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# Social Protection for Child Development in Crisis: A Review of Evidence and Knowledge Gaps

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*Globally, humanitarian needs have reached an historically unprecedented scale, undermining the ability of affected children to survive, grow, and thrive. Social protection holds the promise of addressing acute needs and risks faced by children in crisis contexts, while allowing for human capital investments. We review evidence of the impact of emergency cash, food, and other in-kind transfers implemented by governments or humanitarian actors on child development in different contexts. Compared with development settings, rigorous evidence for crises is limited. Most existing studies focus on either schooling or acute malnutrition, highlighting that transfers can mitigate the detrimental effects of crises on these outcomes. Evidence on linear growth, micronutrient deficiencies, health, labor, learning, psychosocial outcomes, and child protection is limited. Also, most studies are set in contexts characterized by high institutional fragility in which emergency social protection is undertaken by international organizations, while evidence from settings where institutional capacity for shock-responsive social protection exists is scarce. Further gaps relate to the cost-effectiveness of alternative program designs and delivery modalities; heterogeneity by child and household backgrounds; and longer-term effects of interventions. Filling these gaps is critical to support child-sensitive approaches to social protection in crises to effectively pursue Sustainable Development Goal 1.*

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Five hundred and thirty-five million children—about one in four children globally—live in crises-affected countries due to natural or man-made hazards. Children also account for half of the world’s displaced people and refugee populations worldwide

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(UNICEF 2016, 2017). COVID-19 has further disrupted children’s lives across the world—especially those of the most vulnerable—to a catastrophic extent through school closures, increased poverty and food insecurity, and greater risk of violence, abuse, and exploitation.

Social protection, by providing cash, food, or other transfers to households, can tackle demand-side barriers to child development by lowering the opportunity costs of investments and by reducing the risks of child labor, school drop-out, and child marriage. An established literature from low- and middle-income countries (LMICs) highlights the positive effects of social protection on child education, health, and nutrition with impacts that can last over the lifetime (Millán et al. 2019). If appropriately targeted, social protection can promote equitable developmental outcomes for most vulnerable children.

As demand-side constraints such as poverty are usually magnified during crises, governments and humanitarian actors have recently started to use social protection tools that are traditionally employed in non-crisis settings during humanitarian emergencies, with the aim of preventing or mitigating the impacts of crises on households and children (Ulrichs and Sabates-Wheeler 2018). For instance, the use of cash transfers in crises had doubled since 2016, amounting to US\$5.6 billion, or 17.9 percent of global humanitarian assistance (CaLP 2020). Part of this shift is driven by the increasingly complex and protracted nature of crises (Gentilini et al. 2018). The COVID-19 pandemic has provided a further impulse to this trend: in an on-going review, Gentilini and co-authors have tracked more than 1,179 social protection measures in place across 212 countries to respond to the crisis. Of those, around 51 percent are various forms of cash transfers, while 22 percent relate to the distribution of food (Gentilini et al. 2020). In crisis-contexts, social protection is seen as a tool to address urgent and acute needs—the traditional focus of humanitarian assistance—while building long-term resilience through human capital investments and poverty reduction.

Despite this widespread use, rigorous evidence on the effectiveness of “humanitarian social protection” on child development is strikingly limited (Buttenheim 2009). This shortfall is due, in part, to the methodological, logistical, and ethical challenges of conducting studies that yield causal estimates in crises, especially during their most acute phases, as well as to differences in evaluation practices between humanitarian and development actors (Levine and Sharp 2015; Puri et al. 2017). As the evidence base stemming from development contexts cannot be applied unquestioningly to complex emergency contexts due to the increased economic, social, institutional, and security challenges households face in such settings, this evidence gap challenges the design and implementation of effective, “child-sensitive” social protection in crisis.

We critically assess existing experimental and quasi-experimental evidence on the effects of humanitarian social protection on child development. We focus on non-contributory social assistance, including cash, food, and other in-kind transfers,

as these are the most prevalent tools used in crises. We first provide definitions and discuss key issues around social protection and child development in crisis-settings. Then, we present our methodology to classify studies, followed by the literature review. We conclude by mapping evidence gaps and directions for policy-relevant research.

## Social Protection in Crises: What, Why, and How?

### *Defining “Humanitarian Social Protection”*

The conventional distinction between “development” viz. “emergency” or “humanitarian” assistance rests on the assumption that the former focuses on long-term, structural issues, while humanitarian aid addresses crisis-induced temporary and acute needs. Consequently, social protection in development settings has been traditionally distinguished from humanitarian assistance in terms of goals, design, financing, and implementation. In non-crisis LMICs, social protection usually encompasses social assistance tools such as non-contributory transfers, both cash (e.g., unconditional and conditional cash transfers and vouchers) and in-kind (e.g., food assistance or school meals). It also includes government-led health and social services, social insurance, and labor market interventions (Gentilini et al. 2018). These programs currently reach 1.5 billion people globally (Alderman et al. 2018), are usually enshrined in legislation, and are regularly operated by and through governments with the aim of being a predictable safety net that allows recipients to manage their livelihoods (Ulrichs and Sabates-Wheeler 2018). On the other hand, humanitarian assistance focuses on short-term, one-off responses to save lives and address urgent needs of crisis-affected populations, and it is often implemented through external financing and actors (Pega et al. 2014; Justino 2016). It mostly provides non-contributory transfers, which are often disconnected from national social protection systems, if the latter are present.

This distinction, however, is inaccurate on multiple grounds: first, although emergency response characterizes itself by being focused on urgent relief in the face of life-threatening needs, this is seldom the case in reality. For instance, the five largest recipients of humanitarian assistance in 2018 were all long-term recipients (eight years or more), highlighting that the majority of humanitarian funds are directed towards protracted, rather than acute, crises (Development Initiatives 2020). In these contexts, chronic vulnerability provides the ground for recurring humanitarian crises when shocks occur, and humanitarian actors often step in to address long-term needs caused by chronic poverty in contexts in which institutions are too fragile or unwilling to respond (Wisner et al. 2014; Ulrichs and Sabates-Wheeler 2018). This social conceptualization of crises, which connects the hazards that people face with the structural economic, social, and political reasons for their

vulnerability, highlights the potential role of social protection as a mean to address urgent needs induced by shocks, while at the same time contributing to reducing long-term vulnerabilities through poverty reduction and human capital accumulation. Secondly, although humanitarian assistance characterizes itself by addressing urgent needs, evidence shows that when scalable local social protection systems are in place, they can act faster than humanitarian responses. For instance, [Ulrichs and Sabates-Wheeler \(2018\)](#) report that the Hunger Safety Net Programme in Kenya is able to deliver emergency assistance within 10 days from the declaration of the emergency, as compared to the nine months of the United Nations (UN) response.

For these reasons, we adopt a purpose-oriented definition of “humanitarian social protection,” by which humanitarian or emergency assistance is intended to prevent, mitigate, or address *crises*, independently of whether the response is carried out by local governments within their boundaries or international humanitarian actors. This conceptualization differs from the actor-oriented definition, which focuses on the identity of social protection providers in crises (usually the international humanitarian community) ([Gentilini et al. 2018](#)), and bridges the gap between the conventional boundaries between “development” and “humanitarian” assistance.

### *Social Protection in Crises: How?*

In broad terms, the implementation of social protection in crisis, including who operates the program and which tools should be adopted, varies widely based on: (a) The specific characteristics of the crisis; (b) the broader context, including institutional factors, in which the crisis occurs; and (c) political economy considerations. Based on such variables, different social protection modalities may be more appropriate than others. For instance, a conditional cash transfer (CCT) program in a post-disaster setting may be highly unethical as it would exclude non-compliers from program benefits in very fragile conditions, but instead it might be considered appropriate in contexts of fragility to prioritize, for instance, child schooling or health goals. For this reason, it is important to first define the type of crisis at hand in order to understand which policy options are ethical, appropriate, and viable in each specific context. In this regard, existing literature does not help much, as the terms “crises”, “emergencies,” and “humanitarian events” are used almost interchangeably to loosely depict very different policy contexts, such as conflicts, famines, disasters, or displaced populations.<sup>1</sup> While this ambiguity is likely due to the lack of a commonly-accepted definition of crisis and what constitutes “humanitarian assistance,” it inevitably complicates the interpretation of available evidence and the drawing of policy-relevant conclusions from it. In this section, therefore, we present some defining features of crises that will help us to map existing evidence in the remainder of the paper.

First, crises are usually defined by their root causes and temporal nature. Regarding the former dimension, the most common classifications, such as the one from the International Federation of Red Cross and Red Crescent Societies,<sup>2</sup> distinguish between: (a) Natural hazards, including geophysical (earthquakes, tsunamis), hydrological (floods), climatological (extreme temperatures, droughts, and wildfires), meteorological (cyclones), or biological (insect/animal plagues or epidemics); (b) technological and human-made hazards (e.g., complex emergencies/conflicts, famine, displaced populations, industrial accidents and transport accidents, large economic shocks); and (c) a combination of both. The temporal nature of the crisis constitutes a further defining dimension, whereby we can distinguish between sudden-onset (e.g., earthquakes) or slow-onset crises (e.g., droughts, famines). Rapid-onset disasters are likely to affect most households, including non-poor households, although at different degrees. They may cause displacement and large damages to household material circumstances. By contrast, slow-onset crises are characterized by a strong overlap between protracted poverty and fragility. As compared to rapid-onset emergencies, triggers for slow-onset crises are usually less evident, which often cause slower responses and chronic underfinancing (Levine and Sharp 2015; UNICEF 2019). Length, frequency, and phase are additional temporal defining features, whereby protracted crises are usually related to conflicts and persistent political fragility, while recurrent crises are mostly caused by frequent natural hazards or seasonal stress in contexts of chronic poverty and vulnerability. For recurrent crises, there is large potential for social protection systems' strengthening and preparedness. With respect to the phase, Buttenheim (2009) distinguishes between the rescue phase in the immediate aftermath of a disaster, which focuses on providing relief supplies to save lives, viz. the longer-term recovery and rehabilitation phases, when social protection can play a key role in supporting human capital and livelihoods.

Importantly, these dimensions alone do not provide a useful understanding of the potential for implementation of humanitarian social protection if they are not contextualized to the specific setting in which the crisis occurs, including the level of state capacity and social protection systems' maturity, and the presence of other aggravating factors, such as climate change, poverty, inequality, and unplanned urbanization (Levine and Sharp 2015). With regards to state capacity, there is a general expectation that in settings where social protection systems exist and have moderate capacity and maturity, national governments should bear the main responsibility for reducing vulnerability to shocks and for responding to them (O'Brien et al. 2018). In those settings, social protection can be adapted in the face of large covariate shocks through: (a) Vertical expansion (e.g., increasing benefits temporarily for some or all existing recipients); (b) horizontal scale-up (e.g., including new recipients in an existing program); or (c) activation of a new program by piggy-backing on existing data, delivery mechanisms, or administrative capacity. These adaptations—also commonly referred to as “shock-responsive social protection”—can be implemented

by local governments alone or in coordination with international actors, with the idea that existing systems can be modified to deliver assistance during slow-onset crises (e.g., to avoid further crisis escalation), or can deliver ex-post crisis response faster and more cost-effectively than humanitarian actors. However, this insurance function of social protection critically relies on a system's capacity to deliver on additional caseloads and on flexibility of budgets to allow for rapid scale-up ([Alderman and Haque 2006](#); [Ulrichs and Sabates-Wheeler 2018](#)).

Finally, political economy considerations such as political will to create linkages between short-term humanitarian assistance and longer-term programs, to coordinate different actors around some leading objectives, or to resolve tensions arising from opposing mandates, are central. For instance, in contexts of displaced populations, crises often become “humanitarian” because host governments are either unwilling or unable to respond to the needs of such populations. Similarly, in other contexts where local institutions are weak or unwilling to act and multiple actors operate in parallel without coordination, tools such as cash transfers implemented through a common platform could facilitate coordination between multiple actors, enhancing clarity and efficiency of local institutions, and be an improvement to often inconsistent and expensive systems.<sup>3</sup>

It is important to note that a large share of assistance is undertaken in fragile and conflict-affected states, where national social protection capacity is highly compromised. For instance, half of the United Kingdom government's spending on aid is directed to conflict-affected or fragile states ([UK Parliament 2015](#)). Conflict renders the delivery of social protection even more challenging due to concerns over security, nonfunctioning markets, corruption, reduced access to data, lack of trust, and the collapse of existing systems. Importantly, when the legitimacy of the state is questioned and protection and humanitarian principles are undermined, assistance is channeled through the UN system, which may come at the expense of longer-term goals of setting up a social protection system, or of policy evaluation ([Levine and Sharp 2015](#)).

These operational challenges are connected to methodological and ethical hurdles for evaluating social protection in crisis. Running randomized control trials (RCTs) in a crisis-environment would rule out (or at least postpone) access to the intervention for the control group, which would pose serious ethical challenges. Also, the identification of valid counterfactual and data collection operations in crises are often challenged by the urgency for delivery of assistance, fragile institutions, security concerns, the absence of baseline data, and other logistical difficulties, hampering evaluation efforts. For an in-depth discussion of these methodological and ethical challenges of impact evaluations in crises we refer to the review by [Puri et al. \(2017\)](#).



## Methods

We organize and present our findings following the conceptual framework proposed by Longhurst and Sabates-Wheeler (2019), which distinguishes among three alternative scenarios in which humanitarian social protection can operate: (a) Countries that have substantial existing social protection systems and can put in place “shock-responsive” programs; (b) displaced populations, which fall outside the remit of their original country or areas, where the crisis occurred; and (c) countries with very weak local institutions due to conflict or fragile settings, where response is usually undertaken by the humanitarian system and where response could set the stage for building future social protection systems. Within each of these scenarios, we further distinguish among different typologies and phases of crises in order to present existing evidence in broadly comparable settings. We note that while this is a useful working organization of findings, crises are often complex (e.g., including displacement, recurrent natural hazards, and protracted institutional fragility) and often the boundaries between different scenarios become blurred in practice.

We searched for literature in all main bibliographical databases, such as Google Scholar, the International Initiative for Impact Evaluation (3ie), the World Bank Development Impact Evaluation Initiative, the Poverty Action Lab, and the Social Science Research Network. We adopt a life course and multidimensional approach to child development. Specifically, we include in our search all stages of childhood from birth to 18 years, and the following outcomes: Nutritional status,<sup>4</sup> health, schooling, cognitive and psychosocial attainments, labor and child protection.<sup>5</sup> In terms of social protection, we focus on cash (e.g., unconditional cash transfers [UCTs], CCTs, vouchers, cash-for-work/cash-for-assets, etc.); food (generalized food distribution [GFD], school feeding, emergency supplementary feeding, food-for-work/food-for-assets transfers, etc.); and other in-kind transfers (e.g., provision of productive assets, land, etc.). Table 1 presents a summary of our inclusion criteria.

Searches were conducted using broad keywords, for instance: “Cash transfers,” “social protection,” or “school feeding” and “child development,” “education,” “health,” or “nutrition” and “humanitarian,” “emergency,” “conflict,” “crisis,” “refugee,” “disaster,” or “climate shock”. We also searched reports issued by key policy actors such as the World Bank, United Nations International Children’s Emergency Fund (UNICEF), the European Commission, the United Nations High Commissioner for Refugees (UNHCR), the World Food Programme (WFP), the Food and Agriculture Organization of the United Nations (FAO), etc.

We categorized articles as peer-reviewed and non-peer reviewed. We included all peer-reviewed experimental and quasi-experimental studies. Non-peer-reviewed studies were included if they applied a plausible empirical strategy to uncover causality, as in de Hoop and Rosati (2014). Further, we assessed study quality—as assessed by its risk of bias—by combining the Jadad scale, which assesses quality in

**Table 1.** Literature Review: Inclusion Criteria

Domain	Inclusion criteria	Exclusion criteria
Settings and types of crisis	Low- and middle-income countries (LMICs) affected by conflict, complex emergencies, natural disasters and protracted fragilities caused by exposure to violence and environmental crises, including displaced populations.	High-income countries; development settings in LMICs; displaced populations in high-income countries
Relevant populations	Children aged 0–18 years	Youth (18–35 years); mothers of children
Dimensions of child development	<ul style="list-style-type: none"> <li>a. Nutrition</li> <li>b. Health</li> <li>c. Education</li> <li>d. Cognitive and psychosocial development</li> <li>e. Child labor</li> <li>f. Child protection in emergencies</li> </ul> <p>All these are measured at the child-level</p>	Household-level outcomes
Program typology	<ul style="list-style-type: none"> <li>a. Cash transfers: Unconditional and conditional cash transfers, cash-for-work/cash-for-assets, vouchers, social pensions, cash plus</li> <li>b. In-kind assistance: school feeding, general food distribution, food-for-work/food-for-assets, supplementary feeding and asset-based transfers</li> <li>c. Combinations of cash and in-kind transfers</li> </ul>	Labor market interventions, social insurance and other services
Methodology	Quantitative studies including published peer-reviewed studies, working papers and reports that provides a credible counterfactual to estimate causal program effects, such as: randomized controlled trials, regression discontinuity designs, instrumental variables, difference-in-differences, propensity score matching	Quantitative studies that do not provide a credible counterfactual; exclusively qualitative evidence (e.g., case studies)



randomized trials, with a modified Newcastle-Ottawa Quality Assessment Form for Cohort Studies (NOS) (see [Petticrew and Roberts \[2008\]](#) for an in-depth discussion). The modified criteria from the NOS are taken from [Segal and co-authors \(2021\)](#).<sup>6</sup> Studies were evaluated across seven dimensions and received one point for the following: (a) Being randomized and the randomization is appropriately conducted; (b) double-blind; (c) appropriate assessment and treatment, if necessary, of attrition; (d) sample representativeness; (e) reliability of treatment status assignment (e.g., data on exposure are administrative or from the implementer); (f) adjustment for confounders if needed (e.g., due to randomization unbalance); and (g) quality of outcome measurement (e.g., objective measurements of outcome, such as administrative data on schooling or anthropometric measures). A total score was assigned based on the sum of the points obtained for each criterion. Papers were then divided into three categories based on their score: (a) Very low risk of bias, for studies scoring five or higher; (b) low risk of bias, for studies with a score equal to four; and (c) medium risk of bias, for studies scoring three.

Heterogeneous impacts by gender, age, and crisis intensity were reported whenever possible. We note that as we are pulling together studies with different designs, impact estimates reflect different underlying parameters, which are often not directly comparable. [Table 2](#) presents a list of all the studies we review with some of their key characteristics and overall risk of bias. In addition, supplementary online appendix A1 reports details of the quality assessment.

## Results

### *Crises in Contexts Where State Capacity and Social Protection Systems Exist*

In this section we focus on shock-responsive social protection initiatives set up in contexts where pre-crisis social protection systems existed and governments had capacity to adapt those programs to support crisis-affected populations. Although we know such adaptations are common in practice (see [O'Brien et al. \[2018\]](#), for a series of examples), empirical evidence measuring the impact of shock-responsive social protection on children is limited to a single program, “Atención a Crisis,” a CCT implemented by the Nicaraguan government in rural areas in the aftermath of a drought. The program was evaluated through a cluster RCT by [Del Carpio and Macours \(2009\)](#) and [Macours et al. \(2012\)](#), and it provides a good example of a shock-responsive program run by a government in a relatively-stable setting. Both studies have very low risk of bias. Atención a Crisis distributed cash grants conditional upon school attendance and health check-ups. Households received a transfer of around US\$145 paid every two months if they had no children or only children younger than seven years old. In addition, households with children between seven and fifteen years old enrolled in primary school received US\$90 per household, and a further US\$25 per child.

**Table 2. List of Studies Included in the Review**

Study	Scenario in which social protection operates	Type of crisis	Country	Program implementer	Transfer type	Published in peer-reviewed journal?	Methodology	Risk of bias	Target population	Child age range	Child-level outcomes	Gender heterogeneity?
<a href="#">Adelman et al. (2019)</a>	Displaced populations	IDPs	Uganda	WFP	School feeding vs. take-home rations conditional on school attendance	Yes	Unblinded cluster-RCT	Very low	HHs in IDP camps	Primary school-age adolescent girls, children aged 6–59 months	1. Anemia	Yes
<a href="#">Aker et al. (2011)</a>	Fragile states	Recurrent slow-onset crisis	Niger	Concern Worldwide	UCT via different delivery modalities	No	RCT	Very low	HHs in selected villages having produced less than 50 percent of their consumption needs	Under 5 years	1. School fee expenditures	No
<a href="#">Aker (2013)</a>	Displaced populations	IDPs	DRC	Concern Worldwide	UCT vs. voucher to be spent on any items at pre-organized voucher fairs	No	RCT	Low	IDP HHs in one informal camp	0–15 years	1. Number of meals per day 2. School drop-out 3. School fee expenditures	No
<a href="#">Aker et al. (2016)</a>	Fragile states	Recurrent slow-onset crisis	Niger	Concern Worldwide	UCT via different delivery modalities	Yes	RCT	Very low	HHs in selected villages having produced less than 50 percent of their consumption needs	Under 5 years	1. Number of meals in past 24 hours 2. Dietary diversity 3. Weight-for-height z-scores	No
<a href="#">Alderman et al. (2012)</a>	Displaced populations	IDPs	Uganda	WFP	School feeding vs. take-home rations conditional on school attendance	Yes	RCT	Very low	Primary school-age children	6–13 years	1. Primary school enrollment 2. School attendance 3. Age at school entry 4. Grade promotion 5. Progression to secondary school	Yes
<a href="#">Aurino et al. (2019)</a>	Fragile states	Conflict	Mali	WFP	School feeding and GFD	No	DID combined with PSM	Low	HHs and children of compulsory school-age	7–16 years	1. School enrollment 2. Absenteeism 3. Grade attainment 4. Participation in labor (farm and housework) 5. Time in labor	Yes

**Table 2. Continued**

Study	Scenario in which social protection operates	Type of crisis	Country	Program implementer	Transfer type	Published in peer-reviewed journal?	Methodology	Risk of bias	Target population	Child age range	Child-level outcomes	Gender heterogeneity?
Battistini (2016)	Displaced populations	Refugees	Lebanon	Lebanon Cash Consortium	UCT	No	RDD	Medium	Economically-vulnerable Syrian refugees	School-age children	1. School enrollment 2. Child labor 3. Child involved in risky activities (child marriage, dangerous work)	No
Brück et al. (2019)	Fragile states	Recurrent slow-onset crisis	Niger	WFP	GFD, blanket and targeted supplementary feeding, activities supporting access to assets, land rehabilitation, water harvesting, local purchasing	No	IV	Very low	Very poor HHs in priority villages	6–59 months	1. Moderate acute malnutrition 2. MUAC 3. Weight-for-age z-scores	Yes
de Hoop et al. (2019)	Displaced populations	Refugees	Lebanon	Government of Lebanon, UNICEF and the World Food Programme	UCT	No	RDD	Low	HHs with children enrolled in an afternoon shift	6–14 years	1. School enrollment 2. Attendance 3. Education expenditures	Yes
Del Carpio and Macours (2009)	State capacity exists	Drought	Nicaragua	Government of Nicaragua	CCT	No	RCT	Very low	HHs affected by drought	7–15 years	1. Labor participation 2. Time in labor	Yes
Ecker et al. (2019)	Fragile states	Conflict	Yemen	Government of Yemen	UCT	No	Quasi-experimental (degree of conflict intensity)	Low	HHs in chronic poverty status and other disadvantaged categories	0–59 months	1. Weight-for-height z-scores 2. MUAC	No
Edmond et al. (2019)	Fragile states	Conflict	Afghanistan	Ministry of Public Health and UNICEF	CCT	Yes	DiD	Medium	Pregnant women	0–12 months	1. Antenatal and postnatal care	No
Fenn et al. (2017)	Fragile states	Recurrent slow-onset crisis	Pakistan	Action Against Hunger	Different cash-based modalities - standard cash, double cash, fresh food voucher	Yes	Cluster RCT	Very low	Poor and very poor HHs with one or more children	6–48 months	1. Dietary diversity	No

**Table 2. Continued**

Study	Scenario in which social protection operates		Country	Program implementer	Transfer type	Published in peer-reviewed journal?	Methodology	Risk of bias	Target population	Child age range	Child-level outcomes	Gender heterogeneity?
	Fragile states	Post-crisis										
<a href="#">Gilligan et al. (2013)</a>	Uganda	Post-crisis	Uganda	WFP	UCT; Take-home rations	No	RCT	Very low	HHs with children being enrolled in the ECD centers (3–5-years)	1–7 years	1. Food consumption frequency 2. Anthropometric measures (stunting, underweight, wasting) 3. Anemia 4. Participation in ECD center 5. Cognition 6. Psychosocial skills	No
<a href="#">Grijalva-Ebernod et al. (2018)</a>	Somalia	IDPs	Somalia	Research on Food Assistance for Nutritional Impact consortium	UCT of US\$84 per month for 5 months + a single non-food items kit + free piped water	Yes	Non-randomized cluster control trial	Low	HHs in IDP camps	6–59 months	1. Wasting 2. Dietary diversity	No
<a href="#">Guevarra et al. (2018)</a>	Sudan	Recurrent slow-onset crisis	Sudan	WFP	Food-based social protection	No	Stepped wedge cluster RCT	Medium	Children 6–59 months with MUAC in a selected range, children discharged from an outpatient therapeutic program, pregnant and lactating women	6–59 months	1. Wasting and severe wasting	Yes
<a href="#">Hoddinott et al. (2018)</a>	Niger	Recurrent slow-onset crisis	Niger	WFP	First phase: Cash for work (treatment 1) vs. food for work (treatment 2). Second phase: cash transfer (treatment 1) vs. food transfers (treatment 2)	No	RCT	Low	All HHs in selected clusters	0–15 years	1. Reduced portion sizes for children of all ages 2. Education expenditures	Yes

**Table 2. Continued**

Study	Scenario in which social protection operates	Type of crisis	Country	Program implementer	Transfer type	Published in peer-reviewed journal?	Methodology	Risk of bias	Target population	Child age range	Child-level outcomes	Gender heterogeneity?
Langendorf et al. (2014)	Fragile states	Recurrent slow-onset crisis	Niger	Forum Sante Niger and Medecins Sans Frontieres	Food and cash treatment arms	Yes	RCT	Low	HHs including at least one child measuring 60 cm–80 cm	6–23 months	1. First event of severe wasting 2. Child mortality 3. Consumption of distributed food supplements	No
Lehmann and Masterson (2014)	Displaced populations	Refugees	Lebanon	UNHCR	UCT	No	RDD	Medium	Syrian refugee HHs living at high altitudes	6–15 years	1. School enrollment 2. Participation in labor	No
Lin and Salehi (2013)	Fragile states	Post-conflict	Afghanistan	Ministry of Public Health and Global Alliance for Vaccines and Immunization	CCT	Yes	Quasi-experimental (Inverse probability weighting)	Medium	Mothers and community health workers	Below 2 years	1. Institutional delivery 2. DPT3 vaccination	No
Macours et al. (2012)	State capacity exists	Recurrent slow-onset crisis	Nicaragua	Government of Nicaragua	CCT	Yes	RCT	Very low	Poor HHs in rural areas (household expenditures below a certain threshold)	0–15 years	1. Height-for-age 2. Weight-for-age 3. Motor development 4. Cognitive development of children less than 6 when intervention started	Yes
Rosas Raffo and Sabarwal (2016)	Fragile states	Post-conflict	Sierra Leone	Government of Sierra Leone	Cash for work	No	RCT	Medium	Youth aged 15–35 years	0–18 years	1. Children 0–5 years went to health facility when sick 2. School enrollment (adolescents) 3. School attendance (adolescents) 4. Labor market participation (6–14 years)	Yes
Saboya et al. (2018)	Fragile states	Recurrent slow-onset crisis	Chad	WFP	Food-based social protection	Yes	IV	Low	HHs in targeted villages	6–23 months	1. Wasting 2. Height-for-age z-scores for beneficiaries and siblings	Yes

Table 2. Continued

Study	Scenario in which social protection operates	Type of crisis	Country	Program implementer	Transfer type	Published in peer-reviewed journal?	Methodology	Risk of bias	Target population	Child age range	Child-level outcomes	Gender heterogeneity?
Schwab et al. (2013)	Fragile states	Conflict	Yemen	WFP	Cash vs. food assistance	No	RCT	Very low	Severely-food-insecure HHs	0–59 months	1. Dietary diversity	No
Schwab (2019)	Fragile states	Conflict	Yemen	WFP	Cash vs. food assistance	No	RCT	Very low	Severely-food-insecure HHs	0–59 months	1. Child labour	No
Sibson et al. (2018)	Fragile states	Recurrent slow-onset crisis	Niger	Research on Food Assistance for Nutritional Impact consortium	UCT	Yes	RCT	Very low	Children and women aged 15–49 years in selected villages	6–59 months	1. Severe wasting and/or nutritional oedema 2. MUAC 3. Hemoglobin concentration 4. Prevalence of anaemia 5. Dietary diversity	No
Sulaiman (2010)	Fragile states	Post-conflict	Southern Sudan	WFP and BRAC	Food for training	No	RCT	Medium	Most vulnerable HHs	6–14 years	1. School enrollment 2. Time in labor 3. Income from earning activities	Yes
Tranchant et al. (2019)	Fragile states	Conflict	Mali	WFP	School feeding and GFD	Yes	DiD combined with PSM	Low	HHs and children of compulsory school-age	2–15 years	1. Child height	No
Wald and Bozzoli (2011)	Fragile states	Conflict	Colombia	Government of Colombia, World Bank and Inter-American Development Bank	CCT	No	Natural experiment (degree of conflict exposure)	Medium	HHs with at least one child aged 0–17 years and belonging to the poorest quintile of the population	0–17 years	1. School enrollment, grade progression	No

Note: CCT: conditional cash transfer; DiD: difference-in-differences; DPT3: diphtheria-polio-tetanus vaccination; DRC: Democratic Republic of the Congo; ECD: early-childhood development; GFD: generalized food distribution; HHs: households; IDP: internally-displaced people; IV: instrumental variable; MUAC: mid-upper arm circumference; PSM: propensity score matching; RCT: randomized controlled trial; RDD: regression discontinuity design; UCT: unconditional cash transfer; WFP: World Food Programme



Macours et al. (2012) focus on early childhood development (ECD) outcomes. The program had a positive, but fairly moderate, impact on preschoolers' height-for-age z-scores (HAZ) and a larger positive effect on cognitive and psychosocial development. Effects were measured nine months after program roll-out, and no fade-out was observed after two years. Estimated impacts were comparable with the effect of one-and-a-half extra years of maternal schooling, which was large considering the average of four years of schooling for the control group. Impacts for households that received cash plus a lump-sum payment to start a small non-agricultural activity were higher than for households receiving cash only. The authors also show that households who benefited from transfers spent more on critical inputs for child development, e.g., nutrient-rich and animal-source foods, and substantially increased child stimulation. Further, households were also more likely to engage in health-enhancing behaviors, which suggests that the program conditionality may have triggered some behavioral change. In a companion paper, Del Carpio and Macours (2009) investigate program effects on child labor supply, its composition, and number of hours worked per week among older children (6–15 years). The number of hours worked decreased for all children in treatment villages, which is in line with the conditionality related to school enrollment and regular school attendance. Protective effects were larger for boys, probably due to their greater involvement in agricultural labor.

### *Displaced Populations*

The second scenario relates to social protection for refugees and internally displaced populations (IDPs). The peculiarity of these programs lies in the fact that they operate in a location other than where the crisis occurs. Refugee programs are often run by governments of hosting countries or by international organizations operating in transition or destination territories. With regards to IDPs, interventions are usually set up in complicated settings with very fragile local institutions, and despite taking place in the same country in which the crisis occurs, programs are usually implemented by humanitarian actors as governments may be unable or unwilling to support such populations.

### *Refugees*

All available evidence on refugees relates to impact assessments of different UCTs for Syrian refugees in Lebanon. The country hosts more than one million Syrian refugees, and Syrian refugee children are at high-risk of impaired development, with high prevalence of out-of-school children, child labor, and early marriage. Lehmann and Masterson (2014), Battistin (2016), Hoop et al. (2019) have evaluated the effects of different cash transfers on child development by using different identification strategies. The former two studies have a medium risk of bias, while

the article by de Hoop has a low risk of bias. Together, these three studies highlight that transfer size and supply-side constraints are key for UCTs effectiveness on child education, labor, and protection. Specifically, [Lehmann and Masterson \(2014\)](#) used a regression discontinuity design (RDD) to evaluate the impact of a UNHCR winter cash assistance program on child educational access. The program gave US\$575 altogether via ATM cards with the objective of keeping people warm and dry during the 2013–14 winter. Only households residing above 500-meters of altitude were eligible for assistance. Comparing households residing slightly above and below the threshold, the authors showed that the intervention increased school enrollment by 6 percentage points (p.p.), which was driven by transfers fostering parents' ability to cover for transport costs and school expenditures. On the contrary, the “Multipurpose Cash Assistance Programme” of the Lebanon Cash Consortium did not lead to any significant impact on school enrollment ([Battistin 2016](#)). The program provided cash assistance amounting at US\$174 to economically vulnerable Syrian refugee households. Eligibility was determined based on a proxy means test score that was used as a threshold for the RDD design. [Battistin \(2016\)](#) attributed this result to poor educational services availability and the limited transfer size. [Hoop et al. \(2019\)](#) assessed a UCT of US\$20 per month for children aged 5–9 years old, and US\$65 per month for children aged 10–14 years old, provided by UNICEF and WFP for the school year 2016–17. They also adopted an RDD design, comparing children living in pilot and neighboring governorates. The program had limited effects on school enrollment, but substantive impact on afternoon shift attendance, which increased by 0.5 days to 0.7 days per week (equivalent to an improvement of about 20 percent in school attendance over the comparison group). Effects were similar among younger and older children, as well when differentiated by gender. As in the case of [Battistin's](#) paper, school capacity constraints may have played a critical role in limiting enrollment effects, but, as in [Lehmann and Masterson's study \(2014\)](#), the program enhanced attendance by covering education and bus transport expenditures.

[Battistin \(2016\)](#) and [Lehmann and Masterson \(2014\)](#) also assess treatment effects on child labor. In line with results for schooling, [Battistin \(2016\)](#) did not find any effect on work. By contrast, [Lehmann and Masterson \(2014\)](#) found that treated households reduced their probability of sending children to work by 6 p.p. with respect to comparison households. In addition, [Battistin \(2016\)](#) analyzed the child protection effects of cash transfers, finding no effect on preventing children from early marriage and dangerous work, again likely because of the limited transfer amount.

### *Internally Displaced Populations*

Four contributions assess the effectiveness of social protection for child development in displacement camps with low or very low risk of bias. These programs consisted of relief interventions in the context of protracted crises. [Alderman et al. \(2012\)](#)

and [Adelman et al. \(2019\)](#) investigated the effects of two types of WFP food-for-education (FFE) programs (school feeding vs. take-home rations) on child education and nutrition in Northern Uganda, which at the time of the intervention launch in 2005, had been affected by an 18-year civil conflict generating around 1.5 million IDPs. Nearly all rural households in the study districts had been living in IDP camps for more than several years and could not get outside of camp boundaries, making food aid critical for survival. Although the crisis was protracted, the program operated as an emergency relief program, and it was entirely run by the WFP as local institutions were unable to deliver social services.

FFE programs aim to foster children's schooling by providing food to children and their families. To compare different transfer modalities, an unblinded RCT was conducted during 2005–07 in 31 IDP camps in Northern Uganda, which were randomly assigned to three groups: School feeding, take-home rations, and control. Both modalities provided the same energy intakes, corresponding to at least two-thirds of the child's daily vitamin and mineral requirements. The school feeding program consisted of daily lunches, while households in the take-home rations arm received a ration of equal size and composition delivered monthly to an adult female household member for each child meeting school attendance requirements. [Alderman et al. \(2012\)](#) found school meals increased school enrollment by 9 p.p. for children who were not enrolled at baseline. There was a positive and statistically significant impact of both modalities on the morning attendance of older children, aged 10–17, ranging from 8 to 12 p.p.. Dividing the sample by gender, the study found school meals had a positive impact on girls' morning attendance, while rations had a significant positive impact on the attendance of boys aged 10–17. In a follow-up study, [Adelman et al. \(2019\)](#) report that the prevalence of anemia in adolescent girls aged 10–13 exposed to any of the programs declined by a significant 24 p.p. relative to the control group, with no difference by modality. These results lend support to the potential of FFE programs for increasing school participation and nutrition among IDP children.

The third study is set in the Masisi territory in the Democratic Republic of Congo, which has been plagued by intense civil war for much of the past two decades. After a peace deal in 2003, renewed fighting erupted in 2008, displacing millions. At the time of the intervention (2011), the territory hosted 1.7 million IDPs. Through an RCT, [Aker \(2013\)](#) compared the effects of an UCT vs. vouchers to be spent on food and non-food items at pre-organized voucher fairs. The transfer was implemented by Concern Worldwide, an international humanitarian actor, over a seven-month period. The transfer amount—about US\$130, corresponding to two-thirds of total annual income per capita—and timing of delivery were equivalent across the two modalities. The program targeted IDP households in one informal camp. In both intervention groups, there was an increase in the number of meals per day among children below 15 years old, with different magnitudes across modalities (from 1.29

at baseline to 1.71 for voucher and 1.40 for cash group, respectively). However, IDP households receiving cash were more likely to use the transfer to pay for school fees than households receiving vouchers, suggesting that cash, being more fungible, can empower households to allocate their incomes across child development goals.

Finally, [Grijalva-Eternod et al. \(2018\)](#) investigated the effects on nutrition of a cash and in-kind transfer to IDPs living in refugee camps near Mogadishu, Somalia, in 2016. Since 1991, political instability and conflict have disrupted local agriculture and trade, intensifying the effects of droughts and food price volatility on food security, while insecurity and conflict-induced displacement challenged access to humanitarian aid. The program, run by Concern Worldwide, comprised of a monthly UCT of US\$84 per month (equivalent to the cost of a minimum expenditure basket) for five months, a once-only distribution of a non-food-item, and the free provision of piped water through taps. The study adopted a cluster non-RCT design, whereby IDPs were selected based on vulnerability criteria, while control camps were picked from the same geographical area. The transfer increased child dietary diversity by half of a food group among children aged 6–59 months but it did not reduce acute malnutrition, likely because transfers might not have been sufficiently large, or they may not have been used in the most nutritionally-optimal way because of limited market choices.

### *Contexts Characterized by Conflict and Protracted Fragility, Chronic Vulnerability, and Weak Institutions*

#### *Conflict*

The six evaluations presented in this section investigate the impact of social protection programs at different stages of conflict. The first three studies—[Ecker et al. \(2019\)](#), [Schwab \(2019\)](#), [Schwab et al. \(2013\)](#)—have a low or very low risk of bias and are all set in Yemen during 2011–13, a period characterized by widespread political instability before the official outbreak of civil war. During this period, large civil unrest was accompanied by sporadic and localized violence. Social protection was used to prevent individuals from engaging in violence for economic reasons, and to support living conditions in the face of possible conflict intensification and other shocks ([Ecker et al. 2019](#); [Schwab 2019](#)). Thus, these programs provide examples of using social protection to prevent violence escalation in a pre-conflict phase and to mitigate the detrimental effects of political instability on welfare. While all studies focus on the effects of transfers on child nutrition, the implementers and geographical coverage of the programs differ: [Ecker et al. \(2019\)](#) focus on the evaluation of the Social Welfare Fund (SWF), a pre-existing, government-led UCT implemented across the whole of the country, while [Schwab \(2019\)](#) and [Schwab et al. \(2013\)](#) assess a WFP program that distributed either cash or food transfers (around US\$49) in two

governorates on a bimonthly basis over approximately eight months between August 2011 and April 2012.

We start with [Ecker et al.'s \(2019\)](#) study. This implemented a quasi-experimental methodology combining longitudinal data from the National Social Protection Monitoring Survey with household exposure data to different conflict intensities to estimate the effects of the national UCT program on acute child malnutrition. The program started in 2008, before conflict began, and targeted chronically poor households and households with vulnerable members. The monthly UCT (about US\$18.64) mitigated the effects of the early stages of the conflict on preschoolers' acute malnutrition. Further, the protective effect of the transfer was more marked among beneficiary households that received regular payments, possibly due to improved consumption smoothing. Thus, this evaluation provides an example of how a preexisting government-led social protection program can be used to support households while political instability escalates. By contrast, [Schwab et al. \(2013\)](#) and [Schwab \(2019\)](#) assess the effects of WFP cash and food transfers on children's diets and labor, respectively. The WFP program relied on the SWF beneficiary list for the targeting of transfers, and transfers were distributed in coordination with local partners (schools and the post service), which provides an example of how existing social protection systems and local institutions can be employed by humanitarian actors for crisis response. Through an RCT design, [Schwab et al. \(2013\)](#) estimate intervention impacts on child minimum dietary diversity, finding that children aged 6–23 months living in food beneficiary households were 16 percent less likely to obtain a minimally diverse diet relative to peers in the cash arm. Despite consuming approximately 100 less calories per day than food recipients, the cash transfer group ate higher-value food such as animal products. In a companion study, [Schwab \(2019\)](#) found that the extensive margin of child labor for children aged under 14 declined in both food and cash households by 4 and 3 p.p. respectively, although only the estimate on the former was significant. However, the timing of the baseline survey, which occurred prior to the beginning of the school year among much of the beneficiary sample, would suggest some caution in interpreting this result.

The next three studies we review, [Aurino et al. \(2019\)](#), [Tranchant et al. \(2019\)](#), and [Wald and Bozzoli \(2011\)](#) evaluate social protection in the aftermaths of peak conflict, although lower-intensity violence was still present. The former two papers assess the impact of emergency food assistance in Mopti, Mali, with low risk of bias. Between 2012 and 2013, the region, already characterized by economic, climatic, and political fragility, was the stage for widespread violence involving rebel groups on the one hand, and militaries from Mali and France on the other. During this phase, government services and development programs were interrupted and only humanitarian assistance was able to reach affected populations. The two studies used quasi-experimental designs combining difference-in-differences and propensity score matching to analyze the impact of WFP's GFD and school feeding implemented



in 2014–15, following the liberation of the occupied zones and a relative return to normalcy. GFD consisted of a household ration of food supplies, while school feeding provided a free midday meal to primary school children. Prior to the crisis, school feeding was run by the government but financing and implementation moved to WFP with the conflict. Therefore, international humanitarian assistance in this setting combined support for an already-existing governmental program with ad-hoc implementation of emergency aid in the form of GFD. School feeding increased enrollment by 11 p.p. and by about an additional half-year of completed schooling as compared to children not accessing the program, with slightly larger effects for girls. Household receipt of any assistance led to larger increases in enrollment in areas that were more conflict-affected, highlighting a potential for school feeding to promote educational access among most conflict-affected children. However, when looking at attainment, results for school feeding were driven by children residing in areas not in the immediate vicinity of the conflict, indicating that while children may be formally enrolled in school, attendance may still be patchy in higher-conflict intensity areas due to insecurity or higher opportunity costs. With regards to GFD, school attendance among boys residing in households receiving GFD declined by about 20 percent over the comparison group, and was mostly driven by children in high-conflict areas. Boys from GFD households, in particular, expanded their participation in work if residing in high-intensity conflict areas, while girls in school feeding households reduced their share of work or shifted towards activities that were more compatible with school attendance. Overall, these results point to the fact that in order to effectively improve schooling, social protection needs to be designed in a way that is able to offset the opportunity costs of education relative to participation in child labor, as these costs can be particularly high in areas that are most affected by violence. In a companion paper, [Tranchant et al. \(2019\)](#) explore the effect of the same interventions on height of children aged 2–15 years old. Despite the positive effects of receiving any food assistance on household food security, child height did not change, except for children from households receiving two modalities of food assistance in low-conflict intensity areas, which experienced an increase in height by 8 percent with respect to comparison households. This result may be driven by better overall conditions in areas that were not as affected by the conflict (e.g., better markets, food security, more facility in receiving aid, etc.).

Finally, [Wald and Bozzoli \(2011\)](#) explore the contribution of a nation-wide CCT program in reducing the constraints to children's education in conflict-affected areas in Colombia. The study has a medium risk of bias. The Colombian conflict was a half-century long, low-intensity war between the government and guerrilla groups, which led to the internal displacement of around 4.2 million people between 1998 and 2002 only, a period characterized by conflict intensification. The study was conducted in the aftermath of this period, and assessed the effects of the CCT between 2002–2006. At that time, the government concentrated its efforts on regaining



state control over the whole territory. Therefore, this study tests the efficacy of social protection in reducing damages from prolonged violence exposure and in reinforcing government control after a high-intensity phase of the crisis. Focusing on rural areas only, the authors find that CCTs had a higher effect on enrollment for children aged 8–17 years living in conflict-affected areas, as compared to children from non-conflict areas. On the contrary, the impact of the program on grade progression was only significant at a low level of violence, which again points to the importance of safety considerations, as well as demand- and supply-side constraints for effectively shifting attendance upwards during conflicts.

### *Post-Conflict*

We identified five studies evaluating the impact of social protection on child development in the recovery phase following a long-lasting conflict. Despite being implemented even years after conflicts ended, these programs are set up with a humanitarian aid purpose and are funded or co-managed by humanitarian institutions with the aim of supporting human capital formation and the overall resilience of affected households. In such contexts, which are characterized by in-depth and protracted institutional fragility, humanitarian social protection offers a medium-term social assistance tool to address poverty and vulnerability, reduce the risk of future violence through human capital investment, and lay a basis for the establishment of future social protection systems.

Three studies focus on the effects of social protection on health services utilization with a medium risk of bias: [Lin and Salehi \(2013\)](#) and [Edmond et al. \(2019\)](#) analyze the effects of two CCTs in Afghanistan, while [Rosas Raffo and Sabarwal \(2016\)](#) assess the effects of a cash-for-work program on health check-ups among under-5 aged children in Sierra Leone. With regards to the Afghanistan studies, both programs were implemented by the Ministry of Public Health (MoPH) with the support of international actors and they can be considered as recovery interventions. [Lin and Salehi \(2013\)](#) evaluate the effects of a CCT launched in 2009 in collaboration with the Global Alliance for Vaccines and Immunizations to increase utilization of institutional delivery of the diphtheria-tetanus-pertussis (DPT3) vaccination. At the time, early reconstruction efforts had led to improvements in health, education, infrastructure, agriculture, and economic growth. Nevertheless, Afghanistan still faced a complex array of political and socio-economic challenges, and insecurity remained high. The evaluation included four arms: in the first one, women received cash conditioned on delivering their baby at a health facility (around US\$6) and on bringing their child into a clinic for a DPT vaccination (around US\$3). In a second arm, community health workers received around US\$3 per completed referral for DPT3 vaccination and institutional delivery. In the combined arm, both mothers and community health workers received incentives; while no incentives were provided

in the control arm. In comparison with the intervention arms providing incentives only to families or to community health workers, the combined arm showed an 8 p.p. increase in child health service utilization, suggesting a positive interaction of demand- and supply-effects in such a challenging context.

Edmond et al. (2019) conducted a non-randomized, population-based intervention study to assess the impact of a CCT conducted in six districts of Afghanistan by the MoPH and UNICEF between December 2016 and December 2017. The transfer aimed to promote institutional delivery, but the study also assessed effects on antenatal and postnatal care, which were not incentivized by the program. Mothers would receive a transfer of US\$15 for institutional delivery, as well as messages by trained health workers on the importance of delivering in a health facility, and of antenatal and postnatal care. At that time, violence had increased over the previous two years, and the context in which the program was run was characterized by insecurity, anti-government feelings in small villages, and limited decision-making power for women. Difference-in-differences estimates show no change in the prevalence of facility delivery, likely due to poor program coverage and increasing insecurity, but the program did increase access to antenatal and postnatal care, which may have been driven by the effectiveness of basic messages promoted by community health workers on these areas. Importantly, effects were lower among poorer women, who appeared particularly hard-to-reach due to lack of trust and remoteness.

Public work programs have been implemented in several post-conflict settings, such as Guinea-Bissau, Liberia, Nepal, Rwanda, and Sudan because they provide short-term employment to poor households that experience deprivation during and in the aftermath of conflicts, and help to address youth unemployment, ex-combatant reintegration, and infrastructure reconstruction (Rosas Raffo and Sabarwal 2016). However, evidence on their effectiveness is extremely limited. Through an RCT, Rosas Raffo and Sabarwal (2016) focus on the impacts on health service utilization and education of a public work program targeted at youth aged 15–35 years, run by the government of Sierra Leone with the support of the World Bank. The country was devastated by an 11-year armed conflict that ended in 2002. Beneficiaries were entitled to a minimum of 50 days and a maximum of 75 days of work at a daily wage rate of approximately US\$1.80 in 2012. The program increased health facility access for boys under-5 years old from treatment households. Treated households also reported spending 16 percent more on drugs and medications than the control group. Interestingly, the intervention did not have any specific design features intended to encourage a health-seeking behavior, thus the higher income generated by the program may have relieved household budget constraints to health care access. With regards to education, the intervention increased school absenteeism among adolescents that were still enrolled in school, with the average number of school days missed in the four weeks before the survey increasing by nearly 51 percent (0.2 days) among treated households. There was also a decline of about 27 percent in

household spending on schooling in urban areas. However, there was no change in child enrollment or in participation in the paid labor market. The rise in school absenteeism might have been due to an increase in the intensive margin of adolescent labor to make up for older household members being employed by the program.

[Sulaiman \(2010\)](#)—also with a medium risk of bias—assessed the effects of a food-for-training and income generation program on school enrollment in Southern Sudan.<sup>7</sup> The country was affected by a 21-year-long conflict, leaving a very fragile situation characterized by some of the worst human development indicators globally and strong dependence on international humanitarian aid. The program was initiated by BRAC-Southern Sudan, in collaboration with WFP and Consultative Group to Assist the Poor. The operation aimed to reintegrate returnees and foster improvement of the political, economic, and social conditions of conflict-affected communities. Each participant household received food for nine months, with amounts following WFP guidelines for food rations for training programs. The transfers were not conditional on the amount of work provided by beneficiaries. Although the intervention did not impact on the economic activity of treated households overall, the program led to a reduction in child labor in terms of both hours worked and children's reported earnings, as well as to an increase in girls' school enrolment (about 10 p.p.).

Finally, [Gilligan et al. \(2013\)](#) analyzed the impact of a WFP cash-vs.-food intervention in Karamoja, Northern Uganda. The study has a very low risk of bias. The program started in 2011, four years after the ceasefire that ended a 20-year war between the Ugandan government and the Lord's Resistance Army, which killed and displaced millions in the region. Karamoja also suffers from recurrent droughts, poor safety, and high food insecurity. The intervention took place in ECD centers and was conducted as a scale-up of an ongoing ECD program run by UNICEF and the Ministry of Education. The study randomly assigned 98 villages with ECD centers to iron-fortified take-home rations, cash, or control arms. The transfer size was substantial, roughly equating to US\$10.25 or the cost of covering 1,200 calories per day over a six-week period. Transfers were distributed every six-to-eight weeks for a year, preferably to the child's mother. While transfers were originally intended to be conditional on children's attendance at the ECD centers, the conditionality was removed due to operational challenges in monitoring attendance, linking attendance records to children, and listing all beneficiaries. Thus, they become unconditional, requiring only that the child be enrolled in the ECD center and be between 3–5 years old. Cash transfers significantly increased the number of days in which children 1–7 years old consumed starches in the past week by 0.448 days, as compared to control, while food transfers did not have a statistically significant effect. The prevalence of stunting or underweight did not change in either arms. Cash transfers also significantly reduced the prevalence of anemia by about 10 p.p. for children aged 54–83 months. Food transfers, on the other hand, decreased the prevalence of anemia for children aged 36–53 months by 9 p.p., but increased this prevalence for children

aged 6–36 months. The authors attributed this surprising result to the deteriorating hygiene conditions of ECD centers in the food arm, which may have increased infection rates for younger children. The study also showed a significant positive impact of cash transfers on other child development dimensions such as visual reception, receptive language, expressive language, reasoning, memory, and executive function. The effects were especially evident for children aged 54–71 months. Food transfers had no overall effect on ECD outcomes.

### *Recurrent Slow-Onset Crises in Contexts of Protracted Institutional Fragility*

This section presents a series of studies evaluating programs to mitigate the potential damages of slow-onset anticipated crises, e.g., droughts or repeated floods, in fragile contexts with exacerbated risks of poverty for climatic and socioeconomic reasons. These programs have the goal of supporting recovery from crises while building long-term resilience and reducing the risk of future emergencies. With a few exceptions, available studies focus on nutrition and food security, with most programs funded and implemented by international humanitarian actors. With the exception of one paper, all studies are set in the Sahel region.

We start with [Fenn et al. \(2017\)](#), who assessed the effects of a cash and voucher program implemented by Action Against Hunger, with funding from the European Union, among households with at least one child aged 6–48 months in areas affected by repeated floods and droughts in Pakistan. The study has a very low risk of bias. The majority of the population in the intervention area is highly vulnerable to environmental shocks due to high dependence on agriculture. The cluster RCT entailed multiple evaluation arms, including a standard cash transfer of approximately US\$14, a double cash of US\$28, a fresh food voucher with a value of US\$14, and a control group. All intervention modalities resulted in children having a largely reduced probability of being stunted and an improvement in linear growth at both six-month and one-year follow-ups. Also, regardless of what transfer was received, height growth faltered less in the intervention groups than in the control group at six months and at one year, indicating improved nutritional resilience. Results also showed a 48 percent decrease in the odds of a child being wasted (low weight for height) in the double cash arm, and an improvement in ponderal growth in both the fresh food voucher (+16 height-for-age zscores [WHZ]) and the double cash (+11 WHZ) arm after six months from the end of the intervention, but not after a year, suggesting that the amount of cash given was important in determining longer-term impacts. No intervention effects were reported for anemia. However, children in the fresh food voucher arm had significantly lower hemoglobin levels, which the authors attributed to purchasing restrictions applied to food-based vouchers.

[Guevarra et al. \(2018\)](#) and [Saboya et al. \(2018\)](#) evaluated WFP interventions to prevent acute child malnutrition in Sudan and Chad respectively by using

quasi-experimental methods, with medium and low risk of bias, respectively. These programs targeted young children from households residing in very food-insecure and fragile areas, and delivered multiple forms of treatment and prevention against moderate and acute malnutrition (MAM), including GFD, blanket supplementary feeding, targeted supplementary feeding, and activities supporting assets access (e.g., land rehabilitation, water harvesting, etc.). [Guevarra et al. \(2018\)](#) assessed the impact on several indicators of acute malnutrition of introducing a targeted, food-based prevention of acute malnutrition program (treatment) in addition to a targeted supplementary feeding program (control). Overall, no differences were found for the age group 6–59 months. However, a 12 percent decrease in the prevalence of children at risk of malnutrition was reported for the group 6–23 months. [Saboya et al. \(2018\)](#) assessed the effectiveness of introducing a blanket supplementary feeding program (BSFP) on the incidence of MAM among children aged 6–23 months already targeted for supplementary feeding programs for children under-5 and pregnant and lactating women. The program was run during the lean season in highly food-insecure areas of Chad. Receiving the BSFP reduced MAM incidence by 5 p.p. among children aged 6–23 months, with positive spillover effects on older siblings. Program effects were larger for children living in households relying mostly on agriculture, which are most vulnerable to droughts.

Several studies with a very low or a low risk of bias have evaluated social protection programs, both cash- and food-based, addressing food insecurity in Niger, which experienced recurrent droughts between 1980 and 2005. During subsequent crises in 2005–2006, 2008–2009, 2010, and 2012, food insecurity increased further due to crop failure and unaffordability of market-sourced foods ([Aker et al. 2016](#)). These events led to international calls for enhanced governmental and humanitarian response to famine threats, and various interventions were run and funded by international actors after 2008 ([Sibson et al. 2018](#)). In general, cash-only programs do not seem to have an impact on malnutrition in this setting, with the exception of mobile-money transfers ([Aker et al. 2016](#)). Food transfers, either combined with cash or assets, had some positive effects on child nutrition outcomes. We note study results are not strictly comparable, as estimates consider different indicators and age groups.

[Brück et al. \(2019\)](#) compare child nutrition outcomes of households receiving no assistance, receiving nutrition-specific assistance (NS), or receiving nutrition-specific assistance and nutrition-sensitive food for asset-based programming (NSNS) under the WFP's Protracted Relief and Recovery Operation in Niger. The study found no statistical differences between the NS and reference group for children aged 0–59 months. However, middle upper-arm circumferences of children aged 6–23 months in the NSNS group was significantly larger than for children in comparison households. Thus, combining an agriculturally-sensitive intervention with standard food assistance can be more effective in reducing malnutrition than food assistance alone.



Aker et al. (2016) conducted a cluster RCT to compare a cash transfer delivered via mobile phones with a standard cash delivery modality in areas of Niger particularly exposed to recurrent droughts and food crises. The program was implemented by Concern Worldwide in the face of the 2009–10 drought. One-third of sample villages received a monthly mobile money transfer of approximately US\$45 over a five-month period; another one-third of villages received manual cash transfers of equivalent value; and the remaining one-third received manual cash transfers plus a mobile phone, as, due to the crisis, the authors could not collect data from a pure control group. All program recipients were women. Children aged under-5 in electronic-payments villages ate an additional one-third of a meal, as compared with peers in other arms. Their dietary diversity was also 12–14 percent higher than children in other arms and such improvement lasted six months after the program ended. These improvements did not translate into changes in malnutrition, possibly due to child dietary diversity remaining too low to have a substantial nutritional impact. These results for the mobile-transfer women recipients were partially explained by decreases in time spent on obtaining the transfer, which may have allowed them to engage in additional productive activities, as well as increased bargaining power within the household.

Sibson et al. (2018) evaluated an intervention conducted by the Research on Food Assistance for Nutritional Impact consortium during the lean season in 2015, consisting of two cash delivery modalities with different timing and size of the transfers. The authors tested whether starting the UCT two months before the lean season, but providing the same total amount of cash (around US\$180) over six months instead of four, was more effective in reducing the prevalence of acute malnutrition of children in beneficiary households and with respect to the general population (control group). The target of the intervention was households with pregnant and lactating women and children aged 6–59 months. Beneficiaries in both arms also received supplementary feeding. There were no differences in nutritional impacts by arm. The authors suggest that the reduced transfer size, plus contingent factors such as malaria seasonality deteriorating health at the time of that time of the year over the season would explain why the longer-transfer was unsuccessful.

Hoddinott et al. (2018) compared cash-vs.-food transfers implemented by WFP during the six-month period before the September 2011 harvest in Zinder region, a famine-affected area of eastern Niger. Food and cash transfers, valued around US\$50 per month, were delivered with the same degree of frequency and timeliness. Overall, the food transfer had a larger positive impact on measures of food consumption and diet quality for children than cash, both at the peak of the lean season and after the harvest. Households in the food arm also reduced the use of coping strategies (e.g., borrowing from relatives, purchasing food on credit, reduced portions, etc.). On the other hand, households receiving cash spent more on agricultural inputs.



Finally, [Langendorf et al. \(2014\)](#) compared the impact of different combinations of food and cash interventions for acute malnutrition prevention supported by Forum Santé Niger and Médecins Sans Frontières on households with a young child measuring 60–80 centimeters. From August to December 2011, one treatment arm received cash (US\$52 per month) plus either: A high-quantity lipid-based nutrient supplements (HQ-LNS), or medium-quantity lipid-based nutrient supplements (MQ-LNS), or Super Cereal Plus (SC+). Another arm received SC + and family food rations. Two groups received HQ-LNS or SC + only. And one group received cash only (US\$59 per month). Incidence of moderate acute malnutrition among children was two-times lower in arms receiving a food supplement combined with cash compared to those getting cash only, or with the supplementary food only group. In addition, the incidence of severe acute malnutrition was three times lower in the SC+/cash group compared to the SC + only group.

## Mapping Evidence Gaps for Improving Social Protection Response in Crises

This review documents the relative paucity of rigorous studies investigating the role of social protection in supporting child development during different crises and within different institutional and contextual scenarios. Despite limited evidence, there are some stylized findings that emerge from existing studies. First, humanitarian social protection can be effective in supporting children's schooling if the transfer is large enough to offset the opportunity costs of schooling—which are particularly high during crises—and if there are no major supply-side constraints. This positive effect is common across different scenarios, except for slow-onset crises, for which we do not have evidence. Further, both cash- and food-based interventions seem to be generally effective, provided that transfer size and supply factors are adequate. However, there is a large evidence gap on intervention effects on learning, cognition, and psychosocial skills, especially for school-age children.

Second, the majority of studies focusing on child nutrition report a favorable effect of transfers on number of meals and dietary diversity. However, such improvements do not translate into nutritional impacts in every circumstance, as shown by earlier reviews in non-humanitarian settings ([Manley et al. 2013](#)). Importantly, we do observe considerable heterogeneity in treatment effects as studies often compare different transfer modalities, also within the same program. Further, even when considering the same setting and studies of similar quality, as in the Niger studies, there is no consistency around which particular modalities, transfer size, and timing of implementation can be more effective. Broadly speaking, in contexts of chronic food insecurity, interventions combining cash with food or lipid-based supplements tend to be more successful for addressing acute malnutrition than providing cash

alone. This is consistent with [Webb et al.'s \(2014\)](#) recommendations for emergency nutrition assistance. Further, a few reviewed studies highlight the importance of combining cash or food transfers with nutrition-sensitive interventions such as assets provision, especially among populations that are highly dependent on agriculture and vulnerable to recurrent climatic shocks. Importantly, as noted already in non-emergency settings, there is no universal answer to whether cash would work better than food ([Gentilini 2015](#)). Some of our revised studies seem to point to greater increases in dietary diversity for cash groups, while food approaches seem to foster caloric intakes, as also shown in [Hidrobo et al. \(2014\)](#). Thus, the choice of which modality to use will critically depend on the food security situation (e.g., food availability, prices and markets, and other barriers to utilization), availability of complementary inputs such as water, sanitation, or nutritional knowledge, overall program goals, efficiency, and cost-effectiveness of transfer delivery ([Lentz, Passarelli, and Barrett 2013](#); [Tappis and Doocy 2018](#); [Longhurst and Sabates-Wheeler 2019](#)).

This reflection leads us to our third message, which emphasizes that successful approaches to humanitarian social protection for child development need to be tailored to the specific type of crises and to the institutional and broader contexts in which the crisis takes place. This is because these factors ultimately determine the feasibility of implementing humanitarian social protection and its uptake by targeted beneficiaries. Taking school feeding during conflicts as an example, if households perceive that schools will be targeted by violence because they receive food, parents may decide to keep children at home. Conversely, if schools are recognized as safe places, school attendance may increase comparatively more in areas where conflict is more intense. Uptake will also vary substantially by child age, gender, poverty, remoteness, ethnicity, and so on, as these factors shape children's opportunity costs of schooling, parental perceived returns to education, or access to services. For instance, insecurity and fear may particularly affect girls' access to schools if perceptions of insecurity are aligned with social norms related to the view that women are more likely to be targets of violence ([Justino 2016](#)), while educational opportunity costs may be larger for adolescent boys, if they are highly involved in agriculture or work outside the household. Thus, social protection should be targeted and designed bearing in mind these further elements of complexity. Unfortunately, only a few studies have investigated heterogeneity by child and household characteristics, leaving an important gap for future research.

By the same token, transfer design and effectiveness should vary based on crisis intensity and phase, as these factors will determine variation in accessibility to transfers and services, or condition households' choices, for instance between child schooling, labor, or marriage. For instance, while imposing an education conditionality, as in the case of many CCTs or school feeding programs, can contribute to promoting schooling and a relative sense of normalcy during long-lasting and low-escalation

crises, it would be challenging and even unethical to impose conditions on transfers during or in the immediate aftermaths of peak crises. Indeed, as shown in non-crisis settings, imposing conditionalities could undermine the transfer's social protection role by denying benefits to most vulnerable households (Baird, McIntosh, and Özler 2011). Further, implementation of conditionality may be straining or infeasible in fragile institutional settings, as its enforcement requires stable institutions that are familiar with similar processes. These considerations, together with those related to overall objectives of the program, transfer size, duration, and delivery, need to be carefully assessed when designing the transfer. Further, supply-side constraints such as poor service quality and availability can be particularly marked for crisis-contexts, where service providers may be absent, infrastructure damaged, and access limited by insecurity. Thus, coupling transfers to supply-side interventions, as in some "Cash-plus" approaches, could be particularly effective.

Elaborating prompt responses to emergencies also raises questions on how to rapidly get assistance to people most in need, avoiding targeting errors. Also, there may be tradeoffs between speed of payments and targeting. Traditional arguments suggest that identifying beneficiary communities by geographical targeting based on small area poverty mapping and leaving within-community redistribution to local authorities would be a faster way to deliver services bypassing the absence of information on household's pre-crisis livelihood and losses.<sup>8</sup> However, local power inequalities and corruption might make this within-community targeting regressive, and compromise program effectiveness (Özler 2020). In case of shock-responsive actions, information from existing programs, e.g., lists of potential future recipients or households who have been assessed but classified as ineligible, can help identify beneficiaries and improve targeting outcomes. However, limited evidence exists to date from settings where existing social protection systems were in place and had been adapted to respond to shocks by governments or humanitarian actors.

Given the variety of programs and crises included in our review, considerations on why some programs worked in certain settings would be central for drawing conclusions on the generalizability and the applicability of such evidence to other contexts, with the latter being a measure of whether programs can be successfully adapted to different crises and settings (Williams 2020). With this aim, we integrated the description of empirical findings with details on financing, operations, logistics, and the context in which the intervention was set up. Unfortunately, most studies report very little on operational aspects, mechanisms, and contexts, focusing largely on treatment effects, although these aspects could jeopardize program's success. This limits the possibility of mapping mechanisms to determine intervention success and of providing policy-makers with a useful starting point for replicating programs in similar, but not identical, settings. In particular, it would be desirable if future work would include more details on design choices for transfer modalities and sizes, selection of the

target group, and the institutional context, which would help to shed light on context-specific operational choices and constraints faced by social protection implementers.

Another limitation that emerges from our review is the lack of attention for the unintended consequences of social protection programs, which may weaken their safety net goals (Filmer et al. 2018). In fragile or crisis contexts, where investments from government and private sectors are scarce and the local economy strictly relies on humanitarian aid, these distortions may be amplified (Barrett 2006). So far, analysis of general equilibrium effects, e.g., distortions on prices of local products where these goods are purchased in significant quantities by humanitarian actors, that may indirectly affect the beneficiaries and generate inequalities within targeted communities, is generally lacking.

A further evidence gap relates to the limited range of child development dimensions considered by available studies. First, expanding the focus beyond nutrition and schooling to other aspects of child development that are particularly salient during crises (e.g., mental health, early marriage and childbearing, health risk behaviors, and child protection) would be highly beneficial. Secondly, specific attention should be given to the trade-offs between different dimensions of child development affected by the interventions. For instance, while Tranchant et al. (2019) showed that GFD expanded household food security in Mali, Aurino et al. (2019) found that the same program also increased child labor. This indicates that intervention design, targeting, and evaluations need to take account of potential unintended program effects on alternative dimensions of child development, and the trade-offs between them. Finally, no study provided longer-term effects of interventions.

To conclude, children are currently exposed to historically unprecedented levels of crises, likely disrupting their developmental trajectories. Humanitarian social protection holds the promise of mitigating the detrimental effects of crises on child development. This review took stock of existing evidence on the role of cash, food, and other transfers on child development in crisis-settings to identify gaps where further rigorous evidence is urgently needed. We hope this article can contribute to stimulating future research that can support actions so that all children can achieve their full human potential, coherently with the Sustainable Development Goals agenda of leaving no-one behind.

## Notes

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1. For a broader discussion of crisis definition see the European Commission initiative on Social Protection across the Humanitarian-Development Nexus (SPaN) and [Gentilini et al. \(2018\)](#).
2. For full details on the categorization of crisis proposed by the International Federation of Red Cross and Red Crescent Societies refer to the organization website.
3. We thank one of the reviewers for this perspective. A similar system has been used in Jordan, as noted by [Ulrichs and Sabates-Wheeler \(2018\)](#).
4. The analysis focuses on child nutritional outcomes as studies measuring intervention effects on household food security may not take account of intra-household distribution issues.
5. The definition of child protection in emergencies is from [Save the Children \(2014\)](#).
6. A similar approach has been used by [Kristjansson et al. \(2007\)](#) in order to compare quality of experimental and quasi-experimental studies.
7. This territory then became South Sudan in 2011.
8. For a discussion on targeting in face of shocks, see [Alderman and Haque \(2006\)](#).

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## **Supplementary Online Appendix**

### **Social Protection for Child Development in Crisis: A Review of Evidence and Knowledge Gaps**

Elisabetta Aurino and Sara Giunti

Appendix A1. Quality Assessment for Evaluating Risk of Bias

Study	Methodology	Randomization (Y/N)? If Y, was the randomization appropriately conducted?	Double-blind randomization (Y/N)?	Assessment and treatment, if necessary, of sample attrition (Y/N)?	Sample representativeness (Y/N)?	Reliability of treatment status assignment (Y/N)?	Adjustment for confounders if needed (Y/N)?	Quality of outcome measurement?*	Total score	Risk of bias
Adelman et al. (2019)	Unblinded cluster-RCT	1	0	1	1	1	1	1	6	Very low
Aker et al. (2011)	RCT	1	0	1	1	1	1	0	5	Very low
Aker (2013)	RCT	1	0	1	0.5 (one IDP only)	0.5 (risk of contamination)	1	0	4	Low
Aker et al. (2016)	RCT	1	0	1	1	1	1	1	6	Very low
Alderman et al. (2012)	RCT	1	0	1	1	1	1	0.5	5.5	Very low
Aurino et al. (2018)	DiD combined with PSM	0	0	1	1	0.5 (self-reported)	1	0.5	4	Low
Battistin (2016)	RDD	0	0	1	0	1	1	0	3	Medium
Brück et al. (2019)	IV	0	0	1	1	1	1	1	5	Very low
de Hoop et al. (2019)	RDD	0	0	1	1	1	1	0	4	Low

Study	Methodology	Randomization (Y/N)? If Y, was the randomization appropriately conducted?	Double-blind randomization (Y/N)?	Assessment and treatment, if necessary, of sample attrition (Y/N)?	Sample representativeness (Y/N)?	Reliability of treatment status assignment (Y/N)?	Adjustment for confounders if needed (Y/N)?	Quality of outcome measurement?*	Total score	Risk of bias
Del Carpio and Macours (2009)	RCT	1	0	1	1	1	1	0	5	Very low
Ecker et al. (2019)	Quasi-experimental (degree of conflict intensity)	0	0	0	1	1	1	1	4	Low
Edmond et al. (2019)	DiD	0	0	0	1	0.5 (self-reported)	1	0.5	3	Medium
Fenn et al. (2017)	Cluster RCT	1	0	1	1	1	1	0.5	5.5	Very low
Gilligan et al. (2013)	RCT	1	0	1	1	1	1	0.5	5.5	Very low
Grijalva-Eternod et al. (2018)	Non-randomized cluster control trial	0	0	1	1	1	1	0	4	Low
Guevarra et al. (2018)	Stepped wedge cluster RCT	0	0	0	1	1	0	1	3	Medium



Study	Methodology	Randomization (Y/N)? If Y, was the randomization appropriately conducted?	Double-blind randomization (Y/N)?	Assessment and treatment, if necessary, of sample attrition (Y/N)?	Sample representativeness (Y/N)?	Reliability of treatment status assignment (Y/N)?	Adjustment for confounders if needed (Y/N)?	Quality of outcome measurement?*	Total score	Risk of bias
Hoddinott et al. (2018)	RCT	1	0	0	1	1	1	0.5	4.5	Low
Langendorf et al. (2014)	RCT	1	0	0	1	1	1	0.5	4.5	Low
Lehmann and Masterson (2014)	RDD	0	0	1	1	1	0	0	3	Medium
Lin and Salehi (2013)	Quasi-experimental (Inverse probability weighting)	0	0	0	0	1	1	1	3	Medium
Macours et al. (2012)	RCT	1	0	1	1	1	1	0.5	5.5	Very low
Rosas Raffo and Sabarwal (2016)	RCT	1	0	0	0	1	1	0	3	Medium
Saboya et al. (2018)	IV	0	0	1	1	1	1	0.5	4.5	Low

Study	Methodology	Randomization (Y/N)? If Y, was the randomization appropriately conducted?	Double-blind randomization (Y/N)?	Assessment and treatment, if necessary, of sample attrition (Y/N)?	Sample representativeness (Y/N)?	Reliability of treatment status assignment (Y/N)?	Adjustment for confounders if needed (Y/N)?	Quality of outcome measurement?*	Total score	Risk of bias
Schwab et al. (2013)	RCT	1	0	1	1	1	1	0	5	Very low
Schwab (2019)	RCT	1	0	1	1	1	1	0	5	Very low
Sibson et al. (2018)	RCT	1	0	1	1	1	1	1	6	Very low
Sulaiman (2010)	RCT	0	0	1	0	1	1	0	3	Medium
Tranchant et al. (2019)	DiD combined with PSM	0	0	1	1	0.5 (self-reported)	1	0.5	4	Low
Wald and Bozzoli (2011)	Natural experiment	0	0	0	1	1	1	0	3	Medium

Note: \*Score equal to 1 for objective measurements of outcome, e.g., administrative data on schooling or anthropometric measures measured by interviewers; Score equal to 0 for respondent-reported measures from survey data; Score equal to 0.5 for a combination of the two.