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# Social protection in times of conflict

## Evidence from Ethiopia

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**Abstract:** This paper examines the role of social protection in mitigating the adverse effects of conflict on household welfare. We assess the impact of a graduation intervention linked to Ethiopia's Productive Safety Net Programme, focusing on Amhara, a region severely affected by the Tigray conflict. Using data from a large randomized controlled trial and panel surveys conducted before and after the conflict, we evaluate the effectiveness of social protection in conflict settings. Our estimation strategy leverages variation in conflict exposure combined with exogenous programme participation. We find that conflict significantly reduces food expenditures, but social protection mitigates this effect, leading to improved food security and lower poverty rates among beneficiaries compared to non-beneficiaries. However, we find no impact on asset accumulation. These findings underscore the role of social protection in shielding vulnerable households from conflict's worst effects while highlighting its limitations in fostering long-term resilience.

**Key words:** conflict, social protection, safety net programme, poverty, Ethiopia

**JEL classification:** O12, I38, F51, C93

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BETTER ASSISTANCE IN CRISES RESEARCH

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# 1 Introduction

Armed conflict is a pressing issue globally. According to recent estimates, the period between 2020 and 2023 was the most violent of the last 30 years, with 59 conflicts currently active in 34 countries, the highest number since the end of the Cold War (Rustad 2024). It is estimated that one in seven people across the world are exposed to violent conflict (ACLED 2024). While much progress has been made to eradicate poverty across the world in the last three decades, poverty is on the rise in conflict-affected countries, where it will take several decades to achieve the United Nations Sustainable Development Goal 1 (SDG1) of ending poverty at the current pace of progress (World Bank 2024b). As a result, fragile and conflict-affected countries are expected to be the site of 60 per cent of the world's extreme poor by 2030 (World Bank 2024a).

Progress in poverty reduction in the last decades has been attributed, to a large extent, to the widespread rollout of cash transfer and other social assistance programmes, which have lifted millions of people out of poverty (Hirvonen et al. in press; Hickey et al. 2018; Gentilini et al. 2022). A wealth of evaluations of such programmes show that, on average, cash and food transfers have positive short- and medium-term impacts on food security and consumption poverty. The evidence of the impact of social assistance programmes on indicators such as assets, nutrition, and health outcomes is less consistent (Baird et al. 2019; Ahmed et al. 2019; Manley et al. 2022). However, when cash or food is complemented with other interventions, as is the case in a range of multifaceted graduation and cash plus programmes, there is consistent evidence of positive impacts on food security and assets, including reduced asset depletion/shedding (Banerjee et al. 2015; Bandiera et al. 2017; Hirvonen et al. in press). Cash plus interventions seem, therefore, to lead to medium-term economic resilience beyond what can be achieved with cash transfers alone (Sabates-Wheeler et al. 2022). Much of this evidence is, however, from stable and peaceful contexts where governments have the institutional and bureaucratic capacity to implement such programmes. In this paper, we ask whether social protection programmes can be equally effective in conflict settings. We are particularly interested in the role of social protection in mediating the adverse effects of conflict on households who are both vulnerable to conflict and to poverty—and in the potentially different roles played by cash and cash plus programmes as mediators.

We address these questions by studying the impact of a multifaceted graduation programme implemented in Ethiopia during a period of civil conflict. To do so, we use data from a bespoke panel survey conducted in Amhara, an area of Northern Ethiopia severely affected by the spillover of the Tigray conflict during 2021–22. These data were collected to evaluate the Strengthen PSNP Institutions and Resilience (SPIR) programme. SPIR builds on a core cash/food transfer provided by the Government of Ethiopia through its Productive Safety Net

Programme (PSNP) to the most food insecure areas and households. In addition to the PSNP transfer, SPIR provides combinations of nutrition and livestock assets and training to different households, based on the assumption that a myriad of factors shape poverty (Brune et al. 2022). Similar interventions have been successfully implemented in places as diverse as Bangladesh, Ethiopia, Ghana, India, Honduras, Pakistan, and Peru (Banerjee et al. 2015; Bandiera et al. 2017). SPIR is an example of a 'cash plus' programme, which combines cash transfers with additional inputs, interventions, and support to amplify the effects of the cash. These programmes typically provide regular cash transfers in combination with additional components or linkages that seek to (i) augment any income effects from the cash transfer, and (ii) be more effective in achieving and sustaining the desired impacts than cash transfers alone (Roelen et al. 2017; Watson and Palermo 2016; Sabates-Wheeler 2021).

The graduation model typically identifies poor households to receive a sequenced package of support that includes regular cash transfers for a specified period and productive assets, such as livestock, that can generate future streams of income even after the cash transfers stop. Participants are often encouraged to save and apply for small loans, and they may also receive intensive training and coaching. The hypothesis is that a cash transfer alone is unlikely to lead to a significant change on poor people's livelihoods, but a multi-faceted package of support has the potential to construct a pathway out of poverty towards sustainable self-reliance (Hashemi and Umaira 2011). Cash and/or food is expected to provide a protective function by stabilizing household consumption and thus ensuring food security, and also by protecting against distress sale of assets. At a more ambitious level, the cash and complementary interventions (such as higher savings, training, and access to credit and assets) are meant to relieve liquidity constraints and encourage productive investments, thus strengthening household resilience in the face of shocks and stresses. Cash plus programmes have been shown to be effective in situations of economic shocks (Beegle et al. 2018; Sabates-Wheeler 2021; Hirvonen et al. 2023; Alloush et al. 2024). However, it is unclear what happens to the assumed theory of change when civil unrest and conflict undermine or threaten to undermine the structures of provision and delivery and when household decision making is affected by security concerns. As shown in Justino (2009); Justino et al. (2013); Justino (2019, 2022); and Verwimp et al. (2019), one of the features of conflict (which distinguishes it from other shocks) is the fact that households' coping strategies can be specifically targeted by armed groups as a 'weapon of war'.

Over the past decade, the development and humanitarian sectors have stepped up efforts to experiment with cash-plus and other social protection programmes in protracted crises (Blattman et al. 2014, 2020; Khanna and Zimmermann 2017; Justino and Martorano 2018; Fetzer 2020; Sabates-Wheeler, Lind, and Holland-Szyp in press; Lind et al. 2023). Theoretically, the effects of these programmes are unclear *a priori*. On one hand, social protection can reduce the adverse effects of conflict by protecting households in times of crisis against severe loss of

income and food insecurity, either in their locations or in internally displaced persons (IDP) camps. The adverse effects of violent conflict on household welfare outcomes, including child nutrition, education, food security and asset, and consumption outcomes, are well documented (Justino 2009, 2012, 2016; Justino and Verwimp 2013; Justino et al. 2013, 2014; Verwimp et al. 2019; Tranchant et al. 2020; Blattman and Miguel 2010; Akresh et al. 2011). Social protection programmes may be able to mitigate some of these effects for beneficiaries exposed to conflict and violence by providing them with a minimum level of welfare or the tools to be able to cope with these effects and minimize long-term impacts. On the other hand, social protection programmes may amplify the adverse effects of conflict when armed groups perceive interventions as a threat to their authority (Rohner and Thoenig 2021; Fetzer 2020; Khanna and Zimmermann 2017; Premand and Rohner 2024) or payments and in-kind transfers make households a target of violence (Justino 2009, 2019; Arjona et al. 2023).

Evidence from conflict-affected countries reflects this mixed effects of cash transfers on conflict outcomes and on household welfare. In terms of conflict outcomes, Premand and Rohner (2024) show that an unconditional cash transfer programme implemented by the Government of Niger led to short-term increases in violence as non-state armed groups attempted to reduce the political influence of the programmes. In Ethiopia, Hirvonen et al. (2024) discuss the effects of the PSNP on protest participation of beneficiaries in Amhara and Oromia. The study finds that beneficiaries are less likely to participate in the protests, likely due to an increase in trust in government institutions. However, PSNP participation does not affect other conflict outcomes. In terms of welfare effects, Tranchant et al. (2019) document the positive effect of a food assistance intervention by the World Food Programme (WFP) in Northern Mali. The study shows that beneficiaries were much better able to weather the effect of the conflict without loss of consumption or increases in food insecurity. Ecker et al. (2024) find that the Yemen's Social Welfare Fund, an unconditional cash transfer programme, mitigated the worse effects of the conflict on child nutrition. Cash transfers have also been shown to be effective in supporting households in displacement camps, but the effects are short-term given the nature of these largely humanitarian interventions (Hirvonen et al. 2024).

The evidence on cash plus and graduation programmes is much scarcer. The only other paper we are aware of is by Brune et al. (2022). It examines the effect of a graduation programme in Yemen during a period of upheaval, but it is limited to the effects of the programme on household welfare before and after the period of violence. Our paper, in contrast, assesses the actual mitigating effect of social protection on households directly affected by the conflict, in comparison to those that did not receive any social protection. Moreover, we compare how beneficiaries of the Ethiopian PSNP have managed to protect their welfare during a recent conflict with those PSNP beneficiaries who also received the SPIR additional components. We find that conflict significantly reduces food expenditures for ultra-poor households. Control

households experience a notable decline, with food spending dropping by ETB11.22 for each additional conflict event they are exposed to. Given that households are, on average, exposed to 27 conflict events, this results in a 17 per cent decrease in food expenditures. However, the treatment mitigates this effect, leading to higher food expenditures among treated households compared to the control group. Specifically, treated households spend, on average, ETB409 more on food for the typical level of conflict exposure. Additionally, treated households experience lower levels of food insecurity, spending 0.5 fewer months in food insecurity compared to the control group, and are less likely to fall below the poverty line. In contrast, the conflict has little impact on asset accumulation, with no statistically significant differences between the conflict-exposed treatment and control groups. These results contribute to an emerging literature showing how social protection interventions may be able to mitigate the effects of conflict on household welfare, along the lines of Tranchant et al. (2019) and Ecker et al. (2024) discussed above. Existing studies have, however, focused largely on nutrition and food security outcomes, as well as on the effects of relatively modest cash and food transfer programmes. Our results extend this literature by focusing on wider welfare effects from a government-provided graduation programme within one of the largest social assistance programmes in the world. We show that, in general, the SPIR intervention protected households against the worst effects of conflict but did not necessarily provide a pathway out of poverty, which adds some caution to existing results.

The remainder of this paper is structured as follows. Section 2 outlines the setting of the social protection programme. Section 3 provides background on the conflict in Ethiopia. Section 4 details the experimental design, including the treatment, data collection procedures, and outcome measures. In Section 5, we present the estimation strategy. Section 6 discusses the econometric results. Finally, in Section 7, we conclude.

## 2 The Ethiopian Productive Safety Net Programme (PSNP) and the SPIR programme

Ethiopia has a long history of provision of humanitarian food assistance to the most food insecure and vulnerable populations. Food aid through humanitarian and emergencies channels has been the most well-known source of provision, especially in the decades before the 2000s. In response to a context of widespread and repeated drought and food insecurity and the limited ability of emergency food aid to lift households out of destitute situations, a whole range of social protection initiatives has been introduced and innovated since the early 2000s. Even now, there exists a slew of programmes for different population groups, detailed within the National Social Protection Policy (Federal Democratic Republic of Ethiopia 2016), that aim to reduce vulnerability and build people's resilience.

A prominent programme is the PSNP, which was established in 2005 with the objective of reducing food insecurity through building household resilience. In addition, there have been three pilot programmes trialled and funded through donor monies over the past 10 years that aim to complement the PSNP with plus components that ideally augment the cash in such a way that positive outcomes are forthcoming. One such pilot is the SPIR programme.

The PSNP is the second-largest safety net programme and the largest graduation programme in Africa, covering approximately 8 million people. The PSNP operates in poor and chronically food insecure districts (woredas) in six Ethiopian regions (four in the highlands and two in the lowlands). For households with labour availability, the programme provides cash or food payments against public works that build local infrastructure (e.g., roads) or protect the environment (e.g., terracing). Poor and vulnerable households with limited labour capacity receive unconditional (direct support) payments. The plus elements to the programme have evolved over time. In the early days, household knowledge and asset creation through extension and small loans were added to the social transfers, and community asset creation in the form of irrigation or watershed management (for instance) was additional to the cash/food. The PSNP did not originally begin as a graduation programme, but in the early years there was a recognition that the ambition was to enable households to build up assets and livelihood resilience so that over a period of 3–5 years they would be able to 'sustainably' move off the programme. The plus elements of the national PSNP have primarily been in the form of enhancement to economic and livelihood activities.

Evaluations spanning 16 years of the PSNP indicate that it is well-targeted towards the most food insecure and poorest households residing in the areas in which the programme operates. Impact evaluations show that PSNP has reduced the food gap and improved household food security and nutrition (Hoddinott et al. 2013; Gilligan et al. 2009). By providing essential support, the programme has enabled the poorest to build and retain assets such as housing and livestock. It is widely credited with playing a key role in eliminating famine and contributing 2 per cent to the country's GDP growth. However, despite these achievements, many participants continue to struggle with long-term economic independence. Additionally, for those who have graduated from the programme, it remains unclear whether they are, on average, better off than those who remain. Work by Sabates-Wheeler et al. (2020) shows that despite high official graduation statistics, some of the graduated households were not food secure and many had asset levels no different from those households who were still in the programme.

The SPIR programme, implemented from 2016 to 2021, aimed to enhance the effectiveness of the PSNP through complementary interventions in livelihoods, nutrition, gender, and climate resilience. The programme focused on improving food security, nutrition, and resilience to shocks for rural households vulnerable to food insecurity. Previous studies have examined the impact of SPIR on a range of outcomes. Leight et al. (2023) report positive effects on livestock

assets, livestock income, savings, and access to credit. In contrast, Alderman et al. (2021) find no evidence of significant impacts on durable goods, household consumption, child nutrition, or poverty, highlighting a more limited effect of the programme in these areas. Despite the lack of broader welfare improvements, SPIR demonstrates a protective role during adverse weather conditions. Hirvonen et al. (2023) show that, during periods of negative weather shocks, the programme helps shield households from declines in both consumption and nutrition.

## 3 The Tigray conflict and spillover to Amhara

The 2020–21 Tigray conflict in Ethiopia began when tensions between the federal government and the Tigray People's Liberation Front (TPLF) escalated into open warfare in November 2020. After the TPLF attacked a federal military base in Tigray, the Ethiopian government launched a military offensive aimed at disarming the TPLF. This led to a brutal, multi-faceted war involving not only Ethiopian federal forces but also the Eritrean military, which supported the Ethiopian government due to historical animosities with the TPLF. The war caused massive displacement, widespread human rights violations, and a severe humanitarian crisis, including famine in Tigray. As the fighting continued, in early 2021 the TPLF regrouped as TDF and launched counteroffensives, expanding the conflict to neighbouring regions, particularly Amhara and Afar (July 2021). The federal government declared a state of emergency in November 2021 before launching a counteroffensive that forced a TDF retreat to Tigray by the end of that year. A short and unsteady ceasefire ended with renewed fighting in August 2022, with TDF forces again pushing into the neighbouring areas of Amhara and Afar.

The spillover of the conflict into the Amhara region was marked by territorial disputes and direct military engagements. Amhara forces, along with militias, supported the federal government in its fight against the TPLF, particularly in the contested areas of Western Tigray, which have been claimed by both Amhara and Tigray. The capture of these territories by Amhara forces contributed to heightened ethnic tensions and further violence, including forced displacement of Tigrayans and attacks on civilians. The conflict exacerbated humanitarian suffering across both Tigray and Amhara, with millions affected by food insecurity, destruction of infrastructure, and loss of livelihoods. As reported in Sabates-Wheeler, Vasilov, et al. (in press), during its incursion into Amhara, TDF forces targeted public infrastructure, including administration offices, schools, and clinics. An estimated 500 health facilities were destroyed. By November 2021, humanitarian access was severely restricted. At the height of the fighting in 2021, an estimated 542,000 were displaced in the Amhara region. OCHA reported 5 million were in need of food assistance in Amhara in November 2021. After prolonged fighting, a counteroffensive by the ENDF and Eritrean forces ushered in a second ceasefire. The war eventually led to a peace agreement in November 2022.

As indicated above, the 2021 Tigray conflict had a devastating impact on the livelihoods of rural people. Agriculture, the primary livelihood for many, was severely disrupted as farmers lost crops, livestock, and access to essential inputs due to violence, displacement, and infrastructure damage. The closure of markets and trade routes hindered access to food and income, while widespread food insecurity and famine affected millions. Rural populations, particularly women and children, became vulnerable to exploitation and violence, and the destruction of health and education infrastructure further deepened poverty. Moreover, the conflict led to widespread displacement, food insecurity, loss of income, and destruction of essential infrastructure. The war not only affected immediate access to food and resources but also created long-term challenges to rebuilding rural economies. Overall, the conflict left rural communities struggling with long-term economic and humanitarian challenges.

# 4 Experimental design

## 4.1 Treatment

In this paper, we focus on the interventions implemented under the SPIR program, a five-year initiative that ran from 2016 to 2021. SPIR was a multi-sectoral graduation model intervention and served as a safety net programme targeting vulnerable woredas (districts) in the Amhara and Oromia regions of Ethiopia. Like any other cash plus program, SPIR aimed to strengthen PSNP implementation by offering complementary activities focused on livelihoods and nutrition.[1]

SPIR comprises a wide range of programme components, which are organized into four key activities. The activities labelled 'L' and 'N' refer to the core interventions focused on livelihoods and nutrition, respectively. In addition, 'L*' and 'N*' represent enhanced or more intensive versions of these core activities, designed to provide deeper support and improve outcomes in the areas of livelihoods and nutrition. These activities were combined in various programme interventions and randomized into four treatment arms: T1 (L*+N*), T2 (L*+N), T3 (L+N*), and T4 (control group: PSNP only). Note that the SPIR programme specifically targeted PSNP beneficiaries; thus, all the experimental households received the base cash and food transfers, as well as supplemental services provided under the PSNP program. In this paper, we focus on the combined effects of the three treatment arms (T1, T2, and T3). Below, we provide an overview of the different treatment arms and their components. For a more comprehensive examination of these interventions, see Alderman et al. (2021).

[1] SPIR was funded by USAID and implemented by World Vision, CARE, and ORDA in collaboration with the Government of Ethiopia.

The core livelihood activities (L) centred on the formation of Village Economic and Social Associations, which served as platforms for financial literacy training, promoting savings and credit use, and developing agriculture and livestock value chains. The enhanced livelihood activities (L*) incorporated all core livelihood activities, along with an additional targeted livelihood transfer to the poorest households in each kebele (sub-district). This transfer was aimed at the poorest 60 per cent of sampled PSNP beneficiary households, based on the baseline asset index. The livelihood transfer consisted of either a one-time cash payment or an in-kind poultry package, with the choice between cash and poultry determined by random assignment. The cash transfer amounted to ETB5,600, equivalent to US$200 in 2017. The poultry package, of comparable monetary value, included improved-breed chickens along with complementary inputs.

The core nutrition activities (N) included behaviour change communication related to nutrition, alongside education on water, sanitation, hygiene, and health. In the enhanced nutrition arm (N*), these core activities were supplemented by targeted household-level interventions, focusing on families with malnourished children. Additionally, the programme promoted greater involvement of men in household tasks, child-rearing, and nutrition, as well as providing therapeutic interventions for individuals exhibiting symptoms of depression.

### 4.2 Sampling and assignment to treatment

The original study (Alderman et al. 2021) on which this paper is based was a cluster randomized controlled trial designed to evaluate the effectiveness of various components of the multisectoral graduation model. The study's full sample comprised 192 kebeles across 13 woredas in the Amhara and Oromia regions of Ethiopia. This set of woredas included all areas where SPIR was implemented. Treatment assignment was randomized at the kebele level and stratified at the woreda level. Kebeles were assigned to one of four treatment arms: T1, which included both enhanced livelihood (L*) and enhanced nutrition (N*) activities; T2, which included enhanced livelihood (L*) and core nutrition (N) activities; T3, which included core livelihood (L) and enhanced nutrition (N*) activities; and T4, the control group. Additionally, clusters within T1 and T2 were further randomized to receive either cash or poultry transfers. Recall that the transfers were aimed at the ultra-poor households, defined as the 60 per cent poorest households within each kebele. Importantly, the selection of ultra-poor households was carried out for every kebele in the sample, irrespective of the treatment status. In each kebele, approximately 18 households[2] were randomly selected, resulting in a final sample comprising 3,314 households. Furthermore, households were eligible to be part of the study if they were PSNP

[2] Ultra-poor households made up 10 out of the 18 households in each kebele.

beneficiaries, had at least one child under 3 years old, and the child's primary female caregiver was a household member.[3]

In this paper, we shift away from evaluating the SPIR's direct impact to exploring its role in strengthening resilience amid conflict situations. To this end, our study focuses on woredas in the Amhara region due to the region's exposure to conflict spillover from Tigray. Out of the 115 kebeles[4] in the Amhara region that were part of the initial study, 51[5] were randomly selected across seven woredas to be part of our study. The sample selection process adhered to the original stratified cluster design, ensuring a balance across the different treatment arms. In this paper, we concentrate on the sample of ultra-poor households,[6] as identified by the initial study design using the baseline asset index. Additionally, we examine the effects of exposure to any SPIR treatments, resulting in a final sample of 464 ultra-poor households: 359 in the treatment groups (T1, T2, and T3) and 105 in the control group. Figure A1 depicts the geographic distribution of kebeles in our sample.

### 4.3 Measurement and data

#### *4.3.1Outcome variables*

Our study builds on data collection activities from the impact evaluation conducted by Alderman et al. (2021), which ran from 2018 to 2021,[7] as well as an additional household survey conducted in 2022 by the Better Assistance in Crisis (BASIC) research programme at the Institute of Development Studies with funding from FCDO. We utilize two rounds of household surveys: the baseline survey from the Alderman et al. (2021) study, conducted between February and March 2018, and a separate post-conflict survey specifically designed to assess the role of social protection in the context of conflict.

The post-conflict survey, carried out in December 2022, took place during a brief period of conflict de-escalation. Figure A2 provides a timeline of activities. Both surveys targeted the primary female respondent in each household in the sample, defined as the child's main female caregiver, and the primary male respondent, typically the spouse. Sabates-Wheeler, Vasilov, et al. (in press) provide a detailed overview of the post-conflict survey data collection.

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[3] Alderman et al. (2019) provide a detailed overview of the sampling and randomization procedures.

[4] Kebeles with significant security concerns were excluded from the sample selection.

[5] Due to security concerns, 11 kebeles could not be reached and were replaced by randomly selected kebeles.

[6] In Appendix G, we document the results for the full sample.

[7] The Alderman et al. (2021) final endline survey was completed in the first quarter of 2021, prior to the conflict spilling over into Amhara.

The analysis in this paper focuses on two categories of outcomes collected in both baseline and post-conflict surveys: consumption and assets. Table B provides summary statistics for the outcome variables at the post-conflict survey. For consumption, we examine food and non-food expenditure, as well as total consumption expenditure and food security. Consumption expenditures reflect the value of reported quantities consumed at the household level, based on prices collected from local markets.[8] These variables are reported per adult equivalent for the past month,[9] and all consumption measures are continuous variables, expressed in the local currency (Birrs) at 2017 prices, adjusted using Ethiopian CPI data.[10] As a robustness check, we also present the consumption expenditure variables in per capita levels. For our measure of household food security, we use the household food gap. This is defined as the number of months in the past 12 months during which households faced 'problems satisfying their food needs', meaning they experienced hunger for five or more days. In the post-conflict surveys, households reported experiencing food insecurity, as measured by the food gap, for 2 out of 12 months. In addition, we report whether each household falls above or below the international poverty line for extreme poverty, defined as US$1.25 (2011 PPP-adjusted) per person per day. This is captured as a binary indicator, reflecting whether the household's per capita consumption expenditure is below the poverty threshold.[11] Looking at Table B, in the post-conflict survey, the average monthly consumption expenditure per adult equivalent is ETB1,647, which is equivalent to approximately US$69 based on the 2017 exchange rate. Significantly, 88 per cent of this expenditure is dedicated to food, highlighting the prioritization of essential nutritional needs among households. In line with our focus on ultra-poor households, 65 per cent of our sample falls below the US$1.25 poverty line.

Our next set of outcome variables comprises indexes that capture household assets, including four asset categories: durable assets, productive assets,[12] livestock assets, and total assets. These indexes are constructed using principal component analysis. To estimate asset values, we use the number of assets reported by households and combine this with data on asset prices from local markets at the time of each survey round. Assets are valued based on market prices reported in supplementary market surveys and adjusted for inflation to reflect 2017 prices.

[8] Each household was matched with the market they identified in the survey as their 'most important' or 'most frequently visited' market.

[9] Adult equivalents are calculated using factors from the Household Consumption Expenditure Survey (https://catalog.ihsn.org/index.php/catalog/3123).

[10] The baseline survey was conducted in January 2018; therefore, all values are converted to 2017 Birrs using CPI data.

[11] Poverty line calculations follow the World Bank methodology (Jolliffe and Prydz 2016).

[12] Common productive assets include items such as sickles, axes, and shovels. Similarly, common durable assets feature items like solar panels, blankets, and flash-lights.

*4.3.2Conflict variables*

Our conflict data are derived from the Armed Conflict Location & Event Data Project (ACLED) (Raleigh et al. 2010), which provides comprehensive details on georeferenced violent events. ACLED is an event-level dataset that documents the location, date, and characteristics of conflict occurrences, including battles, protests, riots, and other forms of violence. Most non-battle events in our study period and region were related to the Tigray conflict; therefore, we define a conflict event as any violent event type recorded in ACLED. Figure A1 depicts the geographic distribution of our sample and violent events in the region.

Our primary conflict exposure variable of interest is defined as the number of conflict events within a 25 km radius of the household over the past 24 months from the post-conflict survey date. By focusing on the past 24 months, our analysis examines the conflict exposure since the onset of the Tigray conflict in November 2020.[13] Our choice of the 25 km threshold is driven by data availability, as it is the only conflict exposure measure with precise GPS coordinates accessible to us due to privacy concerns limiting access to GPS data. Table B presents summary statistics for conflict exposure variables. On average, households experience 27 conflict events, resulting in approximately 97 fatalities due to conflict.

To test the robustness of our conflict exposure indicator, we rely on displaced GPS coordinates that are randomized within a 1.1 km radius of the original household location. We then calculate conflict exposure variables at distances of 5, 10, 15, and 20 km from the household. For completeness, we also assess conflict exposure within 25 km using the displaced GPS coordinates.

## 5 Estimation strategy

Our primary identification strategy estimates the impacts of SPIR in the face of conflict while employing an analysis of covariance (ANCOVA) model:

$$Y_{i,k,w,t} = \alpha + \beta_1 Conflict_{i,t} + \beta_2 Treat_{k,w} + \beta_3 (Conflict_{i,t} * Treat_{k,w}) + \gamma W_i + \beta_4 Y_{i,k,w,t=0} + \epsilon_{i,k,w,t} \quad (1)$$

where $Y_{i,k,w,t}$ represents the outcome variable of interest for household $i$, located in kebele $k$, within woreda $w$, at time $t$. $Conflict_{i,t}$ serves as the conflict exposure indicator. $Treat_{k,w}$ denotes the pooled treatment indicator, taking a value of one for households assigned to a treatment arm and zero for control households. The specification includes woreda fixed effects $W_i$, which correspond to the randomization strata. Following the ANCOVA approach, we control

[13] Our results are robust to defining conflict exposure over the last 18 months from the survey date, capturing the timing of conflict's spillover into the Amhara region.

for the baseline level of the outcome variable ($Y_{i,k,w,t=0}$).[14] ANCOVA specification has been shown to maximize statistical power in field experiments, particularly when the autocorrelation of the outcome variable is low (McKenzie 2012).

Note that $\beta_1$ captures the impact of conflict on control households. In contrast, our primary independent variable of interest is the interaction term between conflict and treatment ($Conflict_{i,t} \times Treat_{k,w}$), with $\beta_3$ quantifying the extent to which the treatment mitigates the adverse effects of conflict. All regressions are OLS, and standard errors are clustered at the kebele treatment level.

## 6 Results

### 6.1 Balance

Tables 1 and 2 present balance tests for the ultra-poor subsample. Columns (1) and (2) report the sample means for the treatment and control groups, respectively, along with the corresponding standard errors used to test whether the means differ significantly from zero. Column (3) displays the difference between the pooled treatment group and the control group, along with the corresponding standard errors, which are derived from regressing the variable of interest on a binary treatment indicator. As before, the treatment variable is defined as a pooled treatment indicator. Since randomization was stratified at the woreda level, our specification mirrors the main regression model, controlling for woreda fixed effects and clustering standard errors at the treatment assignment level (kebele).[15]

Table 1 displays the randomization checks for the outcome variables of interest at baseline. As expected, given the randomization procedure, the treatment and control groups are well-balanced across all variables, with the only exception being the baseline level of non-food expenditures, which is higher in the treatment group. Recall that our estimation follows an ANCOVA specification, and thus our results control for the baseline level of the outcome variables, thereby helping to mitigate the imbalance in this variable.

A potential threat to identification arises if treatment and control individuals are differentially affected by conflict events, as this could introduce bias into our results. In Table 2, we assess whether households in the treatment and control groups were equally exposed to conflict by following the balance specification described earlier. Our key variables of interest are based on

[14] For observations with missing baseline values, missing data are replaced with zero, and a binary variable is included in the estimation to indicate whether the household had missing baseline data.

[15] The balance test is performed using the OLS regression: $Y_{i,k,w,t} = \alpha + \beta \text{Treat}_{k,w} + \gamma W_i + {}_{i,k,w,t}$, where variables are defined as previously noted.

our main specification of conflict exposure 24 months prior to the endline survey. This analysis ensures that any observed effects can be attributed to the treatment rather than underlying differences in conflict exposure between the groups.

Table 2 presents the results for conflict exposure within 25 km, using precise household GPS coordinates in the first two rows. For robustness, the remaining rows report conflict exposure indicators based on displaced GPS coordinates. None of the coefficients are statistically significant at conventional levels, suggesting that treatment and control households experienced similar levels of conflict exposure.

Table 1: Balance in baseline outcomes

| | (1) Control | (2) Treatment | (3) Difference |
|---|---|---|---|
| Food expenditure | 463.0*** | 541.3*** | 47.55 |
| | (30.32) | (24.95) | (65.17) |
| Non-food expenditure | 95.36*** | 140.8*** | 42.24** |
| | (7.729) | (9.536) | (20.12) |
| Total expenditure | 558.4*** | 682.1*** | 89.78 |
| | (34.84) | (28.24) | (71.60) |
| Food gap | 1.152*** | 1.449*** | 0.302 |
| | (0.131) | (0.0836) | (0.204) |
| Poverty line US$1.25 | 0.173*** | 0.129*** | -0.0403 |
| | (0.0371) | (0.0178) | (0.0513) |
| Durable assets | -0.0562 | -0.102 | 0.00116 |
| | (0.191) | (0.0987) | (0.234) |
| Livestock assets | -0.163 | -0.392*** | -0.233 |
| | (0.105) | (0.0573) | (0.156) |
| Productive assets | 0.105 | -0.192 | -0.125 |
| | (0.259) | (0.140) | (0.391) |
| Total assets | 0.144 | -0.230 | -0.174 |
| | (0.266) | (0.140) | (0.394) |
| Observations | 105 | 359 | 464 |

Note: columns (1) and (2) display sample means. Column (3) displays the difference between the pooled treatment groups and the control group using an OLS regression of the outcome variables on a treatment indicator and the randomization strata. Standard errors are reported in parentheses. Significance levels indicate whether means or differences are significantly different from zero. Asterisks indicate significance levels: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: authors' estimation.

Table 2: Balance in conflict variables

| | (1) Control | (2) Treatment | (3) Difference |
|---|---|---|---|
| Number of conflict events within 25 km | 25.10*** | 28.11*** | 1.380 |
| | (1.393) | (0.802) | (3.697) |
| Number of fatalities within 25 km | 96.25*** | 96.64*** | 8.787 |
| | (6.856) | (3.466) | (16.34) |
| *Displaced GPS* | | | |
| Number of conflict events within 10 km | 4.790*** | 7.217*** | 1.066 |
| | (0.670) | (0.642) | (2.139) |
| Number of conflict events within 15 km | 8.619*** | 13.24*** | 2.875 |
| | (0.773) | (0.702) | (2.455) |
| Number of conflict events within 20 km | 15.83*** | 21.49*** | 2.426 |
| | (0.839) | (0.753) | (2.422) |
| Number of conflict events within 25 km | 25.11*** | 28.48*** | 1.904 |
| | (1.391) | (0.819) | (3.713) |
| Number of fatalities within 10 km | 21.57*** | 24.58*** | 3.042 |
| | (3.014) | (1.866) | (8.727) |
| Number of fatalities within 15 km | 37.59*** | 43.98*** | 4.953 |
| | (3.435) | (2.159) | (9.260) |
| Number of fatalities within 20 km | 60.48*** | 71.43*** | 10.94 |
| | (3.867) | (2.521) | (8.708) |
| Number of fatalities within 25 km | 97.07*** | 98.03*** | 9.983 |
| | (6.775) | (3.552) | (16.07) |
| Observations | 105 | 359 | 464 |

Note: columns (1) and (2) display sample means. Column (3) displays the difference between the pooled treatment groups and the control group using an OLS regression of the outcome variables on a treatment indicator and the randomization strata. Standard errors are reported in parentheses. Significance levels indicate whether means or differences are significantly different from zero. Asterisks indicate significance levels: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: authors' estimation.

## 6.2 Main results

Tables 3 to 4 display the regression results for the ultra-poor households, defining the conflict variable as the number of conflict events within 25 km of the household, using specification 1. For each table, we present the average effect of conflict on control households ($\beta_1$) in the first row. Our primary coefficient of interest, $\beta_3$, derives from the interaction between the treatment and conflict variables, reflecting the differential impact of conflict on treatment versus control households.

Table 3 presents the consumption results. Columns (1) to (3) report household expenditures on food, non-food items, and total consumption, all measured in Birrs. Column 4 displays the household food gap, capturing the number of months in which the household experienced food insecurity. The outcome variable in column (5) is a binary indicator that captures whether a household falls above or below the US$1.25 poverty line. As expected, control households that experienced conflict report significantly lower food expenditures. This decrease is statistically significant at the 10 per cent level, highlighting the impact of conflict on food spending. Specifically, each additional conflict event is associated with a reduction of ETB11.22 in food expenditures for control households. Given that, on average, households are exposed to approximately 27 conflict events, this leads to a cumulative average reduction of ETB303 in food expenditures. To put this into perspective, considering the control group mean, this represents a 17 per cent decline in average household food expenditure, underscoring the impact of conflict on household consumption behaviour. Turning to the interaction effect between treatment and conflict exposure, our results reveal a positive and statistically significant effect. This suggests that treated households experience a different consumption pattern when exposed to conflict compared to control households. Specifically, treated households exposed to conflict exhibit higher food expenditures than their control counterparts, which indicates that the treatment helped mitigate the adverse effects of conflict on household consumption. In terms of magnitude, this translates to a ETB15.14 increase in food expenditures for treated households, statistically significant at the 10 per cent level. For the average level of conflict exposure, this results in an estimated increase of approximately ETB409 in food consumption. This finding underscores the protective role of the treatment in shielding households from the drop in food consumption caused by conflict. Column (2) provides the results for non-food expenditures. None of the coefficients are statistically significant, and their small magnitudes indicate that the conflict did not result in a substantial change in non-food spending. Additionally, the impact of the conflict on non-food expenditures in the treatment group is indistinguishable from that observed in the control group, suggesting that the conflict did not have a differential effect on non-food spending between the two groups. Consistent with the higher food expenditures among households that experienced conflict compared to those in the control group, column (3) reveals a similar pattern in total household expenditures, which is largely driven by the

food expenditures. Looking at the household food gap in column (4), conflict-affected treated households also show lower levels of food insecurity, which is statistically significant at the 5 per cent level. Considering the average level of conflict exposure, this amounts to an approximate reduction of 0.5 months in food insecurity. In column (5), we document the effects on whether a household is above or below the US$1.25 poverty line. This is indicated by a dummy variable that captures whether the household's per capita consumption expenditure falls below the extreme poverty threshold. The interaction coefficient is negative and statistically significant at the 5 per cent level, suggesting that treated households are less likely to fall below the poverty line. This finding reinforces the effectiveness of the treatment in buffering households against the impacts of conflict. Specifically, the treatment appears to have significantly reduced the likelihood of extreme poverty, with an 8 percentage point decrease in the probability of being below the poverty line.

Lastly, in Table 4, we present the results on household asset accumulation, distinguishing among durable, livestock, productive, and total assets. For households affected by conflict, we find no statistically significant difference between the treatment and control groups. Additionally, the results suggest that the conflict had only a marginal impact on overall asset accumulation. Specifically, the conflict coefficient, which measures the effect within the control group, is small in magnitude, indicating that the conflict's effect is limited. If anything, there appears to be only a slight increase in the accumulation of durable assets in areas affected by conflict. This is a disappointing result given that the express intention of SPIR was to build up household assets so that they are more resilient in the face of shocks.

In conclusion, our results reveal that conflict significantly reduces food expenditures, with control households experiencing a significant decline. However, the treatment effectively mitigates this impact, leading to higher food spending for treated households compared to their control counterparts. Additionally, treated households are less likely to experience food insecurity and to fall below the poverty line, highlighting the treatment's effectiveness in alleviating extreme poverty. At the same time, the conflict has a minimal overall impact on asset accumulation. These findings collectively emphasize the treatment's role in shielding households from the adverse effects of conflict on consumption—in other words, the treatment had a protective function for the lives and food security of the households that received it. However, the treatment did little by way of building assets, and therefore, any 'promotive' or livelihood resilience effects were not evident.

Table 3: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line US$1.25 |
|---|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | -11.223* | 1.124 | -10.332 | -0.003 | 0.003 |
| | (5.813) | (0.767) | (6.379) | (0.005) | (0.004) |
| Treat - $\beta 2$ | -383.153* | -34.732 | -424.028* | 0.640*** | 0.189 |
| | (226.372) | (25.901) | (245.973) | (0.186) | (0.138) |
| Treat*Conflict - $\beta 3$ | 15.135** | 0.007 | 15.262** | -0.017** | -0.008* |
| | (6.896) | (0.904) | (7.523) | (0.007) | (0.004) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.102 | 0.175 | 0.095 | 0.001 | 0.182 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.157 | 0.077 | 0.151 | 0.034 | 0.109 |
| Mean dep. var. control | 1,455.491 | 189.085 | 1,646.974 | 2.050 | 0.653 |
| Conflict | 25 km | 25 km | 25 km | 25 km | 25 km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experienced food insecurity. The 'Poverty line US$1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 24 months. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: authors' estimation.

Table 4: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | 0.045*** | -0.005 | 0.008 | 0.033*** |
| | (0.014) | (0.011) | (0.010) | (0.008) |
| Treat - $\beta 2$ | 0.657 | -0.186 | -0.203 | 0.162 |
| | (0.419) | (0.367) | (0.401) | (0.435) |
| Treat*Conflict - $\beta 3$ | -0.022 | 0.001 | -0.000 | -0.014 |
| | (0.016) | (0.011) | (0.013) | (0.012) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.124 | 0.607 | 0.605 | 0.727 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.393 | 0.193 | 0.260 | 0.246 |
| Mean dep. var. control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 25 km | 25 km | 25 km | 25 km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 24 months. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Source: authors' estimation.

### 6.3 Robustness

In this section, we conduct a series of robustness tests to assess the sensitivity of our results. Table C1 evaluates the robustness of our consumption results by applying a different specification to the outcome variables. Specifically, we calculate food, non-food, and total expenditures on a per capita basis rather than per adult equivalent. Our findings remain largely unchanged in terms of both magnitude and significance.

Next, we examine the sensitivity of our primary conflict variable. Recall that our main results define conflict exposure as the number of conflict events within a 25 km radius of the household over the past 24 months. To test the robustness of our conflict exposure indicator, we use disturbed GPS coordinates randomized within a 1.1 km radius of the original household location. We then calculate conflict exposure variables at distances of 5, 10, 15, 20, and 25 km from the household. Tables D1 to D8 present these results. Our main conclusion remains consistent, as the consumption expenditure variables are highly robust to various specifications of the conflict exposure measure.

Additionally, our results remain robust when defining conflict exposure as the number of events over the 18 months prior to the survey, capturing the timing of conflict spillover into the Amhara region. Tables E1 and E2 present the results using the 18-month criterion with the precise GPS coordinates, while Tables F1 to F8 retest the sensitivity to varying distances (5, 10, 15, 20, and 25 km from the household) using the 18-month definition and perturbed GPS coordinates.

Lastly, in Tables G1 and G2, we broaden our analysis from the subsample of ultra-poor households to include the full household sample. Our main conclusions remain largely unchanged. In particular, regarding the food expenditure outcome, the interaction coefficient between the treatment and conflict indicator stays similar in magnitude, though it is less precisely estimated (statistically significant at the 10 per cent level). Additionally, consistent with our main results, treated households affected by conflict report lower levels of food insecurity, statistically significant at the 1 per cent level, as measured by the food gap indicator. This finding further supports the conclusion that the treatment effectively shielded households from a decline in consumption.

## 7 Conclusion

Cash plus and graduation programmes have received much attention over the last 15 years. By augmenting regular cash support with a whole raft of complementary livelihood interventions, these programmes aim to provide and build household assets so that, in the face of shocks,

households are more resilient and better able to withstand the negative impacts of shocks and stresses than those households who have not received support. SPIR is such a programme: providing additional, complementary nutrition and livelihood support to households that are already benefiting from the cash and food transfers of the national Ethiopian PSNP.

Our analysis and results demonstrate that in the context of conflict the households benefiting from both the PSNP and SPIR programme were significantly better protected in terms of their food and consumption than those households only receiving the PSNP. The SPIR intervention had a positive role in supporting the lives of the poorest households during a period of shock and stress. However, the findings also show that, despite multiple years of SPIR support, households in the programme did not have significantly more assets than those who only received support from the PSNP. Moreover, the impact of the conflict on treated household assets was no different to other households.

What does this imply for graduation models in the context of conflict? The evaluation findings from SPIR in a non-conflict setting showed positive effects on some 'resilience' indicators, such as livestock assets, livestock income, savings, and access to credit (Leight et al. 2023). In contrast, Alderman et al. (2021) found no evidence of significant impacts on consumption or poverty. Our results are seemingly reversed, showing positive impacts of the programme for the poorest on consumption and food, yet no impacts on productive indicators. Perhaps it is the conflict that is constraining the conditions for productive impact. If this is the case, this could suggest that during active conflicts the complementary components of graduation programmes should be cancelled or pivoted to other initiatives that are more geared towards building peace rather than building household assets. That said, the results here showed that the continuing SPIR support had a significant protective effect, somewhat akin to what Sabates-Wheeler et al. (2020) have argued in relation to the 'surviving but not thriving' hypothesis. Given that protection of the lives and food security of the poorest must be a priority, especially in times of conflict, the idea of a time-bound 'no regrets' policy whereby programmes continue with full knowledge that effectiveness is compromised is the more appropriate and ethical way to go.

## References

ACLED. (2024). *Conflict Index - July 2024.* Available at: https://acleddata.com/conflict-index/index-july-2024/#:~:text=One%20in%20seven%20people%20worldwide,13%25%20global%20exposure%20to%20conflict (accessed: 2024-11-19)

Ahmed, A., Hoddinott, J., and Roy, S. (2019). 'Food Transfers, Cash Transfers, Behavior Change Communication and Child Nutrition: Evidence from Bangladesh'. IFPRI Discussion Paper 1868. Washington, DC: International Food Policy Research Institute (IFPRI).

https://doi.org/10.2499/p15738coll2.133420

Akresh, R., Verwimp, P., and Bundervoet, T. (2011). 'Civil War, Crop Failure, and Child Stunting in Rwanda'. *Economic Development and Cultural Change*, 59(4): 777–810. https://doi.org/10.1086/660003

Alderman, H., Bachewe, F., Gilligan, D. O., Hidrobo, M., Ledlie, N., Ramani, G. V., and Tafesse, A. S. (2019). 'Impact Evaluation of the Strengthen PSNP4 Institutions and Resilience (SPIR) Development Food Security Activity (DFSA): Baseline Report'. Tech. Rep.. Washington, DC, USA: International Food Policy Research Institute.

Alderman, H., Billings, L., Gilligan, D. O., Hidrobo, M., Leight, J., Taffesse, A. S., and Tambet, H. (2021). 'Impact Evaluation of the Strengthen PSNP4 Institutions and Resilience (SPIR) Development Food Security Activity (DFSA): Endline Report'. Tech. Rep.. Washington, DC: International Food Policy Research Institute.

Alloush, M., Bloem, J. R., and Malacarne, J. G. (2024). 'Social Protection Amid a Crisis: New Evidence from South Africa's Older Person's Grant'. *The World Bank Economic Review*, 38(2): 371–93. https://doi.org/10.1093/wber/lhad037

Arjona, A., Cárdenas, J. C., Ibáñez, A. M., Justino, P., and Arteaga Vallejo, J. (2023). 'The Long-Term Economic Legacies of Rebel Rule in Civil War: Micro Evidence from Colombia'. *Journal of Conflict Resolution*, 68(9): 1825–55. https://doi.org/10.1177/00220027231170569

Baird, S., McIntosh, C., and Özler, B. (2019). 'When the Money Runs Out: Do Cash Transfers Have Sustained Effects on Human Capital Accumulation?' *Journal of Development Economics*, 140(-): 169–85. https://doi.org/10.1016/j.jdeveco.2019.04.004

Bandiera, O., Burgess, R., Das, N., Gulesci, S., Rasul, I., and Sulaiman, M. (2017). 'Labor Markets and Poverty in Village Economies'. *The Quarterly Journal of Economics*, 132(2): 811–70. https://doi.org/10.1093/qje/qjx003

Banerjee, A., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Parienté, W., Shapiro, J., Thuysbaert, B., and Udry, C. (2015). 'A Multifaceted Program Causes Lasting Progress for the Very Poor: Evidence from Six Countries'. *Science*, 348(6236): 1260799. https://doi.org/10.1126/science.1260799

Beegle, K., Coudouel, A., and Monsalve, E. (2018). *Realizing the Full Potential of Social Safety Nets in Africa*. Washington, DC: World Bank Publications. https://doi.org/10.1596/978-1-4648-1164-7_ov

Blattman, C., Fiala, N., and Martinez, S. (2014). 'Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda'. *The Quarterly Journal of Economics*, 129(2): 697–752. https://doi.org/10.1093/qje/qjt057

Blattman, C., Fiala, N., and Martinez, S. (2020). 'The Long-Term Impacts of Grants on Poverty: Nine-Year Evidence from Uganda's Youth Opportunities Program'. *American Economic Review: Insights*, 2(3): 287–304. https://doi.org/10.1257/aeri.20190224

Blattman, C., and Miguel, E. (2010). 'Civil War'. *Journal of Economic Literature*, 48(1): 3–57. https://doi.org/10.1257/jel.48.1.3

Brune, L., Karlan, D., Kurdi, S., and Udry, C. (2022). 'Social Protection Amidst Social Upheaval: Examining the Impact of a Multi-Faceted Program for Ultra-Poor Households in Yemen'. *Journal of Development Economics*, 155(-): 102780. https://doi.org/10.1016/j.jdeveco.2021.102780

Ecker, O., Al-Malk, A., and Maystadt, J.-F. (2024). 'Civil Conflict, Cash Transfers, and Child Nutrition in Yemen'. *Economic Development and Cultural Change*, 72(4): 000–000. https://doi.org/10.1086/726294

Federal Democratic Republic of Ethiopia. (2016). *National Social Protection Strategy of Ethiopia.* Addis Ababa: Ministry of Labour and Social Affairs. Available at: https://www.social-protection.org/gimi/Media.action?id=17017

Fetzer, T. (2020). 'Can Workfare Programs Moderate Conflict? Evidence from India'. *Journal of the European Economic Association*, 18(6): 3337–75. https://doi.org/10.1093/jeea/jvz062

Gentilini, U., Almenfi, M., Iyengar, H. T., Okamura, Y., Urteaga, E. R., Valleriani, G., Muhindo, J. V., and Aziz, S. (2022). 'Tracking Global Social Protection Responses to Price Shocks'. Discussion Paper No. 2210. Washington, DC: Social Protection and Jobs. https://doi.org/10.1596/37441

Gilligan, D. O., Hoddinott, J., and Taffesse, A. S. (2009). 'The Impact of Ethiopia's Productive Safety Net Programme and its Linkages'. *The Journal of Development Studies*, 45(10): 1684–706. https://doi.org/10.1080/00220380902935907

Hashemi, S. M., and Umaira, W. (2011). 'New Pathways for the Poorest: The Graduation Model from BRAC'. Tech. Rep.. Brighton, UK: BRAC Develoment Institute, Centre for Social Protection (CSP).

Hickey, S., Lavers, T., Niño-Zarazúa, M., and Seekings, J. (2018). 'The Negotiated Politics of Social Protection in Sub-Saharan Africa'. WIDER Working Paper 2018/34. Helsinki: UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2018/476-6

Hirvonen, K., Gilligan, D. O., Leight, J., Tambet, H., and Villa, V. (2023). 'Do Ultra-Poor Graduation Programs Build Resilience Against Droughts? Evidence from Rural Ethiopia'. Discussion Paper No. 2206. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.137000

Hirvonen, K., Justino, P., and Oliveira, R. (in press). 'The Role of Social Assistance in African Crises: A Systematic Literature Review'. Working Paper. Helsinki: UNU-WIDER.

Hirvonen, K., Machado, E., and Simons, A. M. (2024). 'Can Social Assistance Reduce Violent Conflict and Civil Unrest? Evidence from a Large-Scale Public Works Program in Ethiopia'. Discussion Paper. Washington, DC: IFPRI. https://doi.org/10.35188/UNU-WIDER/2024/541-7

Hoddinott, J., Sabates-Wheeler, R., Berhane, G., Handino, M., Kumar, N., Lind, J., Tafesse, A., and Tefera, M. (2013). 'Implementing Large Scale Food Security Programmes in Rural Ethiopia: Insights from the Productive Safety Net Programme'. In *Food Security, Safety Nets and Social Protection in Ethiopia* (pp. 173–218). Addis Ababa: Forum For Social Studies (FSS).

Jolliffe, D., and Prydz, E. B. (2016). 'Estimating International Poverty Lines from Comparable National Thresholds'. *The Journal of Economic Inequality*, 14(-): 185–98. https://doi.org/10.1007/s10888-016-9327-5

Justino, P. (2009). 'Poverty and Violent Conflict: A Micro-Level Perspective on the Causes and Duration of Warfare'. *Journal of Peace Research*, 46(3): 315–33. https://doi.org/10.1177/0022343309102655

Justino, P. (2012). 'War and Poverty'. In M. Garfinkel and S. Skaperdas (eds), *Handbook of the Economics of Peace and Conflict* (chap. 27). Oxford: Oxford University Press.

https://doi.org/10.1093/oxfordhb/9780195392777.013.0027

Justino, P. (2016). 'Supply and Demand Restrictions to Education in Conflict-Affected Countries: New Research and Future Agendas'. *International Journal of Educational Development*, 47(-): 76–85. https://doi.org/10.1016/j.ijedudev.2016.01.002

Justino, P. (2019). 'Governance Interventions in Conflict-Affected Countries'. *Journal of Development Studies*, 55(7): 1364–78. https://doi.org/10.1080/00220388.2018.1487053

Justino, P. (2022). 'Wartime Governance and State-Building Trajectories in Post-Conflict Societies'. Working Paper No. 2022-48. Helsinki: UNU-WIDER. https://doi.org/10.35188/UNU-WIDER/2022/179-2

Justino, P., Brück, T., and Verwimp, P. (2013). *A Micro-Level Perspective on the Dynamics of Conflict, Violence and Development*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199664597.001.0001

Justino, P., Leone, M., and Salardi, P. (2014). 'Short and Long-Term Impact of Violence on Education: The Case of Timor Leste'. *World Bank Economic Review*, 28(-): 320–53. https://doi.org/10.1093/wber/lht007

Justino, P., and Martorano, B. (2018). 'Welfare Spending and Political Conflict in Latin America, 1970–2010'. *World Development*, 107(-): 98–110. https://doi.org/10.1016/j.worlddev.2018.03.005

Justino, P., and Verwimp, P. (2013). 'Poverty Dynamics, Violent Conflict and Convergence in Rwanda'. *Review of Income and Wealth*, 59(1): 66–90. https://doi.org/10.1111/j.1475-4991.2012.00528.x

Khanna, G., and Zimmermann, L. (2017). 'Guns and Butter? Fighting Violence with the Promise of Development'. *Journal of Development Economics*, 124(-): 120–41. https://doi.org/10.1016/j.jdeveco.2016.09.006

Leight, J., Alderman, H., Gilligan, D., Hidrobo, M., and Mulford, M. (2023). 'Can a Light-Touch Graduation Model Enhance Livelihood Outcomes? Evidence from Ethiopia'. Discussion Paper No. 2203. Washington, DC: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/p15738coll2.136972

Lind, J., Sabates-Wheeler, R., and Szyp, C. (2023). 'Cash-Plus Programming in Protracted Crises: A Review of Programmes in Contexts of Overlapping Conflict, Forced Displacement and Climate-Related Shocks'. BASIC Research Working Paper 19. Brighton, UK: Institute of Development Studies. https://doi.org/10.19088/BASIC.2023.001

Manley, J., Alderman, H., and Gentilini, U. (2022). 'More Evidence on Cash Transfers and Child Nutritional Outcomes: A Systematic Review and Meta-Analysis'. *BMJ Global Health*, 7(4): e008233. https://doi.org/10.1136/bmjgh-2021-008233

McKenzie, D. (2012). 'Beyond Baseline and Follow-Up: The Case for More T in Experiments'. *Journal of Development Economics*, 99(2): 210–21. https://doi.org/10.1016/j.jdeveco.2012.01.002

Premand, P., and Rohner, D. (2024). 'Cash and Conflict: Large-Scale Experimental Evidence from Niger'. *American Economic Review: Insights*, 6(1): 137–53. https://doi.org/10.1257/aeri.20230069

Raleigh, C., Linke, R., Hegre, H., and Karlsen, J. (2010). 'Introducing ACLED: An Armed Conflict Location and Event Dataset'. *Journal of Peace Research*, 47(5): 651–60. https://doi.org/10.1177/0022343310378914

Roelen, K., Devereux, S., Abdulai, A.-G., Martorano, B., Palermo, T., and Ragno, L. P. (2017). 'How to Make "Cash Plus" Work: Linking Cash Transfers to Services and Sectors'. Innocenti Working Papers, no. 2017-10. Florence: UNICEF Office of Research - Innocenti.

Rohner, D., and Thoenig, M. (2021). 'The Elusive Peace Dividend of Development Policy: From War Traps to Macro Complementarities'. *Annual Review of Economics*, 13(1): 111–31. https://doi.org/10.1146/annurev-economics-073120-102652

Rustad, S. A. (2024). 'Conflict Trends: A Global Overview, 1946–2023'. Report. Oslo: Peace Research Institute Oslo (PRIO).

Sabates-Wheeler, R. (2021). 'Graduation'. In E. Schüring and M. Loewe (eds), *Handbook on Social Protection Systems* (pp. 263–76). Cheltenham, UK: Edward Elgar Publishing. https://doi.org/10.4337/9781839109119.00038

Sabates-Wheeler, R., Hirvonen, K., Lind, J., and Hoddinott, J. (2022). 'Expanding Social Protection Coverage with Humanitarian Aid: Lessons on Targeting and Transfer Values from Ethiopia'. *The Journal of Development Studies*, 58(10): 1981–2000. https://doi.org/10.1080/00220388.2022.2096443

Sabates-Wheeler, R., Lind, J., and Hoddinott, J. (2020). 'Graduation After Ten Years of Ethiopia's Productive Safety Net Programme: Surviving but Still Not Thriving'. *Development Policy Review*, 39(4): 511–31. https://doi.org/10.1111/dpr.12515

Sabates-Wheeler, R., Lind, J., and Holland-Szyp, C. (in press). 'The Limits to Cash-Plus Provision in Protracted Crises'. *Development Policy Review*, -(-): .

Sabates-Wheeler, R., Vasilov, C., Hoppenbrouwers, M., and Lind, J. (in press). 'Lives and Livelihoods in the Context of Conflict in Amhara: the Role of Social and Humanitarian Assistance During the 2021–2022 Tigray Crisis?'. IDS Working Paper. Brighton: Institute of Development Studies.

Tranchant, J.-P., Gelli, A., Bliznashka, L., Diallo, A. S., Sacko, M., Assima, A., Siegel, E. H., Aurino, E., and Masset, E. (2019). 'The Impact of Food Assistance on Food Insecure Populations During Conflict: Evidence from a Quasi-Experiment in Mali'. *World Development*, 119(-): 185–202. https://doi.org/10.1016/j.worlddev.2018.01.027

Tranchant, J.-P., Justino, P., and Muller, C. (2020). 'Political Violence, Adverse Shocks and Child Malnutrition: Empirical Evidence from Andhra Pradesh, India'. *Economics and Human Biology*, 39(-): 100900. https://doi.org/10.1016/j.ehb.2020.100900

Verwimp, P., Justino, P., and Brück, T. (2019). 'The Microeconomics of Violent Conflict'. *Journal of Development Economics*, 141(-): 1–6. https://doi.org/10.1016/j.jdeveco.2018.10.005

Watson, C., and Palermo, T. (2016). *Options For A "Cash Plus" Intervention To Enhance Adolescent Well-Being in Tanzania: An Introduction and Review of the Evidence from Different Programme Models in Eastern and Southern Africa.* Dar es Salaam. (Background Paper for a Stakeholder Workshop, 11–12 February 2016)

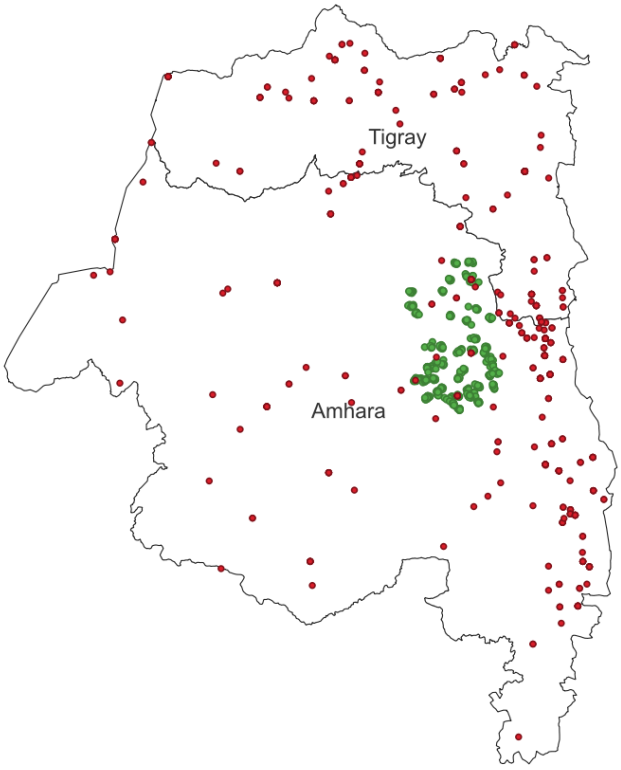
World Bank. (2024a). *Fragility, Conflict, and Violence: Overview.* Washington, DC: The World Bank Group. Available at: https://www.worldbank.org/en/topic/fragilityconflictviolence/overview (accessed: 2024-11-19)

World Bank. (2024b). 'Poverty, Prosperity, and Planet Report: Pathways Out of the Polycrisis'. Report. Washington, DC: The World Bank Group.

# Appendix

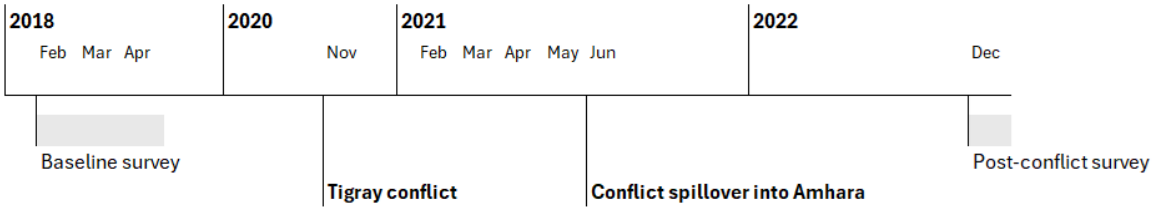
## A Figures

Figure A1: Geographic distribution of violent events and sampled kebeles




Note: the map depicts the Amhara and Tigray regions, with solid lines marking the regional boundaries. Green dots indicate the sampled kebeles, while red dots highlight violent events in these regions between December 2021 and December 2022.
Source: authors' illustration based on survey data (sampled kebeles) and ACLED data (violent events). Background map created with QGIS with shapefile eth_adm_csa_bofedb_2021_SHP.zip, sourced from the Humanitarian Data Exchange, under a CC BY 3.0 IGO license.

Figure A2: Timeline




Note: the timeline presents the baseline and post-conflict data collection activities, as well as the onset of the conflict.

Source: authors' illustration.

# B Summary statistics

Table B1: Summary statistics

| | Mean | SD | Min | Max | N |
|---|---|---|---|---|---|
| Food expenditure | 1455.49 | 1335.70 | 131 | 9191 | 464 |
| Non-food expenditure | 189.08 | 150.80 | 5 | 951 | 464 |
| Total expenditure | 1646.97 | 1376.36 | 256 | 9605 | 464 |
| Food gap | 2.05 | 1.47 | 0 | 8 | 464 |
| Poverty line 1.25$ | 0.65 | 0.48 | 0 | 1 | 464 |
| Durable assets | -0.20 | 1.82 | -2 | 14 | 464 |
| Livestock assets | -0.38 | 1.18 | -2 | 5 | 464 |
| Productive assets | -0.49 | 1.67 | -3 | 6 | 464 |
| Total assets | -0.64 | 2.03 | -4 | 8 | 464 |
| Number of conflicts in 24 mths within 25 km | 27.43 | 15.04 | 0 | 56 | 464 |
| Fatalities from conflicts in 24 mths within 25 km | 96.55 | 66.74 | 0 | 224 | 464 |

# C Robustness – Consumption specification

Table C1: Consumption and poverty line

| | (1) Food expenditure (pc) | (2) Non-food expenditure (pc) | (3) Total expenditure (pc) |
|---|---|---|---|
| Conflict (Control) - $\beta 1$ | -9.054* | 1.119* | -8.166 |
| | (5.149) | (0.665) | (5.678) |
| Treat - $\beta 2$ | -340.150 | -18.108 | -364.214 |
| | (204.511) | (23.882) | (224.673) |
| Treat*Conflict - $\beta 3$ | 12.599** | -0.239 | 12.486* |
| | (5.987) | (0.763) | (6.565) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.107 | 0.434 | 0.115 |
| Observations | 464 | 464 | 464 |
| R2 | 0.159 | 0.078 | 0.153 |
| Mean Dep. Var. Control | 1123.717 | 146.128 | 1271.678 |
| Conflict | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per capita. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 24 months. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are

# D Robustness – Conflict exposure (24 months, 10/15/20/25 km)

Table D1: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict ($\beta 1$) | -24.577 | 0.064 | -24.257 | 0.026* | 0.008 |
| | (14.878) | (1.173) | (15.342) | (0.013) | (0.007) |
| Treat ($\beta 2$) | -133.061 | -44.617** | -176.498 | 0.304* | 0.062 |
| | (168.155) | (19.300) | (182.061) | (0.154) | (0.091) |
| Treat*Conflict ($\beta 3$) | 28.346* | 2.056 | 29.715* | -0.024 | -0.013* |
| | (15.392) | (1.274) | (15.753) | (0.016) | (0.007) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.519 | 0.026 | 0.406 | 0.055 | 0.578 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.157 | 0.091 | 0.152 | 0.025 | 0.115 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 10km | 10km | 10km | 10km | 10km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 10 km radius of the household over the past 24 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table D2: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict ($\beta 1$) | 0.035 | -0.005 | -0.021 | 0.008 |
| | (0.028) | (0.018) | (0.022) | (0.024) |
| Treat ($\beta 2$) | 0.250 | -0.207 | -0.362 | -0.235 |
| | (0.236) | (0.179) | (0.244) | (0.281) |
| Treat*Conflict ($\beta 3$) | -0.028 | 0.011 | 0.034 | 0.013 |
| | (0.030) | (0.018) | (0.024) | (0.026) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.344 | 0.262 | 0.162 | 0.410 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.369 | 0.195 | 0.265 | 0.243 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 10km | 10km | 10km | 10km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 10 km radius of the household over the past 24 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table D3: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict ($\beta 1$) | -26.643* | 1.215 | -25.716 | 0.018** | 0.005 |
| | (13.832) | (2.054) | (15.449) | (0.009) | (0.008) |
| Treat ($\beta 2$) | -271.898 | -47.548** | -321.256 | 0.308* | 0.093 |
| | (179.980) | (17.816) | (193.393) | (0.184) | (0.100) |
| Treat*Conflict ($\beta 3$) | 30.913** | 1.028 | 31.934** | -0.014 | -0.010 |
| | (14.062) | (2.098) | (15.659) | (0.012) | (0.008) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.165 | 0.007 | 0.121 | 0.098 | 0.380 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.160 | 0.096 | 0.154 | 0.024 | 0.113 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 15km | 15km | 15km | 15km | 15km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 15 km radius of the household over the past 24 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table D4: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict ($\beta 1$) | 0.002 | 0.009 | -0.022 | -0.005 |
| | (0.018) | (0.017) | (0.019) | (0.025) |
| Treat ($\beta 2$) | 0.109 | -0.128 | -0.482 | -0.401 |
| | (0.317) | (0.222) | (0.319) | (0.389) |
| Treat*Conflict ($\beta 3$) | 0.001 | -0.004 | 0.031 | 0.023 |
| | (0.019) | (0.017) | (0.020) | (0.026) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.722 | 0.534 | 0.144 | 0.311 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.364 | 0.194 | 0.264 | 0.241 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 15km | 15km | 15km | 15km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 15 km radius of the household over the past 24 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table D5: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict ($\beta 1$) | -14.460 | 0.316 | -15.114 | -0.011 | 0.011 |
| | (11.646) | (1.706) | (12.334) | (0.010) | (0.007) |
| Treat ($\beta 2$) | -376.822* | -62.674** | -453.160* | 0.178 | 0.234 |
| | (219.174) | (27.469) | (232.375) | (0.204) | (0.143) |
| Treat*Conflict ($\beta 3$) | 22.381* | 1.577 | 24.658* | 0.003 | -0.014* |
| | (12.193) | (1.715) | (12.968) | (0.011) | (0.008) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.097 | 0.023 | 0.060 | 0.359 | 0.113 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.158 | 0.083 | 0.153 | 0.025 | 0.113 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 20km | 20km | 20km | 20km | 20km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 20 km radius of the household over the past 24 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table D6: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict ($\beta 1$) | 0.010 | 0.018 | 0.022 | 0.031 |
| | (0.022) | (0.014) | (0.021) | (0.021) |
| Treat ($\beta 2$) | 0.244 | 0.153 | -0.053 | 0.079 |
| | (0.527) | (0.289) | (0.386) | (0.455) |
| Treat*Conflict ($\beta 3$) | -0.008 | -0.019 | -0.010 | -0.017 |
| | (0.021) | (0.015) | (0.021) | (0.023) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.643 | 0.629 | 0.865 | 0.887 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.364 | 0.196 | 0.263 | 0.239 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 20km | 20km | 20km | 20km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 20 km radius of the household over the past 24 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table D7: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict ($\beta 1$) | -11.999* | 0.821 | -11.379* | -0.005 | 0.004 |
| | (6.014) | (0.838) | (6.577) | (0.006) | (0.004) |
| Treat ($\beta 2$) | -356.917 | -35.190 | -398.548 | 0.586*** | 0.179 |
| | (235.071) | (27.161) | (255.351) | (0.195) | (0.141) |
| Treat*Conflict ($\beta 3$) | 14.125** | 0.020 | 14.277* | -0.014* | -0.007 |
| | (7.007) | (0.914) | (7.600) | (0.007) | (0.004) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.142 | 0.190 | 0.130 | 0.004 | 0.217 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.157 | 0.075 | 0.151 | 0.034 | 0.107 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 25km | 25km | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 24 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table D8: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict ($\beta 1$) | 0.050*** | -0.003 | 0.010 | 0.036*** |
| | (0.013) | (0.010) | (0.010) | (0.008) |
| Treat ($\beta 2$) | 0.851* | -0.143 | -0.063 | 0.445 |
| | (0.436) | (0.355) | (0.375) | (0.415) |
| Treat*Conflict ($\beta 3$) | -0.030* | -0.000 | -0.006 | -0.025** |
| | (0.016) | (0.011) | (0.012) | (0.012) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.057 | 0.681 | 0.852 | 0.305 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.397 | 0.193 | 0.259 | 0.246 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 25km | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 24 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

# E Robustness – Conflict exposure (18 months)

Table E1: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | -11.223* | 1.124 | -10.332 | -0.003 | 0.003 |
| | (5.813) | (0.767) | (6.379) | (0.005) | (0.004) |
| Treat - $\beta 2$ | -383.153* | -34.732 | -424.028* | 0.640*** | 0.189 |
| | (226.372) | (25.901) | (245.973) | (0.186) | (0.138) |
| Treat*Conflict - $\beta 3$ | 15.135** | 0.007 | 15.262** | -0.017** | -0.008* |
| | (6.896) | (0.904) | (7.523) | (0.007) | (0.004) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.102 | 0.175 | 0.095 | 0.001 | 0.182 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.157 | 0.077 | 0.151 | 0.034 | 0.109 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 25km | 25km | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 18 months. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table E2: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | 0.045*** | -0.005 | 0.008 | 0.033*** |
| | (0.014) | (0.011) | (0.010) | (0.008) |
| Treat - $\beta 2$ | 0.657 | -0.186 | -0.203 | 0.162 |
| | (0.419) | (0.367) | (0.401) | (0.435) |
| Treat*Conflict - $\beta 3$ | -0.022 | 0.001 | -0.000 | -0.014 |
| | (0.016) | (0.011) | (0.013) | (0.012) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.124 | 0.607 | 0.605 | 0.727 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.393 | 0.193 | 0.260 | 0.246 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 25km | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 18 months. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

# F Robustness – Conflict exposure (18 months, 10/15/20/25 km)

Table F1: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | -24.573 | 0.092 | -24.216 | 0.026* | 0.008 |
| | (15.399) | (1.227) | (15.856) | (0.014) | (0.007) |
| Treat - $\beta 2$ | -131.212 | -44.374** | -174.401 | 0.303* | 0.061 |
| | (168.961) | (19.375) | (182.893) | (0.154) | (0.091) |
| Treat*Conflict - $\beta 3$ | 28.541* | 2.093 | 29.923* | -0.024 | -0.014* |
| | (15.938) | (1.333) | (16.290) | (0.017) | (0.008) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.528 | 0.027 | 0.415 | 0.056 | 0.588 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.157 | 0.091 | 0.151 | 0.025 | 0.115 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 10km | 10km | 10km | 10km | 10km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 10 km radius of the household over the past 18 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table F2: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | 0.037 | -0.005 | -0.021 | 0.010 |
| | (0.030) | (0.019) | (0.023) | (0.025) |
| Treat - $\beta 2$ | 0.258 | -0.208 | -0.357 | -0.226 |
| | (0.236) | (0.179) | (0.246) | (0.282) |
| Treat*Conflict - $\beta 3$ | -0.030 | 0.011 | 0.034 | 0.012 |
| | (0.032) | (0.019) | (0.024) | (0.027) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.330 | 0.260 | 0.169 | 0.428 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.369 | 0.195 | 0.264 | 0.243 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 10km | 10km | 10km | 10km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 10 km radius of the household over the past 18 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table F3: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | -26.978* | 1.367 | -25.917 | 0.018* | 0.005 |
| | (14.402) | (2.156) | (16.101) | (0.009) | (0.009) |
| Treat - $\beta 2$ | -271.989 | -46.409** | -320.326 | 0.309 | 0.092 |
| | (181.831) | (18.117) | (195.516) | (0.185) | (0.102) |
| Treat*Conflict - $\beta 3$ | 31.523** | 0.976 | 32.498* | -0.015 | -0.010 |
| | (14.666) | (2.202) | (16.342) | (0.012) | (0.009) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.169 | 0.010 | 0.126 | 0.098 | 0.397 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.160 | 0.096 | 0.154 | 0.024 | 0.113 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 15km | 15km | 15km | 15km | 15km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 15 km radius of the household over the past 18 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table F4: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | 0.003 | 0.009 | -0.022 | -0.004 |
| | (0.019) | (0.018) | (0.020) | (0.025) |
| Treat - $\beta 2$ | 0.112 | -0.124 | -0.481 | -0.393 |
| | (0.318) | (0.222) | (0.322) | (0.392) |
| Treat*Conflict - $\beta 3$ | 0.001 | -0.005 | 0.032 | 0.023 |
| | (0.020) | (0.018) | (0.021) | (0.026) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.714 | 0.543 | 0.148 | 0.323 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.364 | 0.194 | 0.264 | 0.241 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 15km | 15km | 15km | 15km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 15 km radius of the household over the past 18 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table F5: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.2$ |
|---|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | -14.868 | 0.287 | -15.594 | -0.012 | 0.012 |
| | (11.798) | (1.756) | (12.496) | (0.011) | (0.007) |
| Treat - $\beta 2$ | -379.391* | -62.827** | -456.047* | 0.168 | 0.237 |
| | (222.761) | (27.840) | (236.291) | (0.206) | (0.146) |
| Treat*Conflict - $\beta 3$ | 23.186* | 1.654 | 25.565* | 0.003 | -0.015* |
| | (12.482) | (1.770) | (13.275) | (0.012) | (0.008) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.101 | 0.025 | 0.063 | 0.388 | 0.116 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.158 | 0.083 | 0.153 | 0.025 | 0.113 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 20km | 20km | 20km | 20km | 20km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 20 km radius of the household over the past 18 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table F6: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | 0.011 | 0.020 | 0.023 | 0.033 |
| | (0.023) | (0.015) | (0.021) | (0.021) |
| Treat - $\beta 2$ | 0.257 | 0.162 | -0.056 | 0.084 |
| | (0.530) | (0.290) | (0.388) | (0.455) |
| Treat*Conflict - $\beta 3$ | -0.009 | -0.020 | -0.010 | -0.017 |
| | (0.022) | (0.016) | (0.022) | (0.023) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.628 | 0.610 | 0.857 | 0.879 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.364 | 0.196 | 0.263 | 0.239 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 20km | 20km | 20km | 20km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 20 km radius of the household over the past 18 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table F7: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | -12.807* | 0.842 | -12.177* | -0.005 | 0.005 |
| | (6.407) | (0.878) | (7.005) | (0.007) | (0.004) |
| Treat - $\beta 2$ | -374.791 | -35.437 | -416.772 | 0.582*** | 0.182 |
| | (236.085) | (27.325) | (256.334) | (0.199) | (0.143) |
| Treat*Conflict - $\beta 3$ | 15.347** | 0.032 | 15.520* | -0.014* | -0.008 |
| | (7.378) | (0.950) | (7.992) | (0.008) | (0.005) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.125 | 0.189 | 0.115 | 0.005 | 0.213 |
| Observations | 464 | 464 | 464 | 464 | 464 |
| R2 | 0.157 | 0.075 | 0.151 | 0.034 | 0.107 |
| Mean Dep. Var. Control | 1455.491 | 189.085 | 1646.974 | 2.050 | 0.653 |
| Conflict | 25km | 25km | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 18 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table F8: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | 0.053*** | -0.003 | 0.011 | 0.038*** |
| | (0.014) | (0.011) | (0.010) | (0.008) |
| Treat - $\beta 2$ | 0.866* | -0.141 | -0.057 | 0.463 |
| | (0.446) | (0.358) | (0.380) | (0.421) |
| Treat*Conflict - $\beta 3$ | -0.032* | -0.000 | -0.006 | -0.026** |
| | (0.017) | (0.011) | (0.013) | (0.012) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.059 | 0.687 | 0.865 | 0.292 |
| Observations | 464 | 464 | 464 | 464 |
| R2 | 0.396 | 0.193 | 0.259 | 0.246 |
| Mean Dep. Var. Control | -0.203 | -0.383 | -0.485 | -0.641 |
| Conflict | 25km | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample is restricted to the ultra-poor household subsample. The dependent variables are indices measured in standard deviation units. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 18 months, using displaced GPS coordinates. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

# G Main results – Full sample, conditional

Table G1: Consumption and poverty line

| | (1) Food expenditure | (2) Non-food expenditure | (3) Total expenditure | (4) Food gap | (5) Poverty line 1.25$ |
|---|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | -12.174 | 1.573* | -10.706 | -0.001 | 0.003 |
| | (7.839) | (0.844) | (8.410) | (0.005) | (0.003) |
| Treat - $\beta 2$ | -501.258 | 9.798 | -491.162 | 0.545*** | 0.173 |
| | (340.352) | (27.610) | (363.981) | (0.197) | (0.128) |
| Treat*Conflict - $\beta 3$ | 17.157* | -0.993 | 16.149 | -0.021*** | -0.006 |
| | (9.849) | (1.050) | (10.638) | (0.007) | (0.004) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.150 | 0.743 | 0.186 | 0.008 | 0.185 |
| Observations | 1,014 | 1,014 | 1,014 | 1,014 | 1,014 |
| R2 | 0.179 | 0.081 | 0.174 | 0.035 | 0.110 |
| Mean Dep. Var. Control | 1511.385 | 207.557 | 1722.242 | 1.960 | 0.660 |
| Conflict | 25km | 25km | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample includes the unrestricted full sample. The dependent variables 'Food expenditure,' 'Non-food expenditure,' and 'Total expenditure' are measured in Birrs, defined on a monthly basis per adult equivalent. The 'Food gap' measures how many months, within the past year, households experience food insecurity. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 24 months. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.

Table G2: Asset indices

| | (1) Durable | (2) Livestock | (3) Productive | (4) Total |
|---|---|---|---|---|
| Conflict (Control) - $\beta 1$ | 0.041*** | -0.002 | 0.017* | 0.033*** |
| | (0.013) | (0.011) | (0.009) | (0.011) |
| Treat - $\beta 2$ | 0.546 | -0.324 | 0.199 | 0.276 |
| | (0.418) | (0.447) | (0.398) | (0.508) |
| Treat*Conflict - $\beta 3$ | -0.015 | 0.006 | -0.013 | -0.014 |
| | (0.015) | (0.013) | (0.012) | (0.015) |
| F-stat p-value: $\beta 2 + \beta 3 = 0$ | 0.196 | 0.467 | 0.633 | 0.599 |
| Observations | 1,014 | 1,014 | 1,014 | 1,014 |
| R2 | 0.314 | 0.205 | 0.200 | 0.230 |
| Mean Dep. Var. Control | 0.000 | 0.000 | -0.000 | 0.000 |
| Conflict | 25km | 25km | 25km | 25km |

Note: all regressions are OLS and based on specification 1. The unit of observation is the household, and the sample includes the unrestricted full sample. The dependent variables are indices measured in standard deviation units. The 'Poverty line $1.25' is a dummy variable, which equals one if the household falls below the poverty line and zero otherwise. 'Conflict' serves as an indicator of exposure, defined as the number of conflict events within a 25 km radius of the household over the past 24 months. 'Treatment' is a dummy variable, equal to one if the individual was assigned to a treatment group and zero otherwise. All specifications are estimated conditionally on strata (woreda) fixed effects and the baseline level of the outcome variable. Standard errors are clustered at the kebele treatment level and reported in parentheses. Asterisks indicate significance levels * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.
Source: authors' estimation.