

# The Double Burden of Female Protracted Displacement

Survey Evidence on Gendered Livelihoods  
in El Fasher, Darfur

*Wolfgang Stojetz*  
*Tilman Brück*



**WORLD BANK GROUP**

Gender Global Theme

October 2021

## Abstract

During protracted displacement, women and girls often face serious gender-specific challenges and vulnerabilities, including adverse norms and institutional barriers. Yet, quantitative evidence on gendered drivers and differentials during protracted displacement remains scarce. Using survey data from 18,533 displaced and non-displaced individuals in El Fasher, Sudan, this paper documents that livelihood outcomes are significantly shaped by strong and complex intersectionality between long-term displacement and gender. Being female and being a long-term displaced person have separate negative impacts on work and welfare. Therefore, being a long-term displaced woman is particularly challenging: internally displaced women work more

than non-internally displaced women but are poorer, on average. For men, there is no such difference in employment between the internally displaced and non-internally displaced. These outcomes are the result of the 'double burden of female displacement': women are disadvantaged by norms and institutions both at their destination (due to being a displaced person) and their place of origin (due to their gender). The double burden is strongest for older displaced women. In contrast, protracted displacement can be an opportunity for younger displaced women. Future policies should address the challenges stemming from the intersectionality of gender and displacement and develop targeted programs.

---

This paper is a product of the Gender Global Theme. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world. Policy Research Working Papers are also posted on the Web at <http://www.worldbank.org/prwp>. The authors may be contacted at [brueck@isdc.org](mailto:brueck@isdc.org) and [stojetz@isdc.org](mailto:stojetz@isdc.org).

*The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.*

# **The Double Burden of Female Protracted Displacement: Survey Evidence on Gendered Livelihoods in El Fasher, Darfur**

Wolfgang Stojetz<sup>[†]</sup> and Tilman Brück<sup>[‡]</sup>

**Keywords:** gender; forced displacement; internally displaced persons; livelihoods

**JEL classification codes:** D74; J16; J24; O15

The authors of this paper conducted their research under Gender Dimensions of Forced Displacement project. The project is co-led by Lucia Hanmer and Diana Arango under the guidance of Hana Brix, Global Director, Gender Unit, The World Bank Group.

**Acknowledgments:** This work is part of the program "Building the Evidence on Protracted Forced Displacement: A Multi-Stakeholder Partnership". The program is funded by UK aid from the United Kingdom's Foreign, Commonwealth and Development Office (FCDO), it is managed by the World Bank Group (WBG) and was established in partnership with the United Nations High Commissioner for Refugees (UNHCR). The scope of the program is to expand the global knowledge on forced displacement by funding quality research and disseminating results for the use of practitioners and policy makers. This work does not necessarily reflect the views of FCDO, the WBG or UNHCR. Andrej Smirnov provided excellent research assistance.

## 1. Introduction

Protracted displacement — displacement for five years or more — is ubiquitous and a programming priority. For instance, in more than 50 countries around the world, people were living in internal displacement for more than 10 years in 2014 (Kälin and Chapusiat, 2017). Moreover, 78% of all refugees worldwide were in protracted situations in 2018.<sup>1</sup>

Policy makers have recognized the urgent need to act and to prevent these millions of people from being left behind. For example, the Agenda for Humanity and the 2016 World Humanitarian Summit or the 2018 UNHCR Global Compact on Refugees signed by the UN general assembly focused on the need to adopt a new approach to protracted crises that addresses displacement needs, fosters durable solutions and embraces gender equality as a central principle.

A surge of studies in recent years has produced detailed insights into the characteristics, causes, and consequences of forced displacement (Ruiz and Vargas-Silva, 2013; World Bank, 2017). Specifically, it is increasingly recognized that risk factors for gender equality are often especially pervasive in situations of forced displacement (Rohrwerder, 2016), and that impacts of gender and forced displacement can not only add to but also interact with each other (Arango et al., 2021).

Yet, quantitative empirical research and micro-level evidence on the gendered causes, forms and consequences of livelihoods during displacement remain scarce, which is at least partly due to a lack of suitable, high-quality large-n survey data (ISDC, 2019; Brück and Stojetz, 2020). Specifically, how the two dimensions of gender and forced displacement combine and interact is not well understood in particular (for a detailed review, see Arango et al., 2021). Knowledge is particularly limited for protracted situations, which, due to the long time horizons, can severely compound and create new gender-based vulnerabilities and disparities due to displacement. Little is known about the livelihood strategies of men and women in protracted displacement and how they compare to those of otherwise similar host populations. We do not know, either, how and for how long the origins of displacement, such as violent conflict, shape gendered protracted displacement. Finally, little is known about the mechanisms of how these outcomes are obtained.

In this paper, we study the gendered dimensions of livelihoods in a protracted forced displacement setting. Specifically, we analyze how gender and displacement outcomes — in the form of displacement status and displacement experiences — shape employment outcomes.

To grasp the complex impacts of gender and forced displacement on livelihood outcomes, we take an 'intersectional' perspective (Bastia, 2014). Such an approach aims to explore different forms and sources of disadvantage and emphasizes their interconnectedness and interdependencies, rather than approach them as separate domains (Crenshaw, 1990; Valentine, 2007). Specifically, it explores the relationships and interactions between individual factors across multiple levels of society to determine how outcomes are shaped across societal groups (Kapilashrami and Hankivsky, 2018). Intersectional approaches are increasingly applied in development research and have been shown to improve analyses of labor market outcomes in Sub-Saharan Africa (Elu and Loubert, 2013; Grünenfelder and Schurr, 2015). From a gender perspective, it can help to tease out the interlinkages between the multiple sources of gender inequalities and "focus on the experiences of those who have been excluded thus far from feminist analysis" (Bastia, 2014). We thus aim to analyze how different forms of disadvantage stemming from gender and displacement outcomes (our 'individual factors') intersect, combine, and interact in shaping employment outcomes, with a focus on the

---

[\*] ISDC – International Security and Development Center, Berlin, Germany; and Humboldt University Berlin, Germany. Email: [stojetz@isdc.org](mailto:stojetz@isdc.org) (corresponding author).

[\*] ISDC – International Security and Development Center, Berlin, Germany; Leibniz Institute of Vegetable and Ornamental Crops, Großbeeren, Germany; and Natural Resources Institute, University of Greenwich, Chatham Maritime, United Kingdom.

<sup>1</sup> See <https://www.unhcr.org/globaltrends2018/> (accessed June 30, 2021).

specific experience of women who are internally displaced persons (IDPs) in protracted settings.

In the empirical analysis, we analyze survey data from 18,553 displaced and non-displaced individuals in the context of urban and peri-urban areas of El Fasher, a city in Darfur, which includes two IDP areas: Abu Shouk and El Salam (**Figure 1**).<sup>2</sup> The large majority of IDP households in both areas arrived many years ago (**Figure A1**).<sup>3</sup> We also match the survey data spatio-temporally with conflict event data from the Armed Conflict Location & Event Data Project (ACLED), which provides detailed geo- and time-tagged information about conflict events of inter-group and one-sided violence in Sudan.

We find that displacement and gender strongly combine and interact in shaping livelihood outcomes in protracted crises settings, and that being a long-term displaced woman is particularly challenging. Being an IDP increases the likelihood of both being economically active and poor at the same time. Yet, the employment gap between IDPs and non-IDPs is entirely driven by women: women work more (including paid labor and on- and off-farm self-employment) than non-IDP women, but are poorer, on average. For men, there is no such difference in employment between IDPs and non-IDPs. These outcomes are the result of the 'double burden of female displacement' facing IDP women in protracted settings: barriers to (decent) employment based on norms and institutions both at their *destination* (due to being a displaced person) and their *place of origin* (due to their gender), where disparities in education are created. At the destination, IDPs are strongly and consistently disadvantaged in various institutional-level factors, such as by lacking access to markets and services and a sense of safety.

Among IDPs, we observe important heterogeneities due to an individual's age at arrival in El Fasher. Comparing two IDPs of the same age, the one who was older when their household arrived is less likely to be employed, and, if both work, works fewer months on average and is more likely to work in the agriculture sector. Similarly, the gender gap in IDP employment increases with age at arrival (conditional on age today). Put differently: the more years an IDP child spends in the host community before becoming an adult (given that displacement took place), the smaller the gender gap in employment becomes between women and men IDPs.

In addition to our contribution to the cross-disciplinary literature on gendered forced displacement (as discussed above), our work is related to four literatures.

First, we contribute to the broader literature on the dynamics and impacts of violent conflict. Traditionally dominated by anthropological and macro-political perspectives, development researchers now also study the micro-level processes taking place during and after violent conflicts (Justino et al., 2013). More and better micro-level survey data from conflict-affected settings has become increasingly available (Brück et al., 2016) and has helped to better describe and understand people's experiences, behaviors and outcomes during a conflict and beyond (Verwimp et al., 2019). Contexts and populations of situations of forced displacement have somewhat lagged behind in this regard. The data set we analyze has been part of a recent initiative to help to fill this critical gap (JIPS, 2019a; Pape and Scharma, 2019). We use this data set to produce novel and detailed insights into livelihood constraints and outcomes of individuals who flee violent conflicts, disentangling displacement experiences (such as leaving the place of origin or being exposed to violent or otherwise traumatic events) and displacement status (being an internally displaced person) and their (long-term) implications. In addition, we exploit that we can match the survey data with conflict event data to assess the role of exposure to collective violence.

Second, our study builds on and contributes to knowledge about female labor supply in developing

---

<sup>2</sup> Map source: <https://www.jips.org/news/durable-solutions-analysis-darfur-sudan-profiling-results-methodology/> (accessed June 30, 2021).

<sup>3</sup> Figure and table numbers preceded by an "A" denote that a figure or table is presented in an appendix, which is available upon request from the authors.

contexts. Given the urban/peri-urban setting, we primarily turn to the vast sub-literatures on self-employment, agricultural livelihoods, and informal labor, which all suggest that a wide array of factors create and perpetuate gender inequalities and barriers to empowerment. For example, a recent review of micro-entrepreneurship in developing countries concludes that even after adjusting for observable characteristics, much of the gender gap in success remains “unexplained”, indicating that women in developing countries face unique entrepreneurial challenges (Jayachandran, 2020). This conclusion is echoed by findings from the more specific literature on agricultural livelihoods in developing countries. Recent work recognizes that key dimensions of agricultural production are gendered, including the local institutional context, access to natural resources and assets, and how individuals and households build their livelihoods (Quisumbing et al., 2019; Heckert et al., 2019). Specifically, it has become clear that sex-disaggregated data at the intra-household and individual levels are key for a better understanding of agricultural livelihood outcomes (Doss and Quisumbing, 2020). At the same time, most employment in less developed settings is informal, especially among women (Charmes, 2012). A key reason is that the gender-specific labor market challenges, such as those rooted in legislation or social norms, can create incentives to discriminate against women in formal markets, driving them into informality (Perry et al., 2007). These literatures suggest that displacement might thus influence employment outcomes via multiple endowment, household and institutional level factors, many of which depend on education and gender (Ruiz and Vargas-Silva, 2018). Our study contributes detailed data-driven insights into the gendered livelihood constraints and outcomes from a setting of forced displacement, which are widespread but little studied quantitatively.

Third, our paper adds to the literature on how childhood and adolescence shape outcomes later in life. Existing research into economic behavior and outcomes among adults has primarily focused on experiences during the in-utero and early childhood stages and on evidence from developed countries (e.g. Cunha and Heckman, 2007; Shah and Steinberg, 2017). Much less is known about the impacts of childhood and adolescence in low-income countries, particularly for girls in poor and marginalized backgrounds (YL, 2018). Our study adds evidence on how experiences during childhood and adolescence shape economic outcomes of females in an extremely poor setting of protracted conflict and forced displacement.

Fourth, we contribute to better understanding of the complex situation of protracted displacement in Sudan. Due to data limitations, existing quantitative evidence is scarce, and most existing studies focus on the impacts of the influx of IDPs on the host population. For example, the presence of IDPs was found to have mixed employment impacts on long-term urban residents: the influx increased their probability of being employed in a high-skilled sector, but increased competition among low-skilled workers (Alix-Garcia and Bartlett, 2015). Related to that, economic opportunities for property owners and vendors of certain goods arise, while demand-driven price changes in particular for food negatively affect the welfare of the host population (Alix-Garcia et al., 2012). Further increased land use and environmental degradation in areas close to urban centers might occur (Alix-Garcia et al., 2013). Our study combines a new data set, a gender lens and a focus on the displaced to offer novel quantitative insights into the livelihoods in urban and peri-urban areas.

Our findings have important implications for policy and practice. Traditionally, policies have often sought to address gender inequalities and the needs of the displaced in isolation. The findings of our study emphasize the need for and potential of unified policy approaches, explicitly addressing the intersectionality of gender and long-term displacement. In contrast, our results suggest that gender-differentiated root causes and processes underpin vulnerabilities of forcibly displaced girls and women at multiple levels. We document a ‘double burden’ on women in terms of norms and institutions today and at the place of origin, the latter resulting in lasting impacts at the endowment level. This implies that interventions should tackle both local institutional factors and individual-level legacies to support displaced women in protracted displacement effectively and efficiently. Conversely, policies and practices failing to account for intersectionality and double burdens may not end up helping displaced women much, if anything. However, rigorous tests (such as impact

evaluations) of the effectiveness of policies and practices to counteract intersectionality and double burdens for long-term displaced girls and women are completely absent, to the best of our knowledge.<sup>4</sup>

The remainder of the paper is organized as follows. Section 2 describes the context of our study. Section 3 presents our empirical methodology. Section 4 presents the data used for our empirical analyses. Section 5 discusses our results. Section 6 concludes.

## **1 Context**

### **1.1 Conflict in Darfur**

The Darfur conflict is one of the most severe and protracted crises of our time, caused by a complex web of multiple and intertwined conflicts that have been ongoing for decades. These conflicts that span the communal, ethnic, regional, and resource levels (including over access to land), and direct neighbors, such as Chad and Libya, also add to instability and fragility in the region (Flint and De Waal, 2008; Grawert, 2008).

Large-scale violence first erupted in 2003, when rebel groups attacked the government, accusing it of continuous oppression of the non-Arab population. These events left 200,000 dead, and two million displaced (Grono, 2006). Further conflicts along ethnic lines ensued, with the Sudanese military, police, and Janjaweed (a militia of Sudanese Arabs) on one side and (mostly non-Arab Muslims) rebel groups on the other.

Since 2003, these tensions have been fueled further by the government (Sørbo, 2018), leading to continued, multiple waves of internal displacement (Hagan et al., 2005). Various rounds of peace talks failed to build sustained peace. In 2011, South Sudan gained independence and Sudan suffered huge losses in oil revenue, which had accounted for 95% of its exports.<sup>5</sup> The region remained fragile, which ultimately led to the removal of President Bashir in 2019, after 30 years in office. In August 2020, a transitional period of 39 months of peace as the basis for a democratic transition and economic development was set out. As of 2021, the United Nations is assisting the civilian led government in transition to a long-lasting political settlement and the international community has pledged its support for the transition.<sup>6</sup>

Overall, however, economic crises, water scarcity and conflicts over land use, among other reasons, continue to leave Darfur far from being stable and secure.<sup>7</sup> In fact, many root causes of land access and physical insecurity remain unaddressed and continue to challenge livelihoods in the region (World Bank, 2019a).

It is important to note that the current situation and recent history also inherently reflect a lack of strength of governance and state capacity (Tubiana et al., 2012). Local governments have historically played an important role in public affairs, such as land administration, conflict resolution, tax collection, and local political participation. Yet, the power and authority of local governments has eroded over time and many key aspects of governance were centralized and extractive models increased (Abdul-Jalil, 2007). Non-governmental organizations emphasize the crucial role of local institutions, particularly for securing livelihoods through the provision of public goods, training and addressing gender-specific issues, and made capacity building at the local level a key priority and strategy (Jaspars, 2010). Yet, the continued manifold challenges, including the large number of IDPs, leave livelihoods and society as a whole very vulnerable and many people in poverty.

### **1.2 Protracted displacement**

---

<sup>4</sup> See Puri et al. (2017) for an argument of how to conduct rigorous evaluations in humanitarian emergencies.

<sup>5</sup> See <https://www.worldbank.org/en/country/sudan/overview> (accessed June 30, 2021).

<sup>6</sup> See <https://digitallibrary.un.org/record/3903130?ln=en> (accessed June 30, 2021).

<sup>7</sup> See <https://www.un.org/press/en/2020/sc14304.doc.htm> (accessed June 30, 2021).

In 2005, 6.1 million persons had been displaced in Sudan (including areas that are now part of South Sudan).<sup>8</sup> In 2019, the year the survey data used in this paper were collected, the number of IDPs was still estimated at 1.87 million, with 446,441 of these located in North Darfur. In that year, 54,028 people returned to their homes in North Darfur (UN OCHA, 2019), but lack of protection, risks of gender-based violence, political uncertainty, and lingering disputes over land still prevent most IDPs from returning (Elzarov, 2019).

Since 2017, the numbers of new displacements have been relatively low, but the manifold challenges discussed above make it difficult to build sustainable livelihoods for IDP and non-IDPs, leaving many extremely vulnerable and strongly dependent on aid (UN OCHA, 2020). Many IDPs are also vulnerable to mental health issues, such as posttraumatic stress disorder, which constrains livelihood strategies available to IDPs even further (Hamid and Musa, 2010).

The majority of displaced households arrived at their destination with very little and needed to build new livelihoods, which in some contexts led to a diversification of livelihood activities (Saeed Ali, 2014). Furthermore, the structure of many families changed due to displacement, which also shapes livelihood choices and sometimes forces women to take on new roles (Young and Jacobsen, 2013).

In addition to factors characterizing the displaced population (displacement characteristics), existing reports emphasize that displacement *status* also plays a key role for the livelihood strategies of the displaced. Compared to their places of origin, employment opportunities might increase (George et al., 2019), but institutional and safety challenges prevail in many places, which often leaves women struggling to find decent employment and having to work informally, without any protection and safety (Young et al., 2005; George et al., 2019). Thus, identifying and addressing gender-specific issues is considered an integral part of understanding and improving livelihoods, and ultimately of reaching durable solutions.

### 1.3 Gender inequality in Sudan

Gender inequality in Sudan is extremely high, even in comparison with most other low-income countries. Sudan consistently ranks among the bottom 10 or 20 countries in common statistics, such as the Women, Peace and Security Index (GIWPS and PRIO, 2019) or the Gender Inequality Index.<sup>9</sup>

Sudan's laws are based on Sharia and common law, and although women's advancement and awareness of gender issues are stated as formal objectives, only little progress has been made.<sup>10</sup> For instance, forced (child-) marriage and rape are not (clearly) illegal (UNICEF, 2017). The burden of proof is on the victims, and seeking legal support raises concerns of stigma and risk of punishment (Tønnessen, 2019). Gender-based violence more generally remains a key concern and 88% of the female population are reported to have undergone genital mutilation/cutting, putting their health in extreme danger.<sup>11</sup> Furthermore, men continue to have a strong say in women's decisions. For instance, a man is entitled to denying his wife to work outside the home and to limiting the use of contraceptives (UNDP, 2018). All these risks often affect IDPs in particular. For example, it has been documented that displaced women are at increased risk when they are traveling to agricultural plots and collecting water or firewood (UN OCHA, 2021).

Women's empowerment and economic opportunities also remain curtailed, including issues such as low access to formal employment, poor education and legal discrimination. In rural areas, educational facilities are often lacking and many girls receive less education than boys (UNICEF, 2019). Patriarchal and traditional norms that deny women land ownership combined with a lack of

---

<sup>8</sup> See <https://www.internal-displacement.org/countries/sudan> (accessed June 30, 2021).

<sup>9</sup> See <http://hdr.undp.org/en/composite/GII> (accessed June 30, 2021).

<sup>10</sup> Throughout the last years, however, some progressive laws, as allowing women to travel without consent (July 2020) or declaring female genital mutilation as illegal (May 2020) have been adopted.

<sup>11</sup> See <https://www.who.int/teams/sexual-and-reproductive-health-and-research/key-areas-of-work/female-genital-mutilation/prevalence-of-female-genital-mutilation> (accessed June 30, 2021).

provision of public goods and gender-sensitive services add to the challenges and barriers to achieving sustainable livelihoods women face. As a consequence, gender, displacement status, and their intersectionality continue to strongly determine the livelihood opportunities women can attain (Young and Ismail, 2009).

## **1.4 El Fasher**

The Abu Shouk and El Salam camps in North Darfur are prominent settlements of IDPs in the Darfur region, located in peri-urban areas of El Fasher, the capital and economic center of the region (Minnear, 2004). Since 2003, population size has grown from less than 200,000 residents to over 500,000 (Nugent and Zambakides, 2009). Abu Shouk was initially created and opened by the Ministry of Planning in 2004, assigning a 10 x 10-meter lot to every IDP family. As most displaced persons had come from rural areas, traditional structures were recreated in the camps and new housing was constructed in a way that somewhat resembles housing at the places of origin (Ali et al., 2016).

Evidence on camp development over time is scarce, but a recent study highlights key challenges IDPs experience in the camp, including small residences, small plots, lack of firewood, lack of food or inappropriate food, poor hygiene conditions, difficulties of accessing local labor markets, lack of productive assets, and high levels of insecurity in the camp (Ali et al, 2016). Some of these challenges have been somewhat mitigated via the gradual transition towards a permanent solution for Sudan more broadly, which also stimulated economic integration to El Fasher. This includes building more homes from solid material, integrating markets in camps and attempts at diversification of livelihood activities. Moving to the city is possible without major restrictions, in the city public transport is available, and IDPs can (in theory) commute to work (JIPS, 2019a). Tensions between IDPs and non-IDPs appear to be moderate. Our own calculations suggest that 79% of IDPs and 85% of non-IDPs agree somewhat or strongly that locals and IDPs have good relations.

The transition from a rural to an urban or peri-urban setting poses significant challenges for many IDPs. IDPs in El Fasher, and women in particular, appear to face many of the challenges and barriers to achieving sustainable livelihoods described more generally above, including endowment, institutional, and safety challenges, which often interact with the gender dimension (Bello and Baig, 2014). At the same time, coming to El Fasher also offers improvements and opportunities for some, such as the provision of public goods and services that had not been available in many places of origin, including high-quality education of children.

More generally, transitioning towards durable solutions is a highly complex, multi-actor endeavor, which also directly involves IDPs. In 2017, El-Fasher was chosen as a 'case study' for a concerted effort of governmental and non-governmental actors to achieve fostering local integration. The JIPS durable solution profiling exercise, which produced the survey data we analyze in this paper, was a part of this effort (JIPS, 2019a). The objective was to obtain better information on the displaced, to identify their needs and to provide a common basis for decision-making (JIPS, 2019b), as part of a five-stage process towards durable solutions.<sup>12</sup> After initial enthusiasm, the process ground to a halt due to control and authority issues (Davies and Jenner, 2020). In the meantime, the African Union-United Nations Hybrid Operation in Darfur (UNAMID) mission came to an end in December 2020, as planned in the peace agreement. The government is now in charge of taking over certain responsibilities currently fulfilled by NGOs, which specifically includes identifying new pathways to durable solutions.

## **2 Empirical strategy**

### **2.1 Key indicators**

---

<sup>12</sup> For details on the five-stage durable solutions process, see [https://reliefweb.int/sites/reliefweb.int/files/resources/durable\\_solutions\\_in\\_practice\\_-\\_handbook\\_sept\\_2017.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/durable_solutions_in_practice_-_handbook_sept_2017.pdf) (accessed June 30, 2021).

**Employment.** Our main indicator of *employment status* equals one if an individual engaged in at least one of the following five forms of work in the past 7 days: paid labor for someone else, unpaid labor in an off-farm family business, non-agricultural self-employment, agricultural self-employment, and participation in unpaid training or workshops to foster skills. We also analyze binary indicators of these categories separately. Among workers, we also study employment at the *intensive margin* by analyzing the sectors and total number of activities an individual engages in, as well as hours of work per week and months of work per year.

To model proximate factors shaping employment outcomes, we build on the World Bank's Africa Gender Innovations Lab's (GIL's) framework on gendered *constraints* to entrepreneurship, which emphasizes the role of endowments, the household and the local context (World Bank, 2019b).

We slightly adapt the original framework for our study and categorize factors shaping employment into three groups: 1) *Endowments*, such as education and health; 2) *Household-level factors*, such as gender and demographic composition; and 3) *Institutions*, defined broadly to include both formal rules and regulations as well as informal constraints to behavior, such as social norms (North, 1990), such as threats to safety and security; identification and documentation issues; access to local labor markets, good markets and trade, finance; and access to mechanisms for help with resolving issues of crime and other disputes.<sup>13</sup>

**Gender.** Our main gender indicator equals one if an individual is *female*. We also compute gender composition variables, such as the number of girls versus boys in the household and the number of female adults versus male adults.

**Displacement.** Our indicator of *displacement status* equals one if an individual is an IDP. Our indicators of *displacement experiences* include a range of displacement characteristics, such as length of a household's displacement and individual age when the household arrived in El Fasher. We also compute indices of *conflict exposure* at the district level, including exposure to any form of collective violence, exposure to violence against civilians and exposure to fatalities. When comparing associations across variables that have different scales, we standardize all variables to zero mean and unit standard deviation.

## 2.2 Main analyses

For our baseline estimates of separate and interactive impacts of gender and displacement status (discussed in Section 5.2), we use linear models that include both main terms and the interaction effect of interest ( $\delta$ ) is estimated by OLS regression:

$$Y_i = \alpha D_i + \beta E_i + \delta D_i \times E_i + \gamma' X_i + \varepsilon_i$$

Here,  $Y$  is an employment variable,  $D$  is the female indicator;  $E$  is the displacement status indicator,  $X$  is a flexible vector of control variables; and  $\varepsilon$  is the error term.

To take a closer look at separate impacts of gender among IDPs and displacement status (discussed in Sections 5.3 and 5.4), we specify linear models where the parameter of interest ( $\eta$ ) is estimated by OLS regression:

$$Y_i = \eta C_i + \gamma' X_i + \varepsilon_i$$

Here,  $Y$  is an employment variable,  $C$  is the female or displacement status indicator;  $X$  is a flexible vector of control variables; and  $\varepsilon$  is the error term.

---

<sup>13</sup> We note that some institutional-level variables might also be regarded as 'endowments', such as access to land. To distinguish the two domains, endowments are focused on education and health outcomes in our study.

Depending on the flexible vector of control variables ( $X$ ), we provide estimates of unconditional differences in means and check their robustness to regression adjustments in the form of additional covariates, fixed effects and adjusted standard errors.

In conditional analyses, we focus on parsimonious specifications to avoid issues arising from the inclusion of “bad controls” (Angrist and Pischke, 2009, 2014). That is, we do not include variables that may themselves be outcomes of the gender or displacement variables, which would complicate the interpretation of estimated coefficients of interest due to endogeneity and spurious correlations. We carefully control for necessary covariates such as age and household size and include local fixed effects, whenever it is appropriate. For within-IDP analyses, fixed effects include enumeration area and pre-displacement district indicators, to partial out systematic differences due to the current environment and pre-displacement background. These specifications and checks help us to establish robust associations between key variables, but, due to their inherently endogenous nature, our results should not be interpreted as causal.

Specifically, we explicitly assume that the employment constraints emphasized by the framework above are outcomes of displacement and gender variables. Thus, we model relevant endowment, household, and institutional outcomes in separate regressions and do not include them in the headline regressions modeling employment outcomes.

### 2.3 Additional analyses

To gain deeper insights into factors underpinning our main results, we conduct two types of additional analyses. First, we analyze the role of heterogeneous displacement characteristics and conflict exposure for employment outcomes among IDPs, and how these interact with being a woman (discussed in Section 5.5). To do so, we use similar specifications as for the main analyses as well as a simple probit model to specifically estimate how the impact of being female on employment varies with age at arrival in El Fasher, conditional on age today. Second, we analyze heterogeneity in employment outcomes based on an individuals’ age today, again using a simple probit model (discussed in Section 5.6).

## 3 Data

**Household survey data.** In El Fasher, the World Bank in collaboration with several partners has collected unique survey data from May to July in 2018 that fulfill the ambitious requirements of our purposes (JIPS, 2019a; Pape and Scharma, 2019). The survey targeted two different groups of IDPs and two groups of comparable non-displaced populations in urban and peri-urban areas (**Figure 1**).

The total **survey sample** includes 18,533 individuals from 3,002 households:

- 996 IDP households (5,894 individuals) from the Abu Shouk area;
- 986 IDP households (5,960 individuals) from the El Salam area;
- 509 Non-IDP households (3,303 individuals) from adjacent peri-urban areas; and
- 511 Non-IDP households (3,376 individuals) from nearby urban areas.

The survey data set provides a comprehensive displacement profile of IDPs residing in the Abu Shouk and El Salam areas, including pre-displacement conditions, displacement history and outcomes, as well as detailed additional socio-economic data from both IDPs and non-IDPs.

Notably, a detailed household roster module offers for each member extensive information on socio-demographic indicators (including sex), health (for members aged 5 and over) and employment (for members age 15 and over). While most of this information was provided by one main respondent (a knowledgeable person aged 15 or over, whose sex is also known), an employment sub-module was to be answered by each adult in person, if they were available. The employment sub-module contains detailed information about current and pre-displacement employment outcomes.

**Conflict event data.** We match the survey data spatio-temporally with conflict event data from the Armed Conflict Location & Event Data Project (ACLED), using detailed geo- and time-tagged information on events of violence, including one-sided violence, and fatality numbers.

**Limitations.** The collection of large-scale data in such a challenging environment itself is a great achievement, but quite naturally, the data set has limitations. First, no IDPs were sampled from urban and peri-urban areas outside the Abu Shouk and El Salam areas. Yet about a quarter of the population in these areas are IDPs (JIPS, 2019a). Thus, our analyses refer only to IDPs who live outside these areas. Second, data quality issues prevent analyzing certain dimensions, which could benefit our analyses, such as more detailed information on access to services or time spent on household chores. Third, some information that would benefit our analyses was not collected. This specifically includes fine-grained individual measures of poverty and income. Fourth, information on local conflict events is a coarse and imperfect proxy for household-level 'conflict exposure', due to reporting and measurement error, among other concerns (Baliki, 2017). Yet, we do not expect these issues to vary systematically and create statistical biases in our results.

## 4 Results

### 4.1 Descriptive statistics

**Study sample.** Of all the 18,533 surveyed individuals, 64% live in IDP households, located in equal parts in the Abu Shouk and El Salam areas (**Table A1**). The remaining 36% of individuals live in the surveyed peri-urban (18%) and urban areas of El Fasher (18%).

As shown in **Figure 2**, the age-sex profiles are extremely similar across the IDP and non-IDP groups. In both groups, about 20% are female minors, defined by ages 0-14 (bars on the left), close to 30% are adult females, another 20% are male minors, and about 30% are male adults. **Figure A2** shows more detailed age distributions of the IDP and non-IDP sub-samples, which are also nearly identical. In either group, about 45% are minors and just about 5% are older than 64 years.

**The displaced.** **Table 1** provides background and displacement information. Due to the large number of young people, the mean age is fairly low, at 22 years. **Figure 3a** displays the detailed age distribution of displaced individuals. The average IDP arrived in El Fasher at 11 years old, yet there is a lot of variation in age at arrival and a substantial share of young persons was born in El Fasher (29%). **Figure 3b** shows the distribution of individuals' age when their household arrived in El Fasher, where a negative value means that an individual's family had arrived in El Fasher before their birth. The distribution reveals that many of those who were not born in El Fasher arrived at young ages. As also displayed in **Table 1**, the average household was both first displaced and arrived in El Fasher more than a decade ago, and 86% of IDP households had access to land before displacement.

**Figure A3** illustrates the origin of IDPs at the district level, based on information gathered as part of the survey. The map demonstrates that the large majority of displaced persons in El Fasher originate from areas near the city. **Figure A4** illustrates the spatial variation of our three constructed indices of conflict exposure at the district level. **Figure A5** provides intensity distributions for each index.

**Table 2** shows information on our key employment outcomes. We find that 55% of respondents had engaged in at least one economic activity in the past 7 days (row 1). Respondents were asked to answer five categories of different forms of employment separately (listed in the rows 2-6), and thus multiple answers were possible. The two most common categories are paid work (25%) and unpaid labor in a family-run off-farm business (31%). Among workers, the average IDP performed close to two separate activities. Focusing on the main activity, employed IDPs work about 35 hours per week and were engaged in that activity in about 8 of the past 12 months. For 35% of working IDPs, the main activity is in the agriculture sector.

**Table 3** presents summary statistics on three families of factors that can shape livelihood outcomes: the endowment, household, and institutional levels. At the endowment level, we observe that the average individual has completed more than 5 years of schooling, and 8% of all individuals report having a severe health condition. At the household level, the average household has about seven members, and 45% are headed by a woman. We also constructed a range of variables indicating the gender composition of the household. For example, in the mean household, there are about two men and two women above the age of 14, and 28% of individuals live in a household that has more female than male members above the age of 14.<sup>14</sup> At the institutional level, the degree of access to various markets and public services as well as land access varies significantly across and within categories. For example, 26% have easy access to the labor market, while 91% have good access to conflict resolution and help with crimes. A large majority of households have legal documentation (90%) and most main respondents report that they feel safe during the day (93%) but a lower share (58%) feel safe at night.

In **Table A2**, we provide statistics on four other sets of livelihood outcomes for individuals aged 15 or over: the main source of livelihood in the household an individual lives in; poverty and aid; as well as aspirations. We observe that for 39% of respondents the household's main source of livelihood is farming (the top category), followed by wages and salaries (23%).<sup>15</sup> In addition, our results reveal that many households are poor, with 80% falling below the USD 1.90 per day poverty line, and that 23% live in a household that received aid. In terms of aspirations, we find that 43% would welcome vocational training to improve their livelihoods (the most frequent category), while agriculture is the top category in terms of the sector most individuals would prefer to work in (31%). **Figure A8** illustrates the sectoral transition and economic transformation many displaced households are going through. We document that for a large majority of individuals, the household's main source of livelihood today is different than it was before displacement. Specifically, before displacement most households relied primarily on agriculture (87%), now less than 40% do.

## 4.2 The separate and interactive impacts of gender and displacement status

**Employment.** **Table 4** presents baseline estimates on the role of gender and displacement for being economically engaged in any form. We find that being an IDP is positively associated with an 8-percentage point increase in the likelihood of being employed, conditional on age and household size (column 1). By contrast, being a woman is associated with a 24-percentage point decrease in being employed (column 2), which remains stable in magnitude and statistically significant when we control for IDP status (column 3). The results in column 4 demonstrate that the impacts of gender and displacement interact: the difference displacement status makes for employment status is much stronger for women than for men. **Figure 4a** displays predicted values of employment from model (4), **Figure 4b** visualizes the average marginal effects of IDP status estimated from the model. The figures illustrate that the interaction model does not suggest a significant difference in employment due to IDP status for men, but as a woman being an IDP makes being economically active significantly more likely.

**Poverty.** At the same time, being an IDP makes an individual about 22 percentage points more likely to live below the USD 1.90 per day poverty line (**Table 5**). The interaction model in column 4 and the visualized predicted values and marginal effects presented in **Figure 5**, suggest that the large poverty gap between IDPs and non-IDPs does *not* vary by gender. Combined with the results on employment, this suggests that the gender and displacement domains primarily disadvantage IDP women, who work more than non-IDP women, but are poorer. In the next sections, we will take a closer look at the factors behind this finding.

---

<sup>14</sup> **Figure A6** provides the distribution of the total number of household members of age 15 or over an individual lives with (**Figure A6a**), along with the distribution of the differences between the number of females and males (**Figure A6b**). **Figure A7** presents the corresponding statistics for other household members below the age of 15.

<sup>15</sup> One caveat is that for 25% of the sample, the household's main source of livelihood the recorded category was "Other".

### 4.3 Displacement status

To better understand why IDPs are poorer than non-IDPs, on average, we now take a closer and more detailed look at gaps in employment outcomes and underlying drivers.

**Employment outcomes.** In **Table 6**, we compare unconditional means of various employment outcomes between IDPs and non-IDPs. IDPs are more likely to be economically engaged in various forms of employment, predominantly in paid work (37% among IDPs vs. 31% among non-IDPs), and in unpaid labor in a family-run off-farm business (30% vs. 21%). These results also hold for conditional means, using the same specifications for covariates as in the previous section (**Figure 6**).

Looking at the intensive margin, we find evidence that the sector of activity can help to explain the systematic difference in poverty between IDPs and non-IDPs: economically active IDPs work in fewer jobs, fewer hours and fewer months, and are significantly more likely to have the main activity in the agriculture sector, compared to active non-IDPs. The main activity 35% of economically active IDPs is in the agriculture sector, but for only 14% of economically active non-IDPs. **Figure 6** confirms that these structural differences hold up in multiple regression models. We also observe that the average IDP is not only more likely to live in poverty than their non-IDP counterparts, but also significantly more likely to receive aid (23% vs. 1%) (see **Table A3**, which provides additional differences between IDPs and non-IDPs for other livelihood outcomes).

**Employment constraints.** To look even further into the roots of the detected employment and poverty gaps between IDPs and non-IDPs, **Table 7** displays results on differences in factors shaping livelihood outcomes. Most notably, we now see strong differences at the *institutional* level, where we find that IDPs, on average, have significantly worse access to various markets and services and feel much less safe at night than non-IDPs. Most importantly, 45% of non-IDPs report easy access to the labor market, but only 26% of IDPs. This difference is in keeping with the observation that IDPs' activity is more concentrated in the agriculture sector and generates lower returns. Given the close proximity of the IDP and host populations and close economic ties between the areas, this difference is unlikely due to geography but due to legal, economic or social institutional barriers to access to employment. The standardized coefficient plots in **Figure 7** show that these patterns also hold for conditional means.

### 4.4 Gender among IDPs

We now take a closer and more detailed look at the detected gender disparities in employment outcomes and constraints *among IDPs*.

**Employment outcomes.** **Table 8** reveals strong gendered differences in economic activity based on an individual's sex, when we compare displaced individuals above the (working) age of 14. That includes both the extensive and intensive margins of employment. We find that IDP men are significantly more likely to be engaged in any form of work than IDP women, except for unpaid labor in family-owned off-farm businesses, in which about 30% of both IDP men and women are active. Some of these unconditional differences are sizable: while 49% of displaced men engage in paid work, this is only the case for 25% of women. Similarly, 16% of displaced women have some off-farm self-employment, while for men the share is twice as large (35%). **Figure 8a** reports results from multiple regression models, which confirm that the gender gap in IDP employment is driven primarily by paid work and off-farm self-employment.

We find similarly large disparities at the intensive margin, between working IDP men and women (**Table 8**): compared to IDP women, IDP men engage in more activities, work more hours per week and months per year in their main activity, and are less likely to have their main activity in agriculture (38% vs 32%). The results from multiple regression models reported in **Figure 8b** confirm the

robustness of these results. For other livelihood outcomes, we see relatively little differences across IDP men and women (**Table A4**).

**Employment constraints.** Turning to factors that shape this gender gap, a markedly clear picture emerges from the unconditional comparisons based on an individual's sex, as reported in **Table 9**. While we observe moderate disparities at the household level, differences between IDP men and women at the institutional level are markedly absent. This holds across a range of factors, including access to various forms of markets and services, legal documentation, and perceptions of safety. Rather, there are very strong gendered differences at the *endowment level*.

Specifically, displaced women have significantly weaker endowments than displaced men, in terms of both education and health: they received about two years less of formal schooling and lag behind in literacy rates by about 23 percentage points (about 83% among men, and 60% among women).

**Figure 9** tests these unconditional differences in a multiple regression model, again using standardized variables for comparability of the magnitude of associations. Using the same specification as in **Figure 8**, the results corroborate the findings from the unconditional means: IDP women are highly disadvantaged compared to IDP men in terms of "human capital" while gendered differences in institutional factors are markedly absent.

These results imply that the key gendered constraints IDP women face compared to IDP men are rooted in norms and institutions *at their place of origin* rather than those at the destination (which disadvantage IDPs versus non-IDPs, as we saw in the previous section).

#### 4.5 Displacement characteristics and conflict exposure among IDPs

We now use a gender lens to investigate the role of heterogeneous displacement characteristics and conflict exposure for employment outcomes among IDPs.

**Impacts of displacement characteristics and conflict exposure on employment.** **Figure 10** shows regression estimates of the associations of a range of displacement experiences with the three employment outcomes that are affected the most by displacement status (see **Figure 6**): being employed (**Figure 10a**), months worked (**Figure 10b**), and working in the agriculture sector (**Figure 10c**). Each regression controls for age and the district of origin, which are relatively small areas. The results suggest that variation in displacement experiences is generally not strongly linked with employment outcomes, neither at the extensive nor at the intensive margins.

Yet, we document a strong, robust and negative correlation of being economically active with one specific characteristic: an individual's age when the household arrived in El Fasher. Comparing two individuals of the same age today, the one who was older when their household arrived is less likely to be employed, and, if both work, on average works fewer months and is more likely to work in the agriculture sector. Considering our previous results, a potential channel of impact of variation in age at arrival on employment is via education and we expect it to vary based on an individual's sex.

To test this claim, we investigate in **Figure 11** how gender and different displacement experiences interact in shaping employment status. We report interaction coefficients (being female x displacement experience) from separate regressions that control for the main effects of gender (being female), one displacement indicator (e.g., years displaced) and other covariates, including current age. For most displacement characteristics, the association with employment status does not vary noticeably by sex. Yet, we confirm that the disadvantage associated with being female increases with age at arrival, as suggested by the negative interaction coefficient. **Figure 12** presents predictive margins from a very simple probit model of this relationship, suggesting that the gender gap in IDP employment in fact increases almost linearly with age at arrival, conditional on age today.

**Gender-based differences in displacement experiences and pre-displacement characteristics.** To be able to interpret these relationships better, we test if there are systematic differences in displacement characteristics between men and women (**Figure 13**). Overall, displacement characteristics, levels of exposure to violence, and pre-displacement backgrounds vary markedly little by individuals' sex.

We observe one important exception in pre-displacement backgrounds: women were a lot less likely than men (of the same age today) to be enrolled in school or college at the time when their household left the place of origin. This provides even further evidence that displaced women were significantly disadvantaged in terms of formal education at the place of origin, which in turn constrains their employment outcomes today via their human capital today, or endowments in our framework.

#### **4.6 Heterogeneity due to age**

Our previous results suggest that the 'double burden' on IDP women varies with age. We expect that age is a proxy for the strength of the institutional and endowment level barriers IDP women face and that the barriers are smaller for younger IDP women. The findings presented in **Figure 14** confirm these expectations. **Figure 14a** shows that younger IDP women who work are significantly less likely to work in agriculture compared to older IDP women who work. Towards younger ages, the share of those working in the agriculture sector decreases gradually and the gap to comparable non-IDP women of a similar age narrows. Similarly, we find that younger IDP women have significantly higher literacy levels than older IDP women, and that the gap between IDP women and non-IDP women decreases strongly for younger ages (**Figure 14b**). This suggests that age is indeed also a strong proxy for education, especially with age of arrival in El Fasher determining if IDP women have a chance to catch up on their education vis-à-vis host women.

### **5 Conclusions**

Our results document a perilous set of risks and vulnerabilities associated with being a displaced woman in a situation of protracted forced displacement.

We find that disadvantages stemming from gender and displacement outcomes intersect, combine, and interact in shaping contemporary livelihood outcomes. We call this a 'double-burden' facing displaced women. On the one hand, displaced women are disadvantaged by norms and institutions at their destination. As a result, they work more than non-displaced women, but are poorer. On the other hand, displaced women are disadvantaged by norms and institutions at their place of origin. Compared to displaced men of the same age and background, displaced women were less likely to be in school when they left and have lower levels of schooling and literacy today.

The double burden is strongest for older displaced women, who had less chance to catch up with their education upon arrival in the camp. In this setting, older displaced women should thus be targeted by support programs with priority. For younger displaced women, protracted displacement may be an opportunity (in some sense), as the disparities underpinning the double burden appear to disappear for younger women. These heterogeneities emphasize that displaced women and girls' trajectories are critically shaped by the major transitions displaced households and individuals experience, including the timing of displacement in the life cycle, the experiences and exposures the whole process entails at the individual level, and the different social and institutional environments they are exposed to and interact with. Therefore, support interventions may wish to tackle both local institutional factors and individual-level legacies to support displaced women in protracted displacement effectively and efficiently.

Traditionally, policies have often sought to address the needs of the displaced in isolation and, if things went well, gender inequalities would also have been addressed - but most likely as a separate topic. By contrast, the findings of our study spotlight the need for and potential of concerted policy

approaches exceeding standard approaches to address either long-term displacement or gender as individual factors, overcoming the challenges and vulnerabilities stemming from their intersectionality. Conversely, programs and practices failing to account for the double burden and its ensuing intersectionality may not end up helping displaced women much, if anything. Specifically, policies should aim to reduce institutional barriers and market asymmetries facing IDPs, enabling them access to employment that is outside agriculture, that generates higher incomes and that opens new economic strategies and opportunities. Among IDPs, interventions should target the vulnerabilities that older women (or, depending on context, other sub-groups) carry from their place of origin, enabling them to have better access to endowments, including human and physical capital, and thus better livelihoods.

## References

- Abdul-Jalil, M. A., Azzain, A., & Yousuf, A. (2007). Native Administration and Local Governance in Darfur: Past and Future. In: A. de Waal (Ed.), *War in Darfur and the Search for Peace*, 39-67. Cambridge, MA: Global Equity Initiative, Harvard University Press.
- Ali, O. M. O., Mahmoud, U., & Mohamed, A. (2016). From a temporary emergency shelter to an urbanized neighborhood: The Abu Shoak IDP Camp in North Darfur. *Sudan Working Paper 3*, Chr. Michelsen Institute (CMI).
- Alix-Garcia, J., & Bartlett, A. (2015). Occupations under fire: the labour market in a complex emergency. *Oxford Economic Papers*, 67(3), 687-714.
- Alix-Garcia, J., Bartlett, A., & Saah, D. (2012). Displaced populations, humanitarian assistance and hosts: A framework for analyzing impacts on semi-urban households. *World Development*, 40(2), 373-386.
- Alix-Garcia, J., Bartlett, A., & Saah, D. (2013). The landscape of conflict: IDPs, aid and land-use change in Darfur. *Journal of Economic Geography*, 13(4), 589-617.
- Angrist, J. D., & Pischke, J.-S. (2009). *Mostly harmless econometrics: an empiricists guide*. Princeton: Princeton University Press.
- Angrist, J. D. & Pischke, J.-S. (2014). *Mastering 'metrics: The path from cause to effect*. Princeton: Princeton University Press.
- Arango, D. J., Brück, T., Hanmer, L. C. & Klugman, J. (2021). Introduction to the Special Issue on 'Gendered Dimensions of Forced Displacement'. Under review.
- Baliki, G. (2017). *Empirical Advances in the Measurement and Analysis of Violent Conflict*. Doctoral dissertation, Humboldt University Berlin.
- Bastia, T. (2014). Intersectionality, migration and development. *Progress in Development Studies*, 14(3), 237-248.
- Bello, A. R. S., & Baig, M. B. (2014). Coping strategies of Darfurians displaced women in Khartoum. *Journal of Agricultural Extension and Rural Development*, 6(5), 168-174.
- Brück, T., & Stojetz, W. (2020). *Data Options for Assessing Gendered Dimensions of Forced Displacement*, Background Note for the World Bank's Gendered Dimensions of Forced Displacement Program. Berlin: ISDC - International Security and Development Center.
- Brück, T., Justino, P., Verwimp, P., Avdeenko, A., & Tedesco, A. (2016). Measuring violent conflict in micro-level surveys: Current practices and methodological challenges. *The World Bank Research Observer*, 31(1), 29-58.
- Charmes, J. (2012). The Informal Economy Worldwide: Trends and Characteristics. *Margin: The Journal of Applied Economic Research*, 6(2), 103-32.
- Crenshaw, K. (1990). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stan. L. Rev.*, 43, 1241.
- Davies, A., & Jenner, A. (2020). A Tale of Two Cities-IDPs Plan for Their Durable Solutions in Darfur. *Refugee Survey Quarterly*, 39(4), 507-513.
- Doss, C. R., & Quisumbing, A. R. (2020). Understanding rural household behavior: Beyond Boserup and Becker. *Agricultural Economics*, 51(1), 47-58.
- Elu, J. U., & Loubert, L. (2013). Earnings inequality and the intersectionality of gender and ethnicity in Sub-Saharan Africa: The case of Tanzanian manufacturing. *American Economic Review*, 103(3), 289-92.
- Elzarov, Z. (2019). Emerging options for durable solutions in Darfur. *Forced Migration Review*, (62), 55-57.
- Flint, J., & De Waal, A. (2008). *Darfur: a new history of a long war*. Zed Books Ltd.
- George, R., Saeed, M., & Abdelgalil, S. (2019). Women at the forefront of Sudan's political transformation. *ODI WP 566*.

- GIWPS & PRIO (2019). Women, Peace and Security Index 2019/20: Tracking sustainable peace through inclusion, justice, and security for women. Washington, DC: Georgetown Institute for Women, Peace and Security and Peace Research Institute Oslo.
- Grawert, E. (2008). Cross-border dynamics of violent conflict: The case of Sudan and Chad. *Journal of Asian and African Studies*, 43(6), 595-614.
- Grono, N. (2006). Briefing: Darfur: The International Community's Failure to Protect. *African Affairs*, 105(421), 621-631.
- Grünenfelder, J., & Schurr, C. (2015). Intersectionality—A challenge for development research and practice?. *Development in practice*, 25(6), 771-784.
- Hagan, J., Raymond-Richmond, W., & Parker, P. (2005). The criminology of genocide: The death and rape of Darfur. *Criminology*, 43(3), 525-562.
- Hamid, A. A., & Musa, S. A. (2010). Mental health problems among internally displaced persons in Darfur. *International Journal of Psychology*, 45(4), 278-285.
- Heckert, J., Pereira, A., Doss, C., Myers, E. C., & Quisumbing, A. R. (2019). Building livelihoods for rural youth: A gendered perspective. *IFPRI book chapters*, 97-110.
- ISDC (2019). Gendered Dimensions of Forced Displacement: Ten Key Themes. ISDC Working Paper. Berlin: ISDC - International Security and Development Center.
- Jaspars, S. (2010). Coping and change in protracted conflict: The role of community groups and local institutions in addressing food insecurity and threats to livelihoods—A case study based on the experience of Practical Action in North Darfur. *HPG Working Paper*.
- Jayachandran, S. (2020). Microentrepreneurship in Developing Countries, *NBER Working Paper Series*, 26661.
- JIPS (2019a). Progress Towards Durable Solutions in Abu Shouk and El Salam IDP Camps North Darfur, Sudan. Report, available at: <https://www.jips.org/uploads/2019/12/JIPS-Sudan-profilingreport-2019.pdf> (accessed on 30 June, 2021).
- JIPS (2019b). Analysis of Durable Solutions in Places of Displacement and Return: Lessons learnt from Iraq, Sudan and Somalia.
- Justino, P., Brück, T., & Verwimp, P. (Eds.). (2013). A micro-level perspective on the dynamics of conflict, violence, and development. Oxford: Oxford University Press.
- Kälin, W., & Entwisle Chapuisat, H. (2017). Breaking the Impasse: Reducing protracted internal displacement as a collective outcome. New York: UN OCHA.
- Kapilashrami, A., & Hankivsky, O. (2018). Intersectionality and why it matters to global health. *The Lancet*, 391(10140), 2589-2591.
- Minear, L. (2004). Lessons learned: the Darfur experience. *J. Mitchell, I. Christoplos, L. Minear, and P. Wiles, ALNAP Review of Humanitarian Action*, 111-12.
- North, D. C. (1990). Institutions, Institutional Change and Economic Performance. *Cambridge University Press*.
- Nugent, B., & Zambakides, S. (2009). Darfur: Profile of El Fasher Town and Abu Shouk IDP camp. Nairobi: UN-HABITAT/DFID.
- Pape, U. J., & Scharma, A. (2019). Using Micro-Data to Inform Durable Solutions for IDPs (Vol. 3) : Volume C : Technical Aspects (English). Washington, D.C. : World Bank Group.
- Perry, G. E., Arias, O., Fajnzylber, P., Maloney, W. F., Mason, A., & Saavedra-Chanduvi, J. (2007). Informality: Exit and exclusion. Washington, D.C. : World Bank Group.
- Puri, J., Aladysheva, A., Iversen, V., Ghorpade, Y., & Brück, T. (2017). Can rigorous impact evaluations improve humanitarian assistance?. *Journal of Development Effectiveness*, 9(4), 519-542.
- Quisumbing, A., Meinzen-Dick, R. S., & Njuki, J. (2019). 2019 Annual trends and outlook report: Gender equality in rural Africa: From commitments to outcomes. Intl Food Policy Res Inst.
- Rohwerder, B. (2016). Women and girls in forced and protracted displacement. *GSDRC Helpdesk*

- Research Report, 1364*. Birmingham, UK: GSDRC, University of Birmingham.
- Ruiz, I., & Vargas-Silva, C. (2018). The impact of hosting refugees on the intra-household allocation of tasks: A gender perspective. *Review of Development Economics, 22(4)*, 1461-1488.
- Ruiz, I., & Vargas-Silva, C. (2013). The economics of forced migration. *The Journal of Development Studies, 49(6)*, 772-784.
- Saeed Ali, A. M. (2014). Study on Internally Displaced Population, Gender and Livelihoods in Kassala State, Eastern Sudan. *LOGiGA Working Paper*.
- Singh, N. S., Lokot, M., Undie, C. C., Onyango, M. A., Morgan, R., Harmer, A., ... & Heidari, S. (2021). Research in forced displacement: guidance for a feminist and decolonial approach. *The Lancet, 397(10274)*, 560-562.
- Sørnbø, G. M. (2018). Livelihoods, Conflicts and Ethnicity: Reflections on the History and Relevance of Anthropological Research Cooperation in Sudan. *Forum for Development Studies 45(1)*, 25-46.
- Tønnessen, L. (2019). Women at work in Sudan: Marital privilege or constitutional right?. *Social Politics: International Studies in Gender, State & Society, 26(2)*, 223-244.
- Tubiana, J., Tanner, V., & Abdul-Jalil, M. A. (2012). Traditional authorities' peacemaking role in Darfur. Washington, D.C.: United States Institute of Peace.
- UNDP (2018). Gender, Justice and the Law: Sudan. New York: UNDP.
- UN OCHA (2019). Humanitarian Needs Overview Sudan. Sudan: UN OCHA. UN OCHA (2020). Humanitarian Needs Overview Sudan. Sudan: UN OCHA.
- UN OCHA (2021). Humanitarian Needs Overview Sudan. Sudan: UN OCHA.
- UNICEF (2017). Child Marriage in the Middle East and North Africa – Sudan Country Brief. Sudan: UNICEF
- UNICEF (2019). Education: Annual Report. Sudan: UNICEF
- Valentine, G. (2007). Theorizing and researching intersectionality: A challenge for feminist geography. *The professional geographer, 59(1)*, 10-21.
- Verwimp, P., P. Justino and T. Brück (2019). The Microeconomics of Violent Conflict. *Journal of Development Economics, 141*, 102297.
- World Bank (2017). Forcibly displaced: Toward a development approach supporting refugees, the internally displaced, and their hosts. Washington, D.C.: World Bank Group.
- World Bank (2019a). Sudan Risk and Resilience Assessment. Unpublished report.
- World Bank (2019b). Profiting from Parity: Unlocking the Potential of Women's Business in Africa. Washington, D.C.: World Bank Group.
- YL (2018). How poverty and gender combine to affect youth and adolescence. *Young Lives Impact Case Study*. Oxford, United Kingdom.
- Young, H., & Jacobsen, K. (2013). No way back? Adaptation and urbanization of IDP livelihoods in the Darfur Region of Sudan. *Development and Change, 44(1)*, 125-145.
- Young, H., & Ismail, M. A. (2019). Complexity, continuity and change: livelihood resilience in the Darfur region of Sudan. *Disasters, 43*, 318-344.
- Young, H., Osman, A. M. K., Aklilu, Y., Dale, R., Badri, B., & Fuddle, A. J. A. (2005). Darfur: Livelihoods under siege. Medford, MA, USA: Feinstein International Famine Center, Tufts University.

## Tables and Figures

Figure 1: Study sample in El Fasher, Sudan.

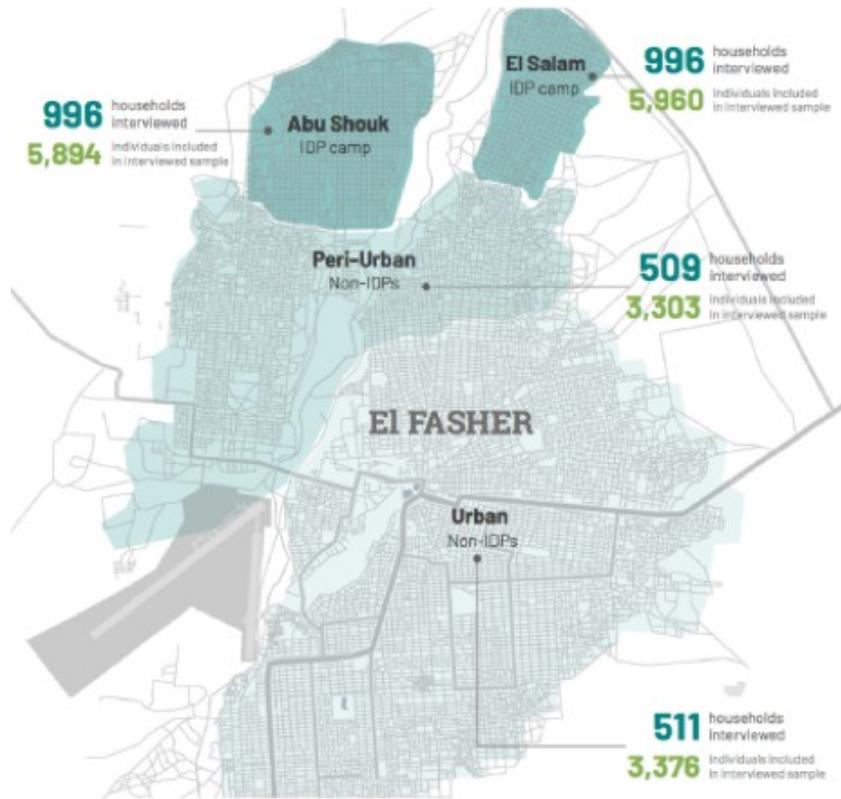
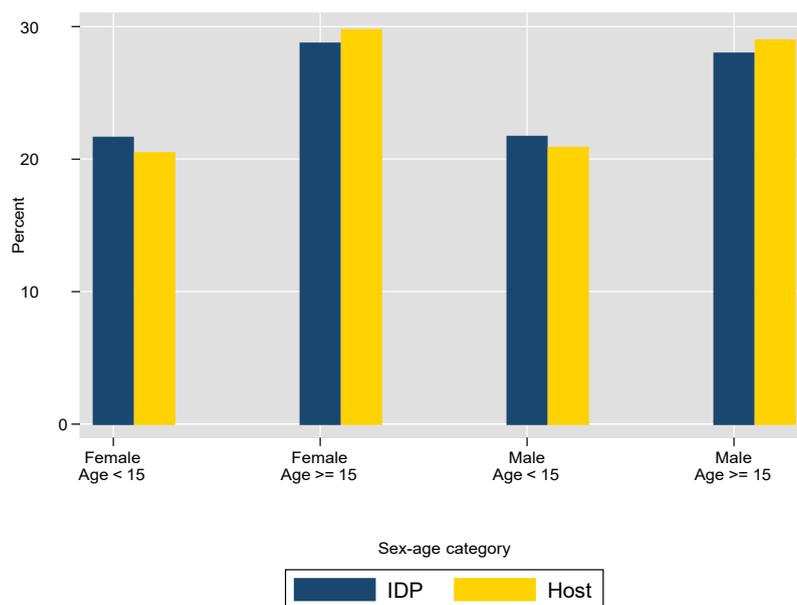


Figure 2: Sex-age profiles of displaced and non-displaced individuals.

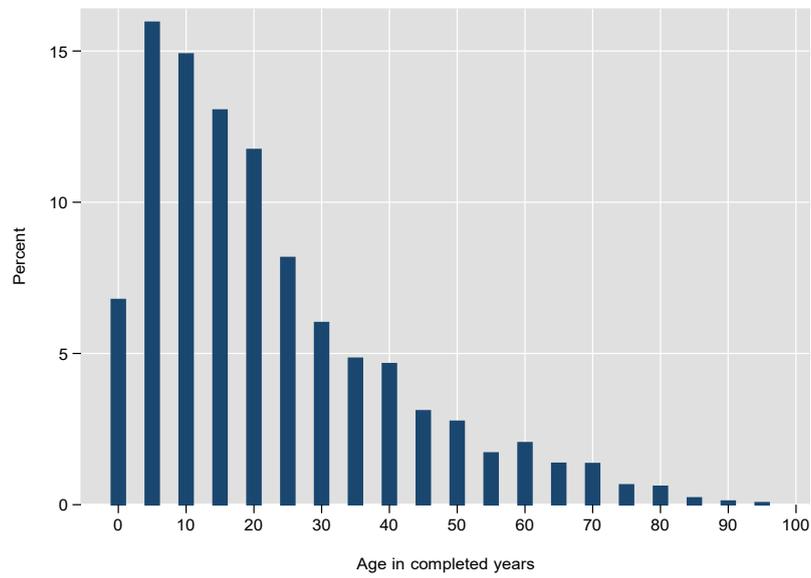


**Table 1:** Background characteristics of IDPs.

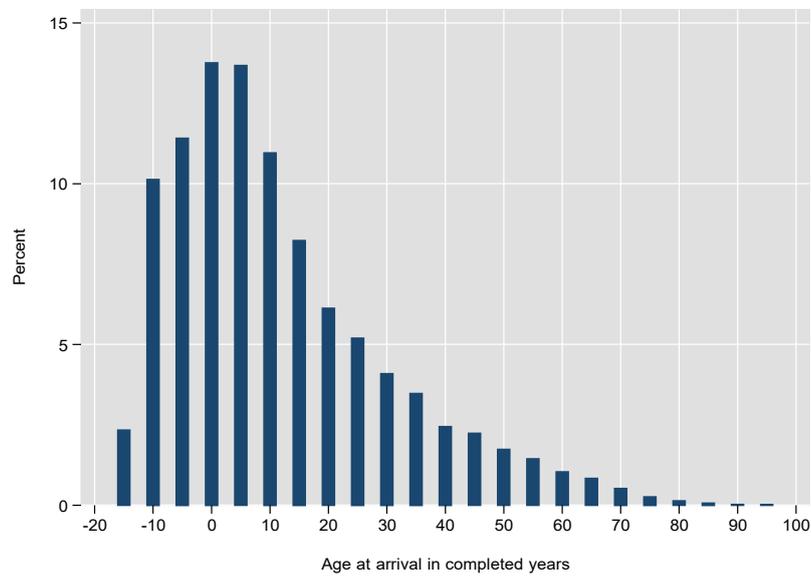
	Mean	S.D.	Min.	Max.	N
<b>Basic characteristics</b>					
Age (years)	22.08	18.17	0	97	11854
Female	0.50	0.50	0	1	11854
Born in El Fasher	0.29	0.45	0	1	11850
Is main respondent	0.17	0.37	0	1	11854
<b>Displacement characteristics</b>					
Years displaced	11.60	4.77	0	18	11850
Ever returned to place of origin	0.32	0.47	0	1	11850
In contact with people at place of origin	0.65	0.48	0	1	11850
Household lost documentation during displacement	0.39	0.49	0	1	11702
Number of times household moved	1.77	0.78	1	10	11097
Time spent in El Fasher	10.46	5.08	0	18	11850
Age when household arrived	11.61	18.75	-15	95	11850
Many other people from place of origin nearby	0.32	0.47	0	1	11322
Arrival as family	0.51	0.50	0	1	11847
<b>Conflict exposure (indices)</b>					
Violence (any form)	-0.00	1.00	-1	3	10416
One-sided violence	0.00	1.00	-1	3	10416
Fatalities	0.00	1.00	-1	4	10416
<b>Pre-displacement</b>					
Access to land before displacement	0.86	0.35	0	1	11798
Farming household	0.87	0.34	0	1	11788
Paid work main activity of household	0.02	0.15	0	1	11788
Enrolled at time of displacement	0.34	0.47	0	1	9882
Employed before displacement	0.46	0.50	0	1	4068
Employed in agriculture before displacement	0.41	0.49	0	1	4059

**Figure 3: Age today and age when household arrived in El Fasher.**

**(a) Age distribution of IDPs.**



**(b) Age when household arrived in El Fasher.**



**Table 2: Employment outcomes of IDPs (age > 14).**

	Mean	S.D.	Min.	Max.	N
<b>Employment status</b>					
Employed	0.55	0.50	0	1	6721
Paid labor for someone else	0.37	0.48	0	1	6659
Unpaid labor in family non-farm business	0.30	0.46	0	1	6662
Non-agricultural self-employment	0.24	0.43	0	1	6648
Agricultural self-employment (own or family)	0.08	0.27	0	1	6646
Unpaid training or workshop	0.05	0.21	0	1	6624
<b>Among workers</b>					
Number of activities	1.87	1.03	1	5	3665
Hours worked	34.76	25.40	0	160	3803
Months worked	7.91	3.70	1	12	3437
Sector of main activity is agriculture	0.35	0.48	0	1	3675

Note: Employed equals 1 if an individual engaged in at least one of the following five forms of work in the past 7 days: paid labor for someone else, unpaid labor in an off-farm family business, non-agricultural self-employment, agricultural self-employment; and participation in a training or workshop.

**Table 3:** Endowment, household and institutional characteristics of IDPs.

	Mean	S.D.	Min.	Max.	N
<b>Endowment level</b>					
Ability to read	0.59	0.49	0	1	11854
Ability to write	0.58	0.49	0	1	11854
Education (years)	5.54	4.55	0	29	9699
Chronic disease or disability	0.08	0.27	0	1	11854
<b>Household level</b>					
Household size	7.11	2.53	1	15	11854
Household head is female	0.45	0.50	0	1	11854
More females than males in the household	0.42	0.49	0	1	11854
Boys in the household (age: 0-14)	1.60	1.36	0	6	11854
Girls in the household (age: 0-14)	1.61	1.41	0	7	11854
More girls than boys in the household (age: 0-14)	0.49	0.50	0	1	11854
Men in the household (age > 14)	1.97	1.34	0	8	11854
Women in the household (age > 14)	1.93	1.18	0	8	11854
More women than men in the household (age > 14)	0.28	0.45	0	1	11854
<b>Institutional level</b>					
Easy access to labor market	0.26	0.44	0	1	11854
Easy access to good markets and trade	0.33	0.47	0	1	11854
Easy access to health services	0.53	0.50	0	1	11854
Easy access to help with crimes and disputes	0.91	0.29	0	1	11854
Easy access to identification documents	0.63	0.48	0	1	11854
Local market nearby (<30mins)	0.66	0.47	0	1	11854
Health care nearby (<30mins)	0.70	0.46	0	1	11854
Access to land	0.31	0.46	0	1	11842
Reporting crimes and disputes	0.23	0.42	0	1	11854
Has form of legal identification	0.90	0.30	0	1	11843
Feels safe at night	0.58	0.49	0	1	1982
Feels safe during the day	0.93	0.25	0	1	1982

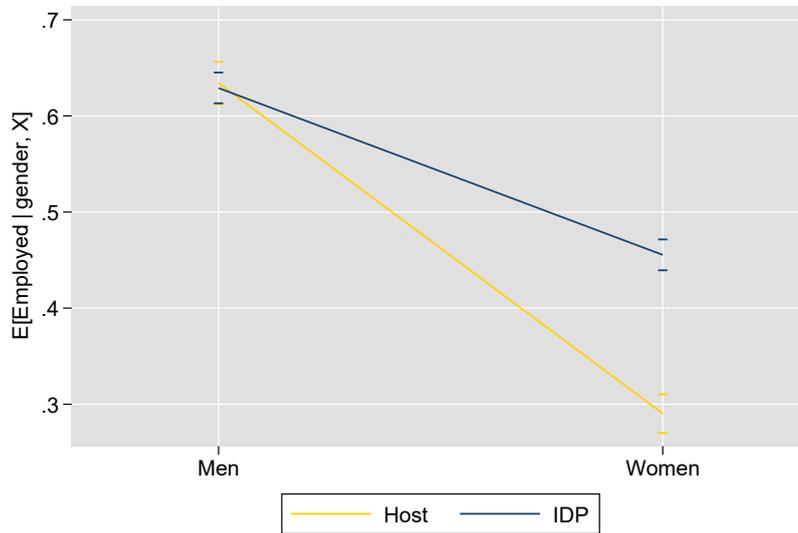
**Table 4:** Being economically active (any form of employment).

	(1)	(2)	(3)	(4)
IDP	0.079*** (0.005)		0.077*** (0.006)	-0.010 (0.679)
Female		-0.239*** (0.000)	-0.238*** (0.000)	-0.347*** (0.000)
IDP x Female				0.173*** (0.000)
Age	Yes	Yes	Yes	Yes
HH size	Yes	Yes	Yes	Yes
N	10641	10641	10641	10641
R <sup>2</sup>	0.037	0.089	0.094	0.101

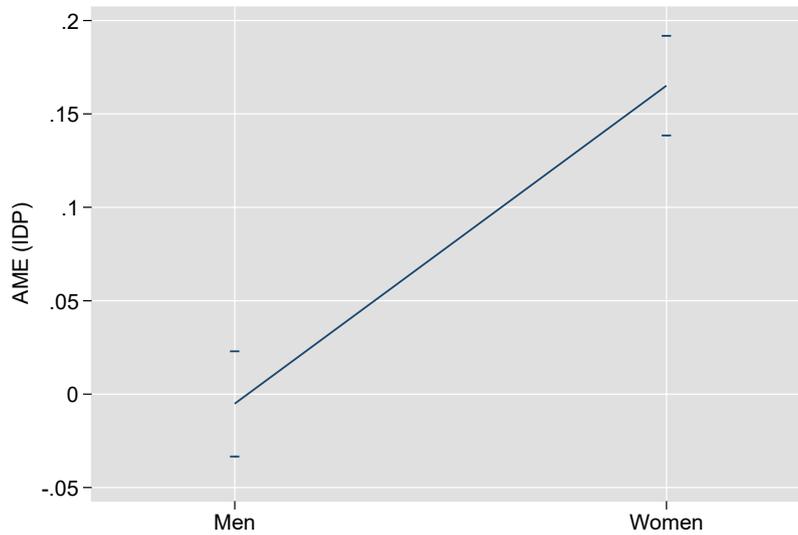
Note: \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. HC2 standard errors in parentheses.

**Figure 4: Being economically active (any form of employment).**

(a) Predictions from interaction model.



(b) Average marginal effect of being an IDP.



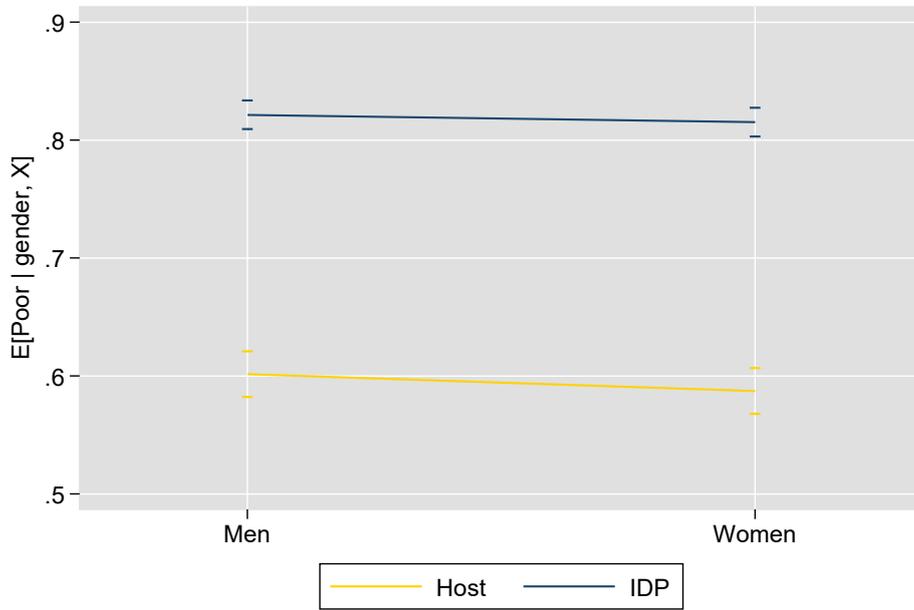
**Table 5:** Living below the USD 1.90 per day poverty line.

	(1)	(2)	(3)	(4)
IDP	0.228*** (0.000)		0.228*** (0.000)	0.223*** (0.000)
Female		-0.012* (0.054)	-0.010* (0.072)	-0.017 (0.144)
IDP x Female				0.010 (0.424)
Age	Yes	Yes	Yes	Yes
HH size	Yes	Yes	Yes	Yes
N	10608	10608	10608	10608
R <sup>2</sup>	0.192	0.139	0.192	0.192

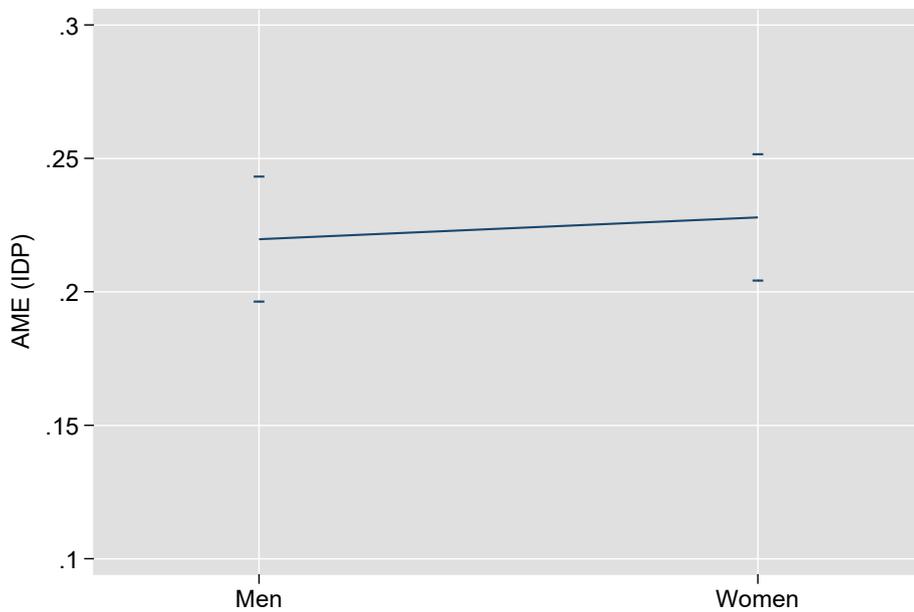
Note: \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01. HC2 standard errors in parentheses.

Figure 5: Living below the USD 1.90 per day poverty line.

(a) Predictions from interaction model.



(b) Average marginal effect of being an IDP.

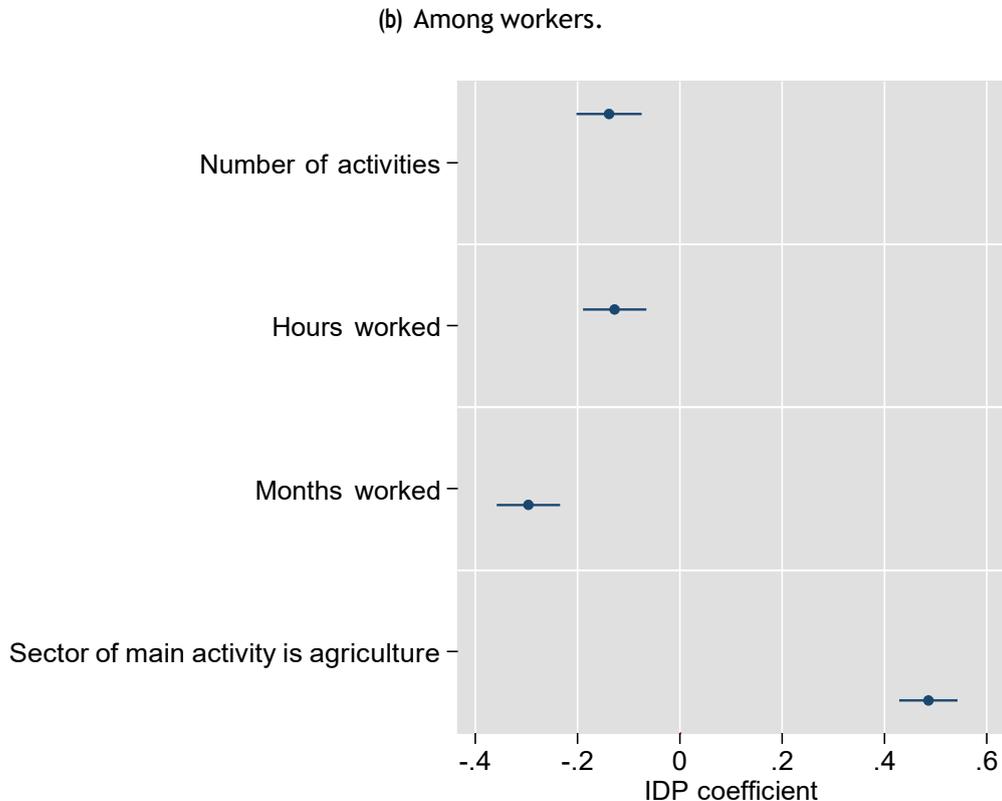
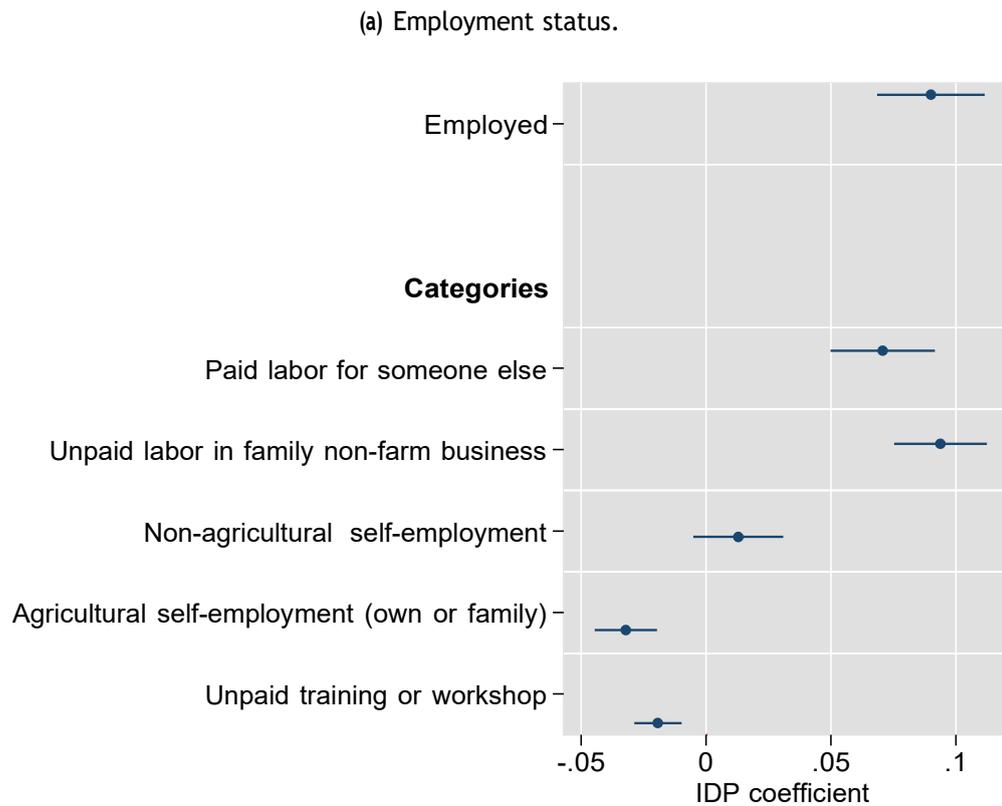


**Table 6:** Differences in employment outcomes between IDPs and non-IDPs.

	IDP	Non-IDP	$\Delta$	$p(\Delta)$
<b>Employment status</b>				
Employed	0.55	0.45	0.09***	0.00
Paid labor for someone else	0.37	0.31	0.06***	0.00
Unpaid labor in family non-farm business	0.30	0.21	0.09***	0.00
Non-agricultural self-employment	0.24	0.22	0.02**	0.02
Agricultural self-employment (own or family)	0.08	0.11	-0.03***	0.00
Unpaid training or workshop	0.05	0.06	-0.02***	0.00
<b>Among workers</b>				
Number of activities	1.87	1.98	-0.11***	0.00
Hours worked	34.76	37.31	-2.54***	0.00
Months worked	7.91	9.21	-1.30***	0.00
Sector of main activity is agriculture	0.35	0.14	0.21***	0.00

Note: Employed equals 1 if an individual engaged in at least one of the following five forms of work in the past 7 days: paid labor for someone else, unpaid labor in an off-farm family business, non-agricultural self-employment, agricultural self-employment; and participation in a training or workshop.

**Figure 6:** Conditional differences in employment outcomes between IDPs and non-IDPs.

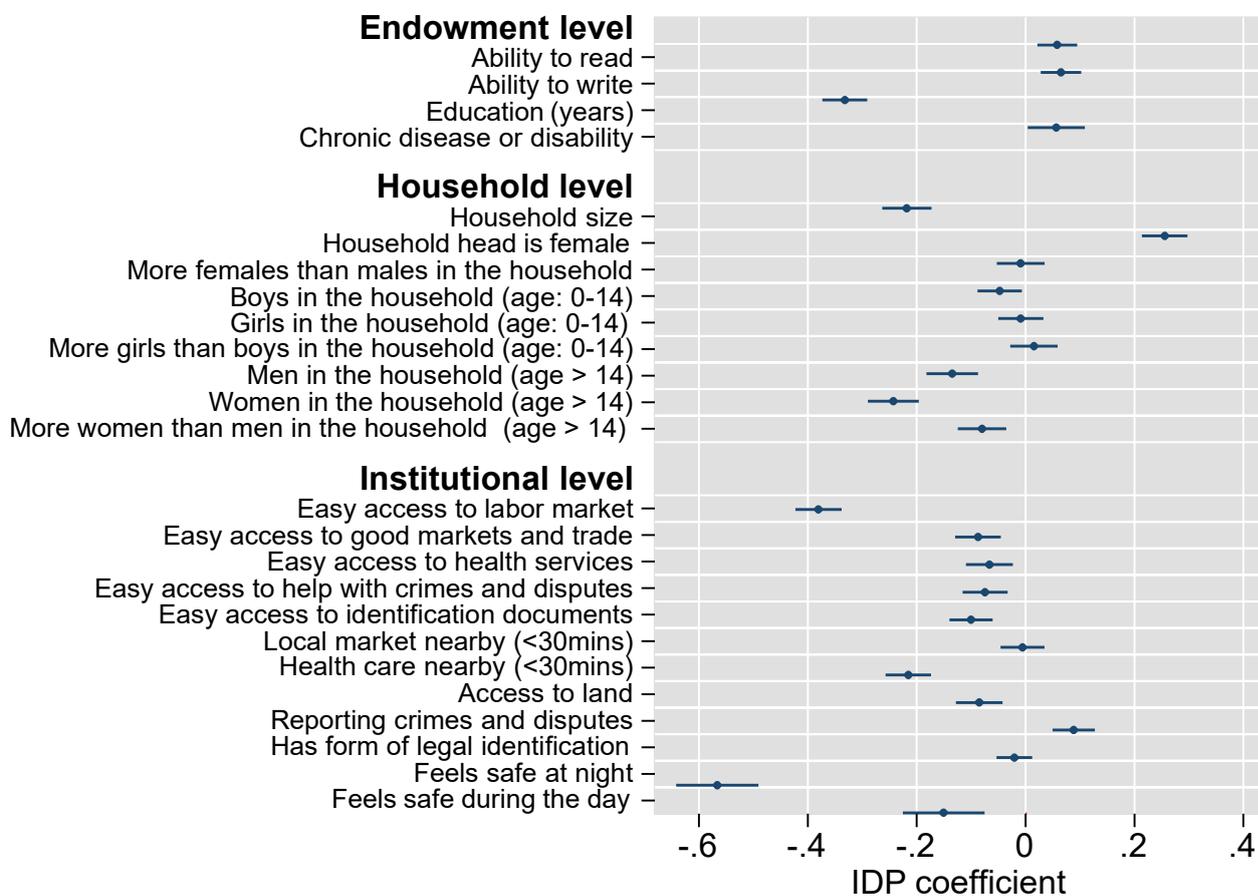


Note: The figures display coefficients related to being an IDP from linear regression models. Each outcome variable (left) was regressed on the female indicator in a separate regression, controlling for individual age and household size, and using HC2 standard errors.

**Table 7:** Differences in employment constraints between IDPs and non-IDPs.

	IDP	Non-IDP	$\Delta$	$p(\Delta)$
<b>Endowment level</b>				
Ability to read	0.71	0.69	0.02*	0.06
Ability to write	0.70	0.68	0.02**	0.02
Education (years)	6.54	8.08	-1.54***	0.00
Chronic disease or disability	0.11	0.10	0.01**	0.04
<b>Household level</b>				
Household size	6.89	7.53	-0.64***	0.00
Household head is female	0.45	0.32	0.13***	0.00
More females than males in the household	0.41	0.41	-0.01	0.51
Boys in the household (age: 0-14)	1.24	1.27	-0.04	0.18
Girls in the household (age: 0-14)	1.23	1.27	-0.04	0.12
More girls than boys in the household (age: 0-14)	0.54	0.56	-0.01	0.17
Men in the household (age > 14)	2.24	2.49	-0.25***	0.00
Women in the household (age > 14)	2.18	2.50	-0.32***	0.00
More women than men in the household (age > 14)	0.31	0.34	-0.02**	0.01
<b>Institutional level</b>				
Easy access to labor market	0.26	0.45	-0.19***	0.00
Easy access to good markets and trade	0.33	0.39	-0.06***	0.00
Easy access to health services	0.52	0.57	-0.04***	0.00
Easy access to help with crimes and disputes	0.91	0.94	-0.03***	0.00
Easy access to identification documents	0.62	0.64	-0.02*	0.08
Local market nearby (<30mins)	0.66	0.67	-0.01	0.26
Health care nearby (<30mins)	0.71	0.80	-0.09***	0.00
Access to land	0.32	0.38	-0.06***	0.00
Reporting crimes and disputes	0.23	0.17	0.06***	0.00
Has form of legal identification	0.95	0.95	-0.00	0.72
Feels safe at night	0.58	0.82	-0.24***	0.00
Feels safe during the day	0.93	0.97	-0.04***	0.00

**Figure 7:** Conditional differences in employment constraints between IDPs and non-IDPs.



Note: The figures display coefficients related to being an IDP from linear regression models. Each outcome variable (left) was regressed on the IDP indicator in a separate regression, controlling for individual age and household size, and using HC2 standard errors.

**Table 8:** Differences in employment outcomes between IDP men and women.

	Female	Male	$\Delta$	$p(\Delta)$
<b>Employment status</b>				
Employed	0.46	0.63	-0.18***	0.00
Paid labor for someone else	0.25	0.49	-0.24***	0.00
Unpaid labor in family non-farm business	0.31	0.30	0.01	0.21
Non-agricultural self-employment	0.16	0.32	-0.16***	0.00
Agricultural self-employment (own or family)	0.05	0.10	-0.04***	0.00
Unpaid training or workshop	0.04	0.06	-0.02***	0.00
<b>Among workers</b>				
Number of activities	1.76	1.96	-0.21***	0.00
Hours worked	30.95	37.62	-6.67***	0.00
Months worked	7.75	8.02	-0.27**	0.03
Sector of main activity is agriculture	0.38	0.32	0.06***	0.00

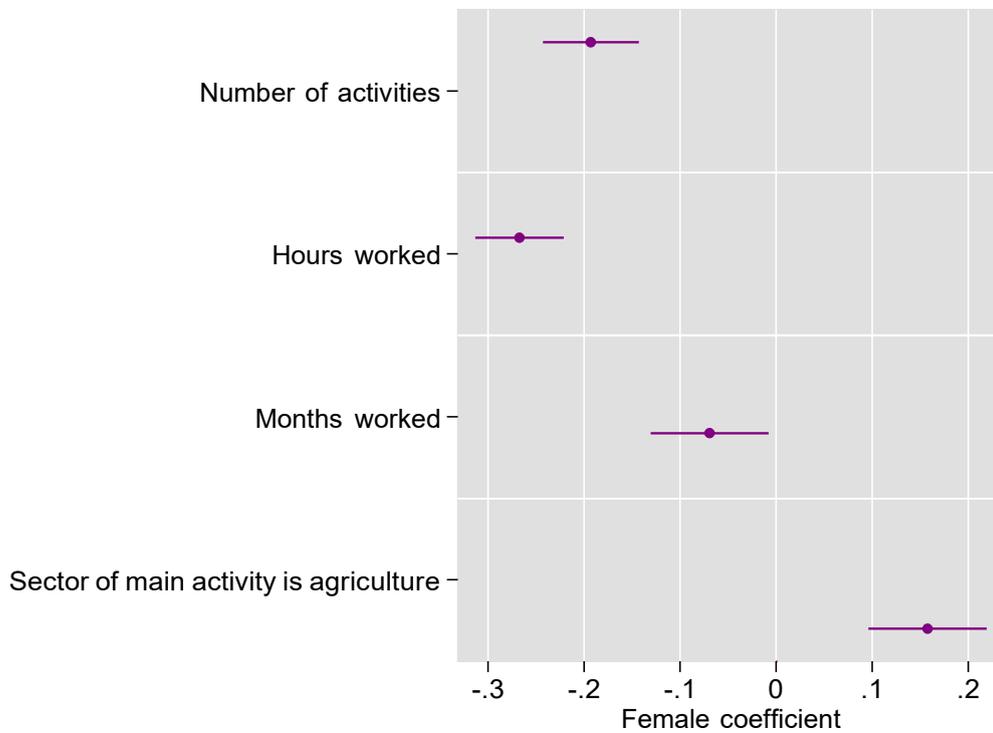
Note: Employed equals 1 if an individual engaged in at least one of the following five forms of work in the past 7 days: paid labor for someone else, unpaid labor in an off-farm family business, non-agricultural self-employment, agricultural self-employment; and participation in a training or workshop.

**Figure 8:** Conditional differences in employment outcomes between IDP men and women.

(a) Employment status.



(b) Among workers.

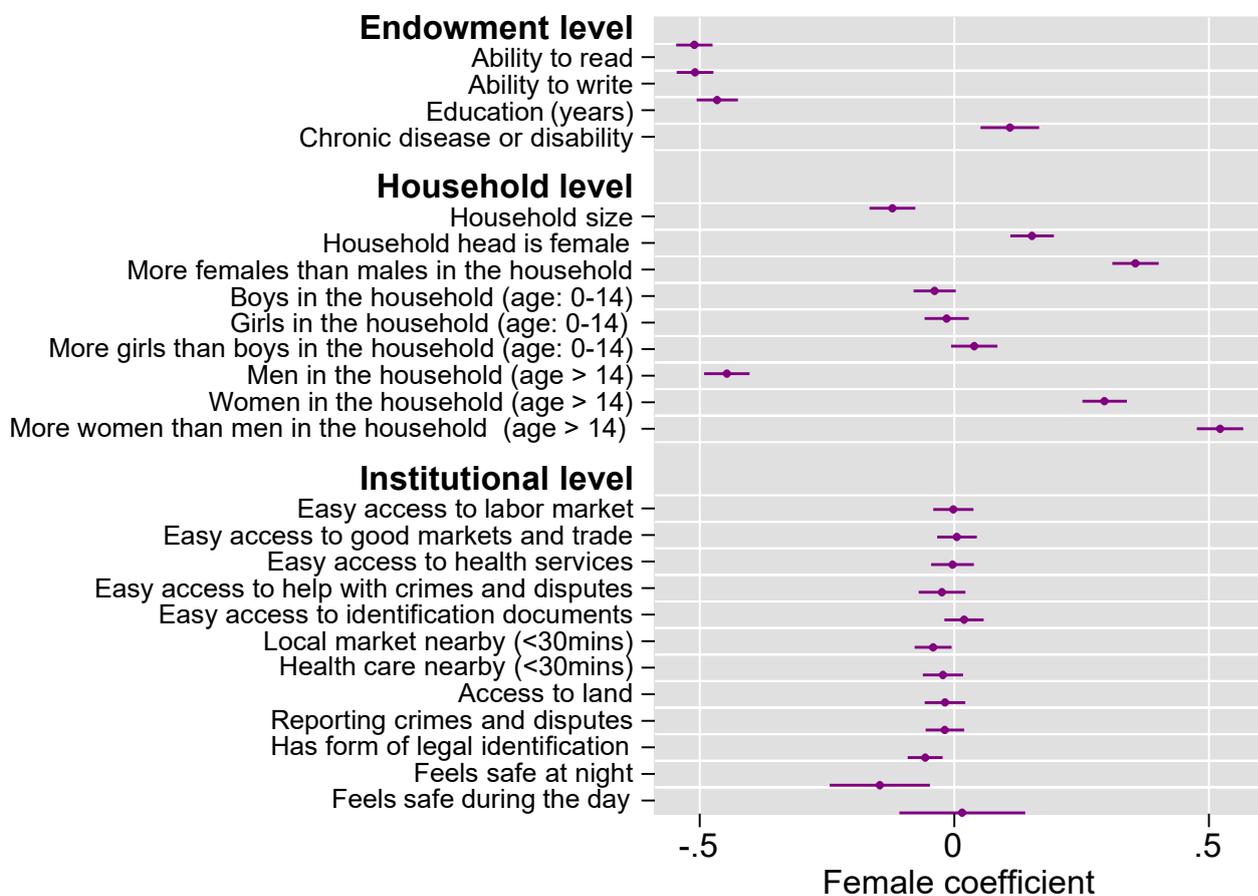


Note: The figures display the coefficient related to being a woman from linear regression models. Each outcome variable (left) was regressed on the IDP indicator in a separate regression, controlling for individual age and enumeration area fixed effects, and using HC2 standard errors.

**Table 9:** Differences in employment constraints between IDP men and women.

	Female	Male	$\Delta$	$p(\Delta)$
<b>Endowment level</b>				
Ability to read	0.60	0.83	-0.23***	0.00
Ability to write	0.59	0.82	-0.23***	0.00
Education (years)	5.58	7.56	-1.98***	0.00
Chronic disease or disability	0.12	0.10	0.02***	0.00
<b>Household level</b>				
Household size	6.74	7.05	-0.31***	0.00
Household head is female	0.49	0.41	0.08***	0.00
More females than males in the household	0.50	0.31	0.19***	0.00
Boys in the household (age: 0-14)	1.21	1.22	-0.01	0.70
Girls in the household (age: 0-14)	1.23	1.23	-0.01	0.78
More girls than boys in the household (age: 0-14)	0.55	0.53	0.02	0.11
Men in the household (age > 14)	1.91	2.59	-0.67***	0.00
Women in the household (age > 14)	2.39	1.96	0.43***	0.00
More women than men in the household (age > 14)	0.44	0.18	0.26***	0.00
<b>Institutional level</b>				
Easy access to labor market	0.26	0.26	0.00	0.83
Easy access to good markets and trade	0.33	0.33	0.00	0.69
Easy access to health services	0.52	0.53	-0.01	0.65
Easy access to help with crimes and disputes	0.91	0.92	-0.01	0.24
Easy access to identification documents	0.63	0.62	0.01	0.21
Local market nearby (<30mins)	0.65	0.67	-0.02	0.11
Health care nearby (<30mins)	0.70	0.71	-0.01	0.41
Access to land	0.31	0.32	-0.00	0.67
Reporting crimes and disputes	0.23	0.23	-0.00	0.86
Has form of legal identification	0.94	0.96	-0.02***	0.00
Feels safe at night	0.58	0.59	-0.01	0.82
Feels safe during the day	0.94	0.92	0.02*	0.06

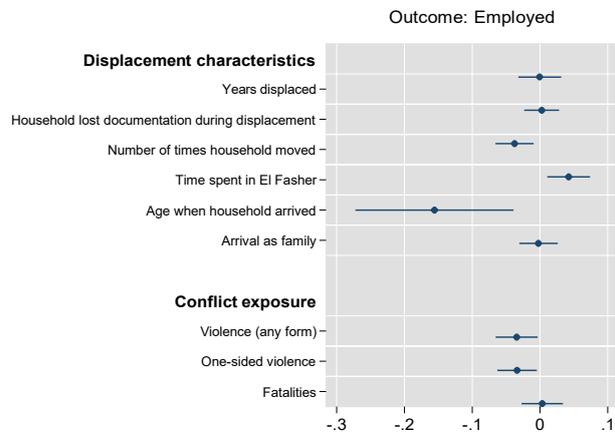
**Figure 9:** Conditional differences in employment constraints between IDP men and women.



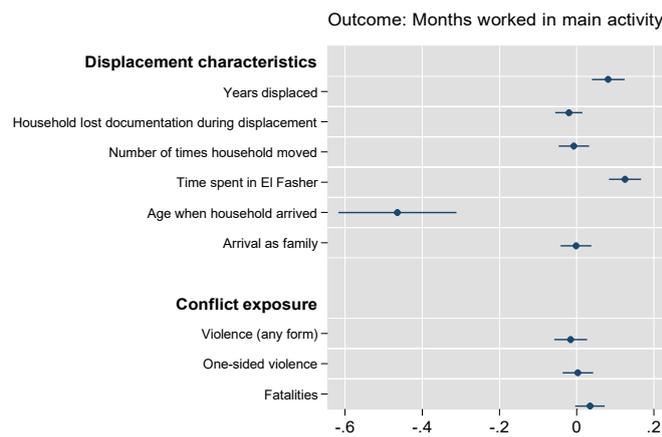
Note: The figures display coefficients related to being a woman from linear regression models. Each outcome variable (left) was regressed on the female indicator in a separate regression, controlling for individual age and enumeration area fixed effects, and using HC2 standard errors.

Figure 10: Employment and displacement experiences.

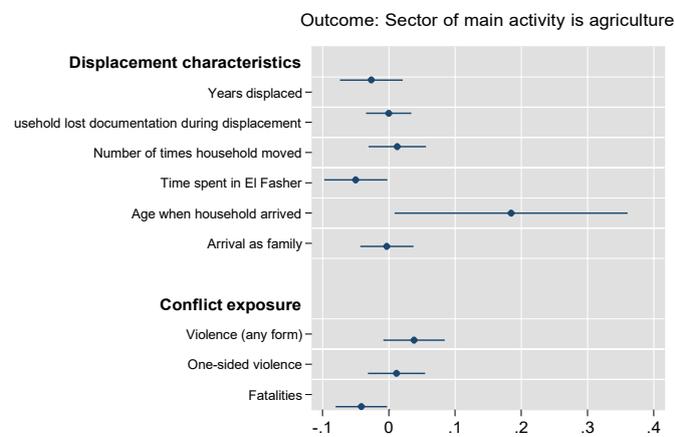
(a) Employment.



(b) Months worked.

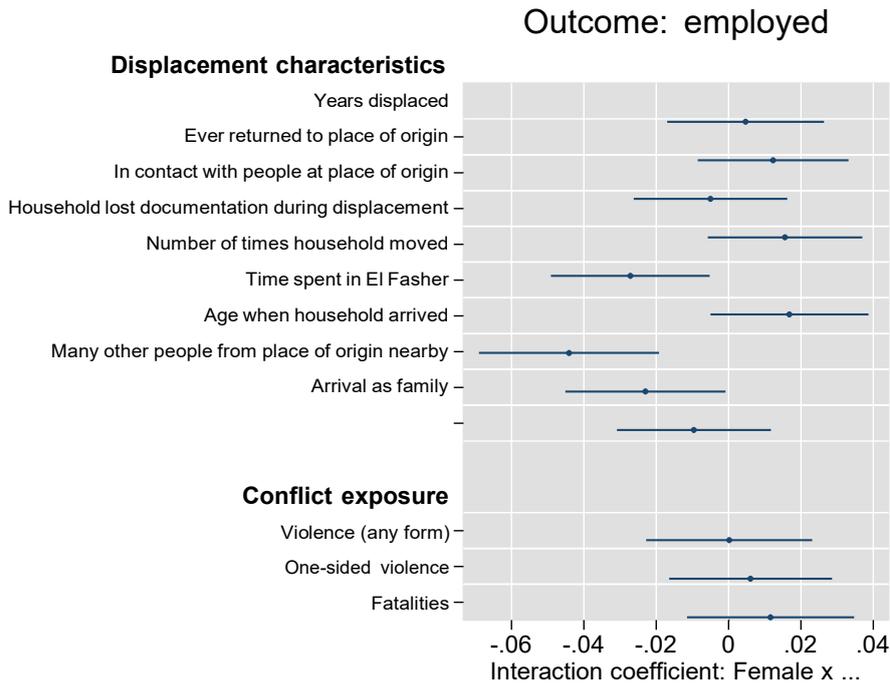


(c) Agriculture as sector of main activity.



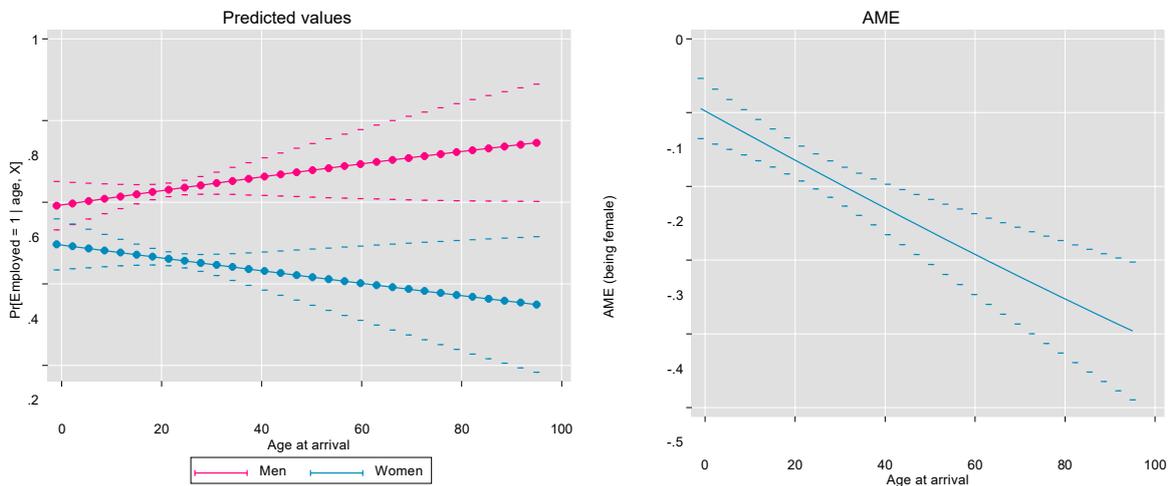
Note: Each line represents a separate linear regression. In each regression, an employment outcome variable was regressed on the listed displacement indicator (left), controlling for individual age, sex, enumeration area fixed effects, pre-displacement district fixed effects and using HC2 standard errors.

**Figure 11: Gendered impacts of displacement characteristics and conflict exposure.**

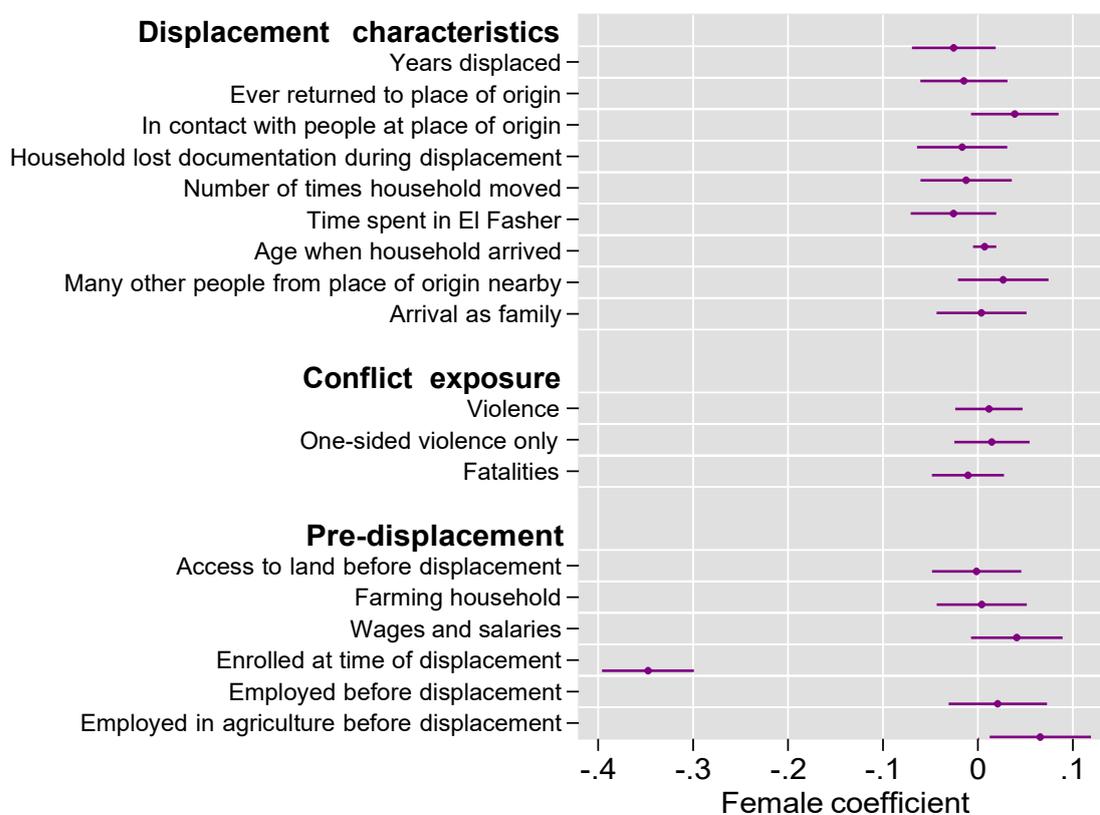


Note: Each line represents a separate linear regression. In each regression, the employment status variable was regressed on the listed displacement experience variable (left), controlling for the main terms (sex and the displacement experience variable), age, enumeration area fixed effects, pre-displacement district fixed effects, and using HC2 standard errors.

**Figure 12: The interaction of age at arrival and being female.**



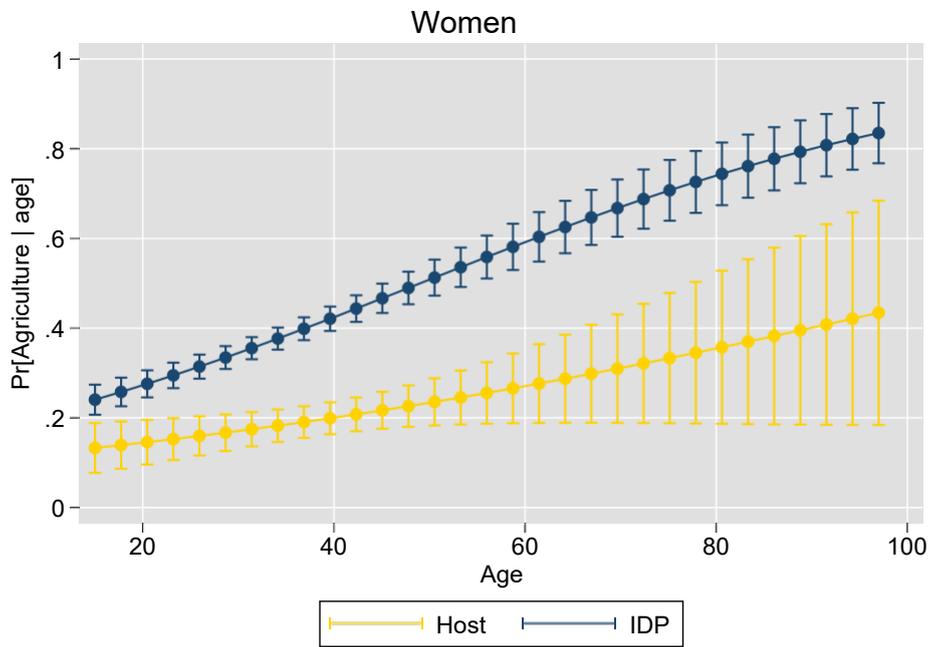
**Figure 13: Gender-based differences in displacement characteristics and conflict exposure.**



Note: The figures display coefficients related to being a woman from linear regression models. Each outcome variable (left) was regressed on the female indicator in a separate regression, controlling for individual age, enumeration area fixed effects, pre-displacement district fixed effects and using HC2 standard errors.

Figure 14: Heterogeneity based on age.

(a) Main sector is agriculture (working women).



(b) Literacy (IDPs).

