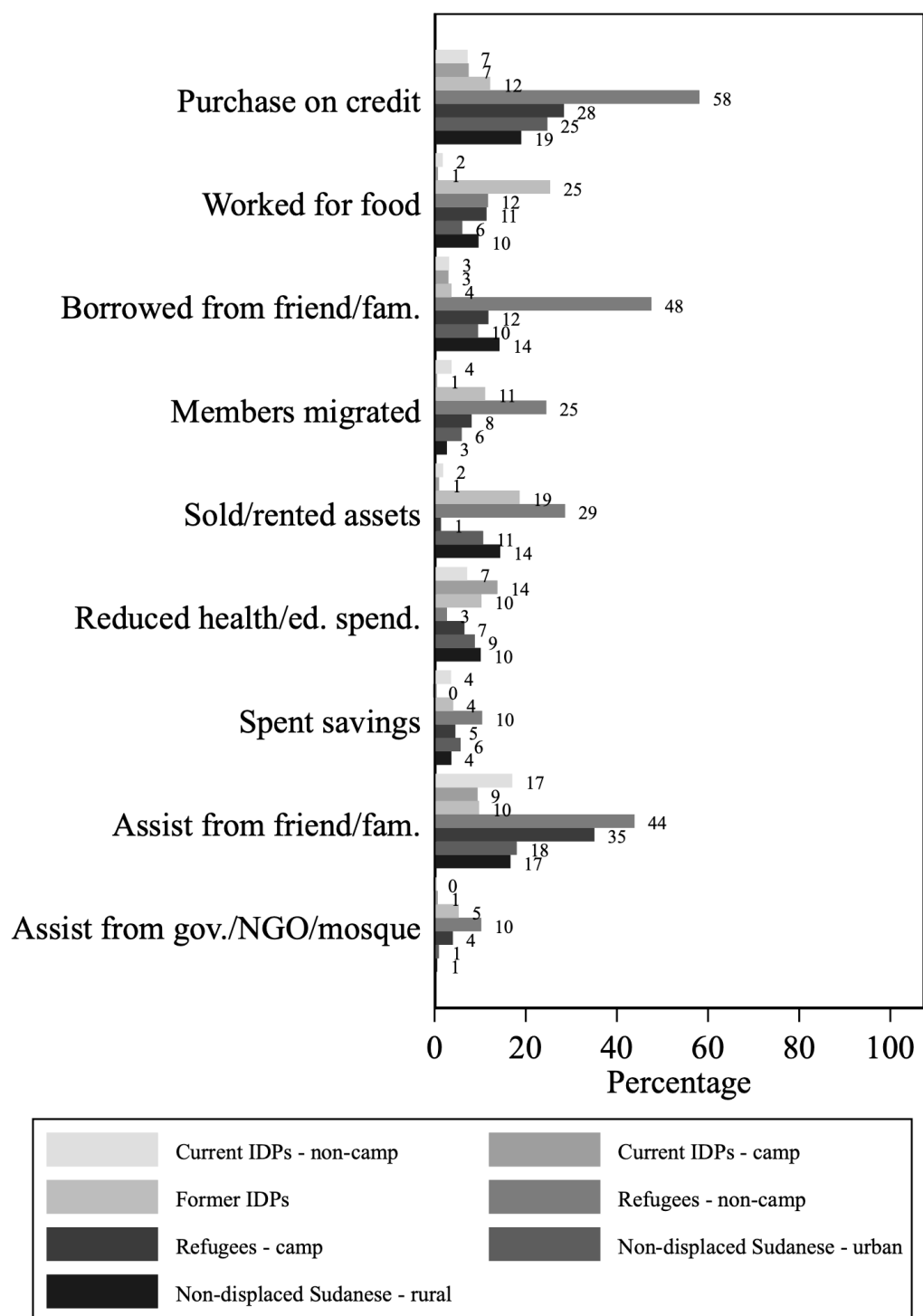
Figure 19. Experiences of shocks in past 12 months (percentage of households), by displacement status



Source: Authors' calculations based on SLMPS 2022

Households resort to a number of coping mechanisms to adapt to shocks (Figure 20). Current IDPs did not tend to have higher use of coping mechanisms than the non-displaced. All refugees seem to rely more on their family and friends for help (44 percent in non-camps and 35 percent in camps versus 17-18 percent for non-displaced Sudanese). However, refugees outside camps in particular tend to rely more on borrowing from friends and family (48 percent) and on purchasing on credit (58 percent versus 21 percent for non-displaced Sudanese). Furthermore, 29 percent of refugees outside camps sold assets, and 25 percent had family members who migrated (consistent with results presented above on absent spouses among refugees), the highest rate for these outcomes of any group. Overall, there is little evidence of relying on public or NGO support (only 10 percent of refugees outside camps and 4 percent in camps used this coping mechanism). However, refugees who live outside camps seem to rely on several coping mechanisms to survive.

Figure 20. Coping mechanisms in past 12 months (percentage of households), by displacement status



Source: Authors' calculations based on SLMPS 2022

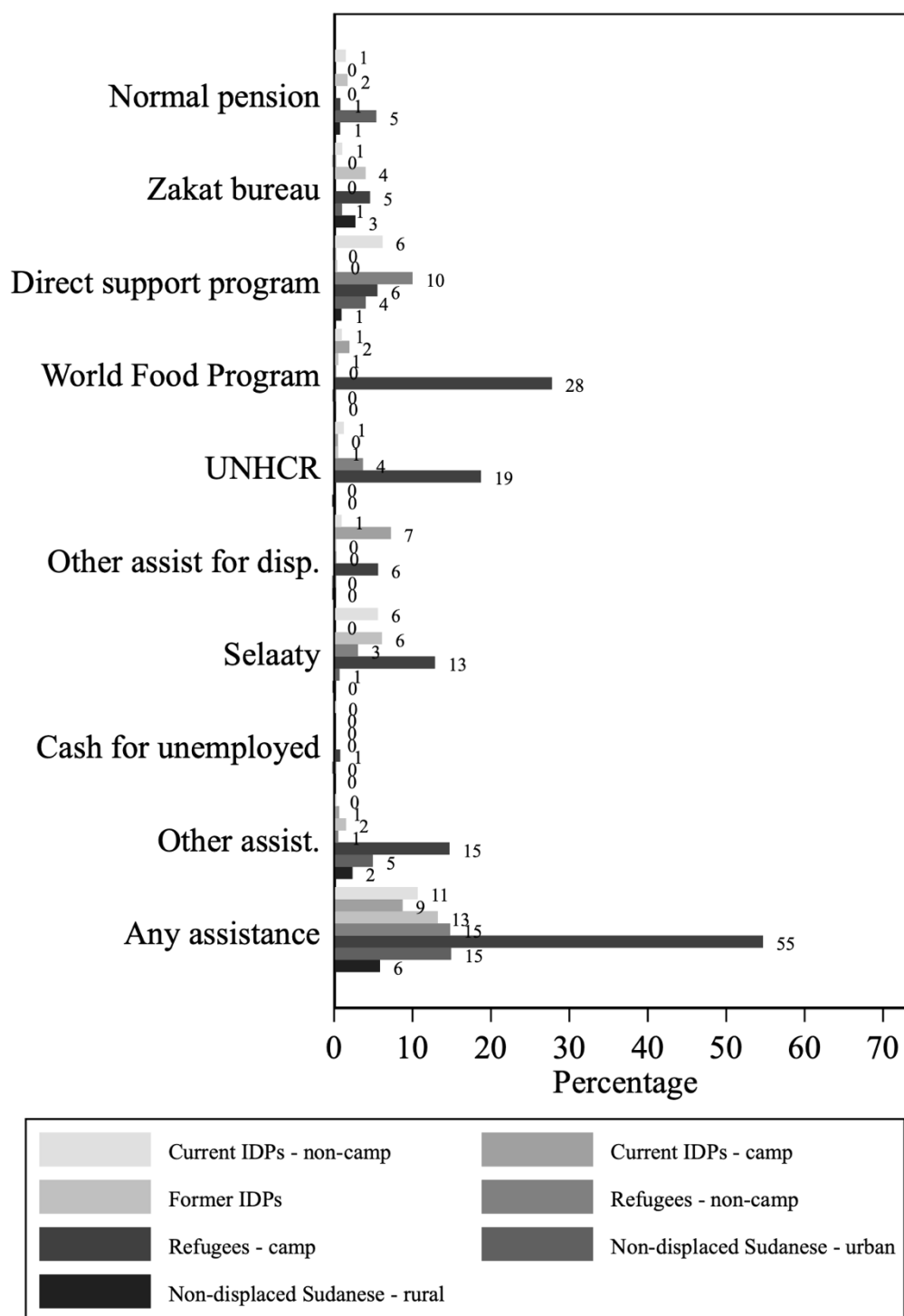
Notes: Strategies of begging, married girls, children <15 worked, borrowed money from a lender or bank, and additional income generating activities used by fewer than 10% of households in any group and not shown.

7.2 *Household receipt of social assistance and remittances*

The most common form of transfers received by households in Sudan are remittances. In fact, over half (57 percent) of non-camp refugee households receive such remittances, suggesting that the high percentage of absent spouses we encountered earlier are in fact likely working in other countries and sending regular remittances to their families. Only 22 percent of camp refugee households received remittances. Non-displaced urban Sudanese households were the next most likely to receive remittances at 15 percent, followed by non-displaced rural Sudanese households (8 percent), with rates from 0-5 percent among the various IDP groups.

Figure 21 shows the rate at which households in Sudan receive charitable and public support by displacement status. The first thing to note is the rarity of such support. The group that is the most likely to receive support, by a wide margin, is camp-based refugees, 55 percent of whom receive some form of assistance. Twenty-eight percent of them receive assistance from the World Food Program and 19 percent from UNHCR, but they also have higher than average access to the consumer subsidy program Selaaty and other assistance. Fewer than 15 percent of all other groups receive any kind of social assistance, with the most common form of support for them being the Direct Support Program and Selaaty. In contrast to camp-based refugees, camp-based IDPs, who are by far the most disadvantaged group, receive the second lowest rates of any social assistance (9 percent) after rural non-displaced Sudanese (6 percent).

Figure 21. Receipt of social assistance and remittances (percentage of households), by displacement type



Source: Authors' calculations based on SLMPS 2022

8 Conclusions

Sudan has experienced ongoing conflict since the early 2000s, resulting in millions of IDPs. Conflicts and ongoing political instability have also adversely affected the economy and by extension the welfare of the whole population. At the same time, Sudan has been home to millions of non-Sudanese refugees due to conflicts in neighboring countries. In this paper, we examined the characteristics of these displaced groups, distinguishing between camp and non-camp based current IDPs, former IDPs, and camp and non-camp-based refugees, and comparing them all to urban and rural non-displaced Sudanese.

First, we note the substantial differences in household welfare between camp and non-camp-based populations of refugees and current IDPs. Camp-based populations tend to be very deprived on almost every dimension of welfare, with the vast majority falling in the bottom two quintiles of household wealth in Sudan. Camp-based IDPs are particularly disadvantaged and appear to be relatively neglected by the international community compared to their refugee counterparts.

Non-camp-based refugees tend to be disproportionately female and tend to live in large extended family households that are mostly female-headed. They also tend to be mostly urban and have comparable socioeconomic characteristics to urban non-displaced Sudanese populations. With more than half of married refugee adults having an absent spouse and a large fraction of refugee households relying on migrant remittances, it appears that many refugee households have male members that remained in their countries of origin or have moved on to third countries on their own and are supporting their families in Sudan. This may explain the very low labor force participation rate among refugee women. The support they receive from male relatives appears to be a critical factor in their ability to leave the camps and live in host communities.

Among camp and non-camp-based refugees that are employed, a large fraction are engaged in regular private wage work rather than self-employment. The main difference among them appears to be in their rate of employment rather than the kind of employment they engage in, with camp-based refugees having much lower employment rates. In contrast, employed camp-based IDPs are mostly engaged in irregular or casual wage work, a much more precarious form of employment. The main source of employment for non-camp based IDPs is family farming.

Among refugees, there are large gaps in outcomes between camp and non-camp groups along almost all dimensions of welfare, likely reflecting the selectivity of the process of leaving the camps, a pattern observed in other contexts as well (Ginn 2020; Obi 2021). Adult refugees outside camps have relatively high educational attainment relative to other groups except non-displaced urban Sudanese and appear to invest heavily in the education of their children, who have comparable enrollment rates to those of non-displaced urban Sudanese, at least up to age 15. Probably because they are more urban, they have higher rates of mobile ownership and higher rates of access to the internet. Yet, refugees in camps do not share those characteristics, as they have lower educational attainment, and their children are more likely to start their education late and finish early. In terms of health, refugees outside camps report substantially better health than refugees in camps. Both groups of refugees tend to rely more on private hospitals and clinics for their healthcare than other groups. Interestingly, refugees outside camps report higher rates of food insecurity than their camp-based counterparts, partly reflecting the better access

camp-based refugees have to international assistance, such as that of the World Food Program. This disparity may also be a reflection that non-camp refugees reside primarily in urban areas where food price inflation was rampant. Refugees outside camps rely on a variety of coping mechanisms such as seeking assistance from friends and relatives when dealing with negative shocks; this dovetails with their high reliance on remittances. However, those living in camps tend to rely more on public support and transfers, especially from international organizations.

There is a large difference in welfare between camp and non-camp based current IDPs. We note that non-camp-based IDPs fare somewhat better in terms of household wealth than rural non-displaced Sudanese. This is likely to be the result of the selection process that leaving the camps entails. In terms of wealth, camp-based IDPs, together with camp-based refugees, are among the poorest groups in Sudan, but unlike their refugee counterparts they appear to receive minimal assistance from either international organizations or the Sudanese government. Camp-based IDPs are also highly disadvantaged in terms of employment, with only 6 percent of males and 8 percent of females being employed. They are also highly disadvantaged in terms of education, with 57 percent of adult males and a shocking 96 percent of females being illiterate. Their children have very limited access to schooling, comparable only to that of rural non-displaced Sudanese. Camp-based current IDPs also have the lowest rates of access to mobile phones and the internet. They also have the lowest levels of self-reported health, and they report the highest level of food insecurity among all groups.

To conclude, it appears that camp-based displaced populations are highly disadvantaged, but that camp-based refugees are able to receive relatively more assistance from the international community than their IDP counterparts. Some refugees are also able to access remittances from relatives abroad that allow them to leave the camps at higher rates. These results strongly underscore the need for interventions to support camp-based IDPs and even policies to support them in leaving the camps.

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