Cash and In-Kind Transfers in Humanitarian Settings

A Review of Evidence and Knowledge Gaps

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Disclaimer

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Executive Summary

BACKGROUND

1. In 2019, the World Food Programme (WFP), through its Office of Evaluation (OEV), launched a new Impact Evaluation Strategy 2019–2026 with an aim to generate a rigorous evidence base that is operationally relevant and useful for WFP programmes. As part of this initiative, centralized impact evaluations involving several countries are now implemented through evaluation "windows" (WFP, 2019). These window-level impact evaluations are developed in alignment with WFP's key evidence priorities, including cash-based transfers, gender equality, climate change and resilience, and school-based programming. One cross-cutting thematic area across these evidence priorities is the need to create impact evaluation evidence for improving the practice of humanitarian assistance interventions. To this end, in partnership with WFP, the Development Impact Evaluation department (DIME) at the World Bank conducted a systematic literature review of humanitarian assistance programmes and shares the main findings in this report.

OBJECTIVE

2. An estimated 235 million people needed humanitarian assistance and social protection in 2021, an increase of more than 65 million from 2020 (UNOCHA, 2020). In addition, in 2020 over 91.9 million individuals worldwide were estimated to have been forcibly displaced due to prosecution, conflict, generalized violence, or other human rights violations (UNHCR, 2020). The need for humanitarian assistance and social protection has been exacerbated by the COVID-19 pandemic, which presents an unprecedented challenge to the humanitarian system in both scale and complexity. It is, therefore, more important than ever to have reliable and rigorous evidence on the impact of humanitarian response programmes, that is, "what works", in addressing the needs of crisis-affected populations, as well as to understand how cost-effective the implementation of such programmes is, so that donors, aid agencies, and policymakers can make informed decisions and target those in greatest need.

3. In the last decade, social protection has increasingly emerged as a policy-response tool to address poverty and hunger not only in developing contexts but also in humanitarian contexts.[1] Moreover, as part of the commitments under Sustainable Development Goal 1, the global community has agreed to expand the coverage of social protection measures for all and to achieve substantial coverage of the poor and the vulnerable by 2030 (United Nations, 2015). This expansion also includes the scale-up of social protection programmes in humanitarian contexts (fragile and conflict-affected populations).[2] Despite the growing use of social assistance programmes in humanitarian settings, there is still a dearth of reliable evidence causally linking interventions to relevant outcomes.

4. This systematic review uses evidence from quasi-experimental and experimental studies conducted in low- and middle-income countries to assess and summarize the state of the existing knowledge on the effects of non-contributory humanitarian assistance interventions on five outcome domains at the individual and household levels: (i) basic needs, (ii) financial outcomes, (iii) gender, (iv) human development, and (v) social cohesion. In doing so, we address two research questions within the context of humanitarian

1 Following Fiszbein et al. (2014), social protection encompasses: (i) social insurance and contributory schemes that protect against shocks to health or employment; (ii) labour market interventions such as job training; and (iii) social assistance programmes (or social safety nets), targeted non-contributory interventions such as cash and in-kind transfers, and labour intensive public works.

2 Social protection tools are increasingly becoming essential mechanisms in supporting distressed populations in humanitarian contexts. According to the 2020 Global Humanitarian Assistance Report, as of 2019, the total volume of cash and voucher assistance in humanitarian settings reached 5.6 billion dollars, up from 2 billion in 2015.

settings. First, what are the impacts of these humanitarian assistance programmes on individual and household-level outcomes? Second, what is the relative effectiveness and efficiency of different modalities and delivery channels in achieving their objectives? In addition, this review identifies knowledge gaps in the literature and discusses several promising future evidence avenues to help close these gaps and to support informed decision-making by policymakers.

5. In particular, we focus on the effects of conditional and unconditional cash-based transfers (CBT) as well as in-kind transfers (e.g., food or vouchers) in humanitarian settings. Our motivation for framing this review around CBTs and in-kind transfers among other types of humanitarian assistance aligns with the World Food Programme's overall implementation portfolio. According to WFP's Annual Performance Report for 2020, unconditional in-kind food distribution and CBTs accounted for the vast majority of WFP's transfers in 2020 (i.e., 87 percent of all of WFP's transfers). At the beneficiary level, 70 percent of WFP's beneficiaries in 2020 were assisted with in-kind food transfers, while one-third were reached through the use of CBTs (with some beneficiaries receiving a mix of transfers). Therefore, CBTs and in-kind transfers represent significant evidence priorities for WFP as well as the wider humanitarian sector. For ease of language, we refer to these programmes as 'humanitarian assistance' throughout this review.

6. While there have been a few systematic reviews on cash-based interventions in humanitarian contexts (Doocy and Tappis, 2018; Gentilini, 2016; Puri et al., 2017), these studies are based on a selective set of case studies. Aurino and Giunti (2021)'s review is the closest to our study. They review evidence of the impact of emergency cash, food, and other in-kind transfers, but focus on the outcomes of child development only. Our review complements existing reviews by including more recent rigorous studies that evaluated the impact of unconditional or conditional cash and in-kind transfers. We also analyse the impacts on a more comprehensive set of outcomes that have been overlooked by the existing literature, including human capital, women's empowerment, and social cohesion. Therefore, this systematic review provides an overview of the evidence to date on humanitarian assistance programmes, flagging particularly promising interventions for practitioners and policymakers, and marking a way forward for future evidence-based results.

METHODOLOGY

7. Following a standard procedure for systematic reviews, we identified eligible studies from low- and middle-income countries through academic and grey literature. In terms of the inclusion criteria, the study had to be set in a humanitarian setting, such as a natural disaster, conflict-affected setting, or health outbreak. These humanitarian crises could be emergencies (sudden onset) or more protracted crises (slow onset).[3]

8. As mentioned above, we focused our analysis on humanitarian assistance programmes, which are mainly social assistance programmes that provide aid during humanitarian crises. In this review, we included five approaches to social protection and assistance in humanitarian settings: unconditional cash transfers (UCTs), conditional cash transfers (CCTs), food transfers, vouchers, and public works (also known as food-for-assets). In this process, we excluded other types of interventions such as microfinance, WASH, community-driven development programmes or peacebuilding activities, and health or medical assistance, which are relevant for the humanitarian literature but go beyond the scope of this review.

9. In terms of methodology, we required that studies used either randomized controlled trials or quasi-experimental designs to isolate the causal effect of the intervention from other external factors that might confound the results. It is important to note that there exists a broader non-impact evaluation literature, which includes descriptive, qualitative, and mixed methods studies assessing the factors that facilitate or hinder the implementation of cash-based or in-kind transfers in humanitarian settings. Such studies provide valuable insights relating to areas such as contextual factors and beneficiary perspectives that carry important implications for programme design, scale up, and replication. However, we excluded these from our review since we were not able to determine whether it was the humanitarian assistance programme or

3 For this review, a humanitarian emergency (or crisis) is defined as a singular event or a series of events that threaten the health, safety, or well-being of a community or large group of people.

other factors that might have caused outcome changes. The search process resulted in 20 included studies that were assigned for data extraction.

10. To discuss the effectiveness of humanitarian assistance programmes and identify evidence gaps, we use a narrative approach that we complement with two metrics. First, we measure the level of evidence by the number of rigorous studies per outcome category. Second, using a vote counting method, we show the patterns across studies of statistically significant or insignificant, and positive or negative impacts.

MAIN FINDINGS

11. Despite the growing use of humanitarian assistance programmes, there is relatively little rigorous research on what works, for whom, and why. In our review, only 20 studies met the inclusion criteria for analysis. Overall, the following characteristics emerged:

a) *Experimental design:* The final sample consists of eleven journal articles, six technical reports, and three working papers. The publication year ranges from 2007 to 2020, with the number of studies growing in recent years. Most of the studies (55 percent) use quasi-experimental designs, while the remaining 45 percent use randomized controlled trials (RCT).

b) *Type of humanitarian crisis:* Most of the studies in this review (75 percent) focus on a conflict-related crisis, and they are evenly split between refugee camp and non-camp settings, while the remaining five (25 percent) focus on a natural disaster setting. We did not find any published studies that report humanitarian response impacts from a health outbreak setting.

c) *Geographic distribution*: The twenty studies cover wide geographic regions: seven studies in Africa (Ethiopia, Mali, Niger, the Democratic Republic of Congo (DRC), and Uganda), seven studies in the Middle East (Jordan, Lebanon, and Yemen), three studies in Latin America (Ecuador), and three studies in Asia (Fiji, Sri Lanka, and the Philippines).

d) *Type of humanitarian assistance intervention*: Unconditional cash transfers (UCTs) are the most common type of humanitarian assistance intervention, followed by food transfers, vouchers, conditional cash transfers (CCTs), and public works.

e) *Programme beneficiaries*: The humanitarian assistance interventions mainly target internally displaced people, refugees, severely food-insecure households, households affected by natural disasters, etc. Most of the interventions target the household head (both men and women), but a few also target only adult women. Only one intervention targets the primary caregiver of children aged 5–14.

12. There is a lot of variation in the availability of evidence for humanitarian assistance programmes across different outcome categories. We find that most evidence in humanitarian settings concentrates on basic needs outcomes, such as food security, food and non-food expenditure, and coping strategies. This is followed by studies that report household financial outcomes such as assets, income, credit, and savings, where the evidence can be characterized as emerging. On the other hand, there is a dearth of studies examining human development outcomes, such as health, education, and labour, as well as gender and social cohesion. In particular, we find that women's empowerment and gender-based violence outcomes are the least explored outcomes of social assistance programmes in humanitarian settings.

13. *The impacts of humanitarian assistance programmes vary by the types of outcomes being assessed.* We find that most humanitarian assistance programmes can effectively improve some individual and household-level outcomes compared to the control group. However, the evidence is limited to be able to draw general conclusions across outcomes and modalities:

a) *Basic needs outcomes*: Most types of humanitarian assistance interventions can effectively improve basic needs outcomes, such as food security, food expenditure, and coping strategies, compared to the control group.

b) *Financial outcomes:* Cash-based programmes, such as UCTs, vouchers, and cash-for-work improve household asset accumulation in humanitarian settings, while food assistance and food-for-work have no impact. On savings and income, the evidence is very limited and, therefore, inconclusive.

c) *Human development outcomes*: The evidence is limited to a few studies that suggest that UCTs and CCTs can positively affect education and health. However, the impact of food transfers and vouchers on these outcomes is mixed and inconclusive.

d) *Gender outcomes*: The evidence on women's empowerment and gender-based violence is very scarce and ambiguous. Some studies suggest that cash-based interventions can increase women's intra-household bargaining power or involvement in income-generating activities, while other studies do not find similar evidence.

e) *Social cohesion outcomes*: A small number of studies show that both cash and in-kind transfers can effectively promote social capital and social cohesion during humanitarian crises compared to the control group.

14. Regarding the relative effectiveness of different modalities, decisions about the most appropriate modality versus another cannot be generalized or predetermined. The existing evidence suggests that modality performance and their differences depend on a series of factors such as the nature of the humanitarian crisis (sudden onset vs. slow onset), the objective of the programme or the main outcome of interest, the profile of the targeted population, implementation costs, and local market capacity, among others. All these factors must be considered when choosing transfer modalities.

a) *Basic needs outcomes*: Cash and in-kind transfers are similarly effective in improving basic needs outcomes, such as food security or coping strategies. However, specific differences among modalities depend on the type of indicator used to measure them. For example, cash tends to increase non-food expenditure more than in-kind transfers.

b) *Financial outcomes:* Lump sum cash transfers are more effective than multiple smaller payments for generating assets, but there is no difference in encouraging savings behaviour.

c) *Human development outcomes*: There is no study on the relative effectiveness of different transfer modalities in improving human capital outcomes.

d) *Gender outcomes*: The limited evidence on gender-based violence shows that giving cash vs. in-kind transfers to women has no differential impacts on gender-based violence.

e) *Social cohesion outcomes*: The limited evidence indicates that both cash and vouchers can be equally effective in improving social capital during humanitarian crises.

15. *While the effectiveness of cash and in-kind transfers is similar on average, the efficiency is generally in favour of cash.* When comparing equally valued transfers across different modalities, cash transfers seem to be more efficient to deliver than in-kind modalities. Studies suggest that mobile money cash transfers are the most efficient, provided that mobile network infrastructure is available. The second most efficient transfer method is manual cash delivery, followed by voucher transfers, with food transfers being the most expensive way to deliver assistance. It is important to note that this ordering is based on the costs only, and one also must consider the benefits, which are typically multi-dimensional.

16. Given the lack of rigorous causal evidence on humanitarian assistance programmes, there is a high dividend to be earned from conducting more impact evaluations in humanitarian settings. Substantial evidence gaps remain, and there is a need to better understand implementation design choices, such as which population to target, what type of modality to transfer, and the duration, size, and frequency of transfers, to name a few. In this review, we identified several cross-cutting evidence gaps where more impact evaluations would be needed:

a) *More evidence is needed on the impact of humanitarian assistance on human development, gender, and social cohesion*. For example, given the very limited evidence in these domains, it would be interesting to explore whether female-targeted transfers can decrease gender-based violence and improve women's well-being in humanitarian settings.

b) *There is a need to better understand the conditions for which cash transfers can be more effective than in-kind transfers.* The existing evidence suggests that what makes one modality more effective than another depends on factors such as the characteristics of the targeted population and the capacity of local markets, among others. Future research could provide a better understanding of the interactions between these characteristics and different transfer modalities. In addition, it would be interesting to explore complementarities between different interventions, such as blended interventions or cash plus interventions.

c) *More evidence is needed on targeting mechanisms in humanitarian settings*. One question to explore is whether a faster and less accurate targeting method would improve welfare more than a slower yet more accurate targeting method.

d) *There is a need to better understand not only the immediate impacts of humanitarian assistance programmes, but also the long-term effects that arise in the recovery period.* While there is enough evidence that humanitarian assistance programmes are effective in improving basic needs in the short run, it is important to know whether this initial push also allows beneficiaries to strengthen community resilience to future crises and help them engage in productive income-generating activities such as agriculture, self-employed business, or labour market participation.

e) *There is a need to explore how variations in the size, frequency, and duration of transfers may influence the outcomes of interest.*

f) *There is a need to explore differences in impact by type of humanitarian crisis (e.g., conflict vs. natural disaster vs. heath outbreak), phase (e.g., sudden onset vs. slow onset or protracted crises), and intensity or complexity.*

g) *There is a need to better understand not only the cost-efficiency of different types of interventions, but also their cost-effectiveness.*

Main Results from Humanitarian Assistance Programmes

CATEGORY	OUTCOME	FINDINGS
BASIC NEEDS	Food Security (N=10)	- Most humanitarian assistance interventions are effective in improving food security. - Types of food consumed varied by cash vs. food or voucher transfers.
	Food Expenditure (N=7)	- Cash transfers increase food expenditure. - Effects of food transfers on food expenditure are mixed.
	Non-food Expenditure (N=12)	- Various modalities are found to increase non-food expenditure. - Some evidence that cash transfers increase non-food expenditure more than other modalities.
	Coping (N=7)	- Most modalities effectively reduce undesirable coping strategies (e.g., reducing meals, selling livestock, or child labour).
FINANCIAL OUTCOMES	Assets (N=9)	- Most programmes are effective for household asset accumulation. - At least for acquiring assets, lump-sum cash transfers are more effective than multiple smaller payments.
	Income (N=3)	- Only two interventions (cash-for-work programmes and non-food vouchers) are evaluated. Results are mixed.
	Credit and Savings (N=5)	- Only a limited number of studies explored this outcome area, making it difficult to conclude the effects of the programmes. - No significant effects of cash transfers on savings, and mixed results on the debt amount.

		- Cash may increase saving more than vouchers, but there is no difference in savings between lump sum and multiple payments.
HUMAN DEVELOPMENT	Education (N=5)	- Studies find a large increase in enrollment, but not much evidence on school attendance. - A trade-off between nutrition and education: general food distribution may decrease attendance relative to on-site school feeding.
	Labour (N=4)	- The effect of cash on labour market participation is mixed. - One study finds that female-targeted interventions do not affect female labour market participation and working hours.
	Health (N=5)	- Cash improves child nutrition (e.g., weight-for-height, mid-upper arm circumference), but results are noisier for vouchers and food transfers.
GENDER OUTCOMES	Empowerment (N=4)	- Results are mixed depending on what questions are used to measure women's empowerment.
	Gender-based Violence (N=1)	- Female-targeted interventions reduce gender-based violence relative to the control group, but there are no differences between the types of interventions (i.e., cash, voucher, food).
SOCIAL COHESION	Social Cohesion (N=4)	- The number of disputes within the community decreases and sharing/contribution increases in a refugee setting. - No difference in sharing between cash and voucher

1 Introduction

17. A humanitarian crisis is a singular event or a series of events that threaten the health, safety, or well-being of a community or large group of people.[4] Humanitarian crises are often categorized into three broad categories: (i) natural disasters, (ii) conflict-related emergencies, and (iii) health outbreaks. According to the 2021 Global Humanitarian Overview Report, an estimated 235 million people will need humanitarian assistance and protection, an increase of more than 65 million from 2020 (UNOCHA, 2020). In addition, over 79 million individuals were estimated to have been forcibly displaced worldwide in 2019 due to prosecution, conflict, generalized violence, or other human rights violations, representing an increase for the eighth consecutive year (UNHCR, 2020). The need for humanitarian assistance and social protection has been exacerbated by the COVID-19 pandemic, which presents an unprecedented challenge to the humanitarian system in both scale and complexity.

18. While some humanitarian crises can be attributed to a single and distinct event that occurs with little or no warning (sudden onset), most humanitarian crises are complex, protracted, and chronic (slow onset), evolving from a series of events that exacerbate vulnerabilities of a population over a prolonged period (UNOCHA, 2018). However, in both types of crises there is a generalized threat to human life, where humanitarian needs exceed available resources, and the most disadvantaged populations disproportionately feel the impacts of such crises. It is, therefore, more important than ever to have reliable and rigorous evidence on the impact of humanitarian response programmes on relevant outcomes, that is, "what works", in addressing the needs of crisis-affected populations, as well as how cost-effective the implementation of such programmes is, so that donors, aid agencies, and policymakers can make informed decisions and target those in greatest need.

19. In the last decade, the use of social protection programmes in humanitarian contexts has increasingly emerged as a policy response tool to address poverty and hunger.[5] As part of the commitments under Sustainable Development Goal 1, the global community has agreed to expand the coverage of social protection measures for all and to achieve substantial coverage of the poor and the vulnerable by 2030 (United Nations, 2015). This expansion also includes the scale-up of social protection programmes in humanitarian contexts (fragile and conflict-affected populations), which we call humanitarian assistance interventions. In particular, according to the 2020 Global Humanitarian Assistance Report, there is a clear upward trend in the use of social protection programmes in the form of cash and vouchers. For example, as of 2019 the total volume of cash and voucher assistance reached US$5.6 billion, up from US$2 billion in 2015, while the majority of the humanitarian portfolio is provided in kind (Overseas Development Institute, 2015).

20. The main objectives of this review are to assess and synthesize the existing knowledge on the effects of humanitarian assistance interventions and to identify evidence gaps in the literature for future research and for evidence-based decision-making by policymakers and practitioners. In doing so, we address two research questions within the context of humanitarian settings. First, what are the impacts of humanitarian assistance programmes on individual and household-level outcomes? Second, what is the relative effectiveness and efficiency of different modalities and delivery channels in achieving their objectives? This review uses evidence from experimental and quasi-experimental studies focused on humanitarian assistance interventions in the form of cash and in-kind transfers. We examine unconditional cash transfers (UCTs), conditional cash transfers (CCTs), food transfers (FT), vouchers, and public works (PW). Following a standard procedure for systematic reviews, we identified 20 eligible studies from low- and middle-income countries to assess the overall effects of humanitarian assistance programmes on a wide range of

4 For more detail, see here.

5 In more stable developing contexts, a vast literature in social sciences shows that social protection programmes help reduce poverty and inequality, enhance livelihoods, and have long-term positive impacts on human capital development (Baird et al., 2014; Bastagli et al., 2016; Davis et al., 2016; Handa et al., 2018; Hidrobo et al., 2018).

individual and household-level outcomes, as well as the relative effectiveness of different humanitarian assistance modalities.

21. Our motivation for framing this review around CBTs and in-kind transfers, among other types of humanitarian assistance, aligns with the World Food Programme's overall implementation portfolio. According to WFP's Annual Performance Report for 2020, unconditional in-kind food distribution and CBTs accounted for the vast majority of WFP's transfers in 2020 (i.e., 87 percent of all of WFP's transfers). At the beneficiary level, 70 percent of WFP's beneficiaries in 2020 were assisted with in-kind food transfers, while one-third were reached through the use of CBTs (with some beneficiaries receiving a mix of transfers). Therefore, CBTs and in-kind transfers represent significant evidence priorities for WFP as well as the wider humanitarian sector. For ease of language, we refer to these programmes as 'humanitarian assistance' throughout this review.

22. Despite the growing use of social assistance programmes in humanitarian settings, there is relatively little rigorous research on what works, for whom, and why. While there have been a few systematic reviews on cash-based interventions in humanitarian contexts (Doocy and Tappis, 2018; Gentilini, 2016; Puri et al., 2017), these studies are based on a selective set of case studies. For instance, Doocy and Tappis (2018) report the impacts of cash-based interventions in humanitarian settings based on only five rigorously measured studies. Aurino and Giunti (2021)'s review is the closest to our study. They review evidence of the impact of emergency cash, food, and other in-kind transfers, but focus on the outcomes of child development only. Our review complements existing reviews by including more recent rigorous studies that evaluated the impact of unconditional or conditional cash and in-kind transfers. We also analyse the impacts on a more comprehensive set of outcomes that have been overlooked by the existing literature, including human capital, women's empowerment, and social cohesion. Therefore, this systematic review provides an overview of the evidence to date on humanitarian assistance programmes, flagging particularly promising interventions for practitioners and policymakers, and marking a way forward for future evidence-based results.

23. This review is organized as follows. Section 2 describes the methodological approach used in this systematic review. Section 3 presents the impacts of humanitarian assistance programmes on the main outcomes across different domains using rigorous impact evaluations. In this section, we also discuss the efficiency or value for money of these interventions in terms of implementation costs. In Section 4, we assess the relative effectiveness of different transfer modalities in humanitarian settings. Section 5 discusses the evidence gaps and proposes new areas for research. Finally, Section 6 summarizes our key findings, and discusses implications for policymaking.

2 Methodology

24. To answer our main research questions, we conducted a systematic review of the experimental and quasi-experimental literature focused on humanitarian assistance programmes. This section describes the process we followed for identifying studies to use in our analysis, which consisted of three iterative stages: (i) search and inclusion criteria, (ii) screening process, and (iii) data extraction. We also describe how we mapped study-specific outcomes onto broader outcome categories.

2.1 IDENTIFICATION OF STUDIES AND INCLUSION CRITERIA

25. We collected information on humanitarian assistance interventions through computer-aided searches and reviews of reference lists in the studies identified. A primary systematic search for peer-reviewed and grey literature was conducted in several search engines and databases using a combination of predetermined keywords and vocabulary for social assistance and emergencies, which are presented in **Table 1**. In addition to the database search, the bibliographies and citations of included studies were thoroughly analysed for further studies that met inclusion criteria. We also reviewed websites of organizations working in the humanitarian field to search for relevant grey literature. Lastly, we also contacted experts and researchers who have frequently published on the impacts of social safety net programmes in peer-reviewed journals and asked them to indicate any other relevant published studies that we could incorporate in our review.

26. **Table 2** describes the inclusion criteria. First, we sought to include studies that were set in humanitarian crises. For this review, a humanitarian crisis is defined as a singular event or a series of events that threaten the health, safety, or well-being of a community or large group of people.[6] Among policymakers, there are two recognized types of humanitarian crises: (i) sudden onset, which is a single, distinct event that occurs with little or no warning (e.g., earthquake); and (ii) slow onset or protracted crises, which are more complex humanitarian crises that demand prolonged assistance over several years (e.g., severe drought or ongoing conflict). In this review, we focus on both types of humanitarian assistance scenarios. These humanitarian crises are often categorized further into three broad categories: (i) natural disasters, (ii) conflict-related emergencies, and (iii) health outbreaks. Programmes implemented before the onset of the humanitarian crises and evaluated during the humanitarian crises were excluded from the review.

27. We limit our analysis to programmes that provide humanitarian assistance to crisis-affected populations in the form of unconditional cash transfers (UCTs), conditional cash transfers (CCTs), food transfers (FT), vouchers, and public works (PW) as these are the most widely used forms of transfers and, therefore, evidence priority in the humanitarian sector.[7] In this process, we excluded other types of interventions in humanitarian settings such as microfinance, WASH, community-driven development programmes or peacebuilding activities, and health and medical assistance. We decided to focus primarily on non-contributory humanitarian assistance interventions because many governments and humanitarian actors have recently started to use social protection tools in humanitarian settings, but very little is known about their effectiveness in such contexts.[8]

6 For more information on humanitarian crisis, see Humanitarian Coalition (last accessed October 2020).

7 Unconditional in-kind food distribution and CBTs accounted for 87 percent of WFP's all transfers in 2020 (WFP's Annual Performance Report for 2020).

8 It is important to note that the evidence from development contexts cannot be applied directly to complex humanitarian contexts since the latter are characterized by harsher conditions such as increased economic, social, institutional, and security challenges. This situation creates an important knowledge gap, particularly in terms of the design and implementation of effective social protection measures in humanitarian settings.

28. Studies included in this review were required to employ either experimental or quasi-experimental designs that can isolate the causal impact of humanitarian assistance programmes on outcomes of crisis-affected populations. We required that studies were either randomized control trials or that they estimated intervention effects using one of the following quasi-experimental methods: difference-in-difference, propensity score matching, instrumental variables, regression discontinuity design, or another causal estimation technique. We also included experimental studies that did not have a pure control group, which are particularly relevant in humanitarian settings. Studies that did not establish any counterfactual were excluded.

29. It is important to note that there exists a broader non-impact evaluation literature, which includes descriptive, qualitative, and mixed methods studies assessing the factors that facilitate or hinder the implementation of cash-based or in-kind transfers in humanitarian settings. While these studies provide rich insights into implementation, contextual factors, and beneficiary perspectives important for programme design, we excluded these from our review since it is difficult to draw clear causal inferences from non-IE study designs. For example, one cannot confidently claim whether it was the humanitarian assistance programme that was studied or other confounding factors that caused outcome changes.

30. The search did not impose restrictions on the timing of publication, although focusing on experimental and quasi-experimental evaluation designs effectively limit our attention to studies published after 2007.

31. In terms of types of studies, publication in a peer reviewed journal was not a strict requirement for inclusion. We also included studies from working paper series (e.g., World Bank Policy Research, CDG, IFPRI) and technical reports only if they included a suggested formal institutional citation. This analysis is also restricted to low- and middle-income countries (as defined by the country-income groupings of the World Bank), where most humanitarian assistance programmes are implemented, with no other explicit population exclusion criteria.

2.2 SCREENING PROCESS

32. The screening of studies and the application of inclusion and exclusion criteria took place in two rounds. In the first round, all studies that appeared in the search process were classified as potentially eligible or excluded by only reviewing the citation and abstract. During this round, studies were deemed ineligible if they did not meet the following inclusion criteria: (i) not a humanitarian setting, (ii) not a social assistance programme, (iii) duplicates, and (iii) of no relevance to the study question. The majority of ineligible studies were not from a humanitarian setting or duplicates of another report. If duplicate studies published in different formats appeared in the search process, studies published in an academic journal were included rather than identical studies published as technical reports.

33. In the second screen, each potentially eligible study from the first screen was assigned to two reviewers for full-text review. Each reviewer read the full text of the study and assessed study features meant to proxy for study quality in terms of methodology, including the use of an evaluation design that would generate causal impacts. For instance, to be included in our final sample, studies needed to isolate the impact of the humanitarian assistance programme using some sort of comparison group and report the precision of estimated effects. Considering all these criteria, each reviewer rated studies as “For Review” or “Excluded”, and the reason for exclusion was recorded accordingly. All studies for which there were any doubts or disagreements about potential eligibility were discussed by all authors to arrive at a final rating. This final process resulted in a total of 20 included studies that were assigned for data extraction.

2.3 DATA EXTRACTION AND DESCRIPTION OF INCLUDED STUDIES

34. We extracted three types of information from each of the included studies: study, intervention (contrast), and outcomes. *Studies* are defined as independent publications of humanitarian assistance programmes (e.g., journal articles, working papers, technical reports). *Interventions (Contrasts)* represent the different treatment arms/contrast groups of a programme within a study. For example, a study might provide one group of beneficiaries with a cash transfer, a second group with a food transfer, a third group with a voucher, and a fourth group with no transfer. For our analysis, these would produce four

interventions/contrasts. *Outcomes* are comparisons of treatment and comparison groups on a set of outcome measures. The resulting sample from this data extraction includes 20 studies, 40 interventions (contrasts), and 457 outcomes.

2.3.1 Study level

35. At the study level, we document author name(s), publication year, country, publication type, humanitarian crisis type, regional distribution, and impact evaluation design. **Table 3** provides the characteristics of the sample. The final sample consists of eleven journal articles, six technical reports, and three working papers.[9] Nine of the studies used experimental methods (RCTs), while the remaining eleven used quasi-experimental methods. Among those that used RCTs, four studies do not have a pure control group, which means they compared different modalities (e.g., one group receives CCT while the other group receives FT). The studies examined the effects of humanitarian assistance programmes implemented by international organizations, non-governmental organizations, and/or governments. Regarding intervention type, most of the studies focused on UCTs, followed by food transfers, vouchers, CCTs, and public works. Six studies also reported cost analyses of the evaluated interventions, but only four discussed the cost-efficiency of different modalities.

36. **Figure 1** shows the geographic distribution of the studies. The twenty studies consist of seven studies in Africa (DRC, Ethiopia, Mali, Niger, and Uganda), seven studies in the Middle East (Jordan, Lebanon, and Yemen), three studies in Latin America (Ecuador), and three studies in Asia (Fiji, Sri Lanka, and the Philippines). These twenty studies correspond to seventeen humanitarian assistance programmes in twelve countries. On average, there are 1.2 studies per programme – sometimes we reviewed more than one study on the same humanitarian assistance programme that reported different outcome variables.

37. Most of the studies (75 percent) are from a conflict affected setting, and they are evenly split between refugee-camp and non-camp settings (seven studies were in a refugee camp context and eight were in a non-camp setting), while the remaining five (25 percent) were in a natural disaster setting. We did not find any published studies that report humanitarian assistance impacts from a health outbreak setting, which also met our inclusion criteria. The publication year ranges from 2007 to 2020, with the number of studies growing in recent years. **Figure 2** illustrates the increasing trend in publications, particularly since 2019.

2.3.2 Intervention (contrast) level

38. We also extracted information about the evaluated interventions, and **Table 4** summarizes the characteristics of the treatment arms of the included studies.[10]

39. We assigned humanitarian assistance interventions to *at least* one of five intervention categories: (i) unconditional cash transfers (UCT), (ii) conditional cash transfers (CCT), (iii) vouchers, (iv) food transfers, and (v) public works. Each humanitarian assistance *programme* combines one or more of these five intervention categories, implemented mainly by international organizations (e.g., World Food Programme, UNICEF) and non-governmental organizations (e.g., Concern Worldwide, Mercy Corps, IRC, Oxfam). [11]In fewer cases, these programmes have also been implemented by governments.

9 Additional details of each publication are listed in the Appendix Table 1.

10 We identified several important impact evaluation design characteristics such as: intervention category, target population, intervention duration, sample size, recipient identity, transfer schedule, payment type (multiple or single), total payment value, and cost per beneficiary, among others.

11 For example, a humanitarian assistance programme can provide one group of beneficiaries with a cash transfer, a second group with a food transfer, and a third group with a voucher, while other humanitarian programmes provide beneficiaries with only cash or food transfers or both. In our review, 86 percent of the programmes were implemented by external humanitarian actors (e.g., international organizations, NGOs), while the remaining 14 percent were implemented by governments.

40. We review 40 humanitarian assistance interventions from 20 studies covering low- and middle-income countries.[12] There are on average 2.05 contrasts per study, ranging from two to four treatment arms (including the control group and studies without a pure control).[13] Since one of the focuses of this review is the relative effectiveness of social assistance modalities, it is important to understand the underlying characteristics of each of the five types of interventions in a humanitarian setting.

41. ***UCT interventions (18).*** Unconditional cash transfers are by far the most common intervention type included in our review. Eighteen UCT contrast/interventions correspond to ten studies – five in the Middle East (Lebanon and Yemen), three in Asia (Fiji, Sri Lanka, and the Philippines), and two in Africa (DRC and Niger). Four of these studies use random assignment without a pure control, while the remaining six use quasi-experimental methods. Studies that use random assignment without a pure control directly compare different modalities of UCT (e.g., single payment vs. multiple payments), or they compare UCTs to food transfer programmes or voucher programmes. Programmes that use non-random assignment compare UCTs to the control group. This type of intervention is used more in conflict-affected settings (60 percent) than in natural disaster settings (40 percent).

42. ***Food transfer interventions (11).*** Food transfers are the second most common intervention type in our review. Eleven food transfer contrasts correspond to nine studies – four in Africa (Ethiopia, Mali, and Uganda), one in Asia (Sri Lanka), three in Latin America (Ecuador), and one in the Middle East (Yemen). Four of these studies use random assignment, one without a pure control (e.g., general food distribution vs. school feeding) and three with a pure control (e.g., food transfers compared to the control group). The remaining five studies used non-random assignment and contrasted food transfers with the control group. Food transfer interventions were more likely to be implemented in conflict-affected settings (67 percent), but some evidence exists in natural disaster settings.

43. **Voucher interventions (5).** There are five voucher interventions in this review that correspond to three studies – two in Africa (DRC) and one in Latin America (Ecuador). All these studies used random assignment (two with a pure control and one without a pure control), and they were implemented in a conflict-affected setting (none in a natural disaster setting).

44. **CCT interventions (4).** There are four conditional cash transfer interventions in this review that correspond to two studies – one in the Middle East (Yemen) and one in Latin America (Ecuador). CCT interventions are not very popular in humanitarian settings. Both studies used random assignment with a pure control, and they were only implemented in conflict-affected settings.

45. **Public works interventions (2).** There are only two public work interventions in this review (a cash-for-work intervention and a food-for-work intervention) that correspond to two studies – one in Africa (Ethiopia) and one in the Middle East (Jordan). Neither intervention used random assignment, and public works interventions were used equally in conflict-affected and natural disaster settings.

46. The humanitarian assistance interventions included in this review mainly targeted crisis-affected populations, such as internally displaced individuals, refugees, severely food-insecure households, households affected by natural disasters, etc. Twenty-three of these humanitarian assistance interventions targeted the household head (both men and women), while sixteen exclusively targeted adult women. Only one intervention targeted the primary caregiver of children aged 5–14. Most of these interventions were implemented in a rural setting, with only three being implemented in both rural and urban areas. Sample sizes varied between 252 households and 11,500 households. The duration of the intervention varied between four months and 24 months, with most of them being less than 12 months (See Figure 3).

2.3.3 Outcome level

In this review, we classified all outcome measures as belonging to one of five broad categories: (i) basic needs (e.g., caloric intake or availability, the value of food consumed of food expenditure, dietary diversity,

12 Some characteristics of these contrasts are listed in Appendix Table 2.

13 Several studies have also pooled their interventions (e.g., CCT, Voucher, and FT) and compared them to the control group. These cases are not included in the intervention categories.

food insecurity, coping strategies, etc.); (ii) financial outcomes (e.g., livestock, nonfarm productive assets, farm productive assets, land, savings); (iii) gender (e.g., women's empowerment, gender-based violence); (iv) human development (e.g., education outcomes, health and nutrition, labour force participation outcomes); and (v) social cohesion outcomes (e.g., social participation, trust in institutions, etc.).

47. To identify evidence gaps and applied research priorities, we consider a basic metric of the level of evidence as measured by the number of rigorous studies per outcome category used to generate evidence. Given the limitations of conducting research in humanitarian settings and the possible limitations to external validity, it is important to interpret these results with caution. To assess the relative level of existing evidence, we define as "substantial" the evidence base informed by more than ten rigorous impact evaluation studies in humanitarian settings. In cases where such a number is between five and ten, the evidence can be considered "emerging", while if only a handful (lower than five), it may be deemed "limited". Where no evaluation evidence was available, evidence is clearly "absent".[14]

48. **Table 5** presents the level of evidence across the different outcome categories. Overall, we find a wide variation in the availability of evidence for humanitarian assistance programmes across different outcome categories. It can be argued that most evidence in humanitarian settings concentrates on basic needs outcomes, such as food security, food and non-food expenditure, and coping strategies. Therefore, the evidence base for basic needs outcomes can be classified as substantial relative to other categories. After basic needs, financial outcomes (which include asset ownership, income, and savings) are the second most reported outcome group. The evidence base for financial outcomes is emerging. However, less evidence exists on the impact of humanitarian assistance programmes on human development, such as education, health, economic opportunities (e.g., labour), and especially social cohesion and gender. For these outcome categories, the evidence base is limited. In particular, women's empowerment and gender-based violence outcomes are some of the least explored impact measures of humanitarian assistance interventions.[15] Policymakers should carefully consider this unbalanced evidence base when deciding on interventions and reforms in humanitarian settings.

14 As a robustness check, we also employed a vote counting method at the study level to quantitatively summarize the humanitarian assistance literature. This method allows us to quantify the number of estimates that are positive or negative, as well significant and insignificant. We categorized the average treatment effect of each intervention into four groups: (i) positive, insignificant; (ii) positive, significant; (iii) negative, insignificant; and (iv) negative, significant. However, it is also important to note some limitations to this method. The primary concerns about vote counting are that (1) it does not account for sample size and therefore gives a small sample study the same weight as a large sample study; (2) vote counting is unable to provide an effect size; and (3) vote counting cannot account for publication bias. Another caveat with our data extraction process is that we excluded any treatment effects that measured the impact of the intervention on specific subgroups (heterogeneity analysis). This means that we did not extract the effect sizes of all the tables presented in the studies. In each study, we recorded only the main intention-to-treat (ITT) treatment effect of the intervention.

15 In our review, twelve studies report outcomes on non-food expenditure, ten on food security, nine on food expenditure, nine on assets, seven on coping strategies, five on credit and savings, five on health, five on education, four on labour, four on social cohesion, four on women's empowerment, three on income, two on subjective well-being, and one on gender-based violence. Some of the studies evaluated more than one outcome area, while others only focused on a particular outcome area. Appendix Table 3 indicates what type of outcomes are reported in each study included in the review.

3 Main Results

3.1 EFFECTIVENESS OF HUMANITARIAN ASSISTANCE PROGRAMMES

49. This section explores the results of the twenty studies included in the review by five outcome categories. The first outcomes group is basic needs: food security, food and non-food expenditures, and coping strategies. The second group is financial outcomes consisting of income, assets, and savings. The third group explores human development outcomes, such as education, labour-force participation, health, and subjective well-being. The fourth group includes gender-related outcomes such as gender-based violence and women's empowerment. Lastly, the fifth group explores social cohesion outcomes.

3.1.1 Basic Needs Outcomes

Food Security

50. Food security is the most reported outcome in the humanitarian assistance literature. Vulnerable populations in humanitarian settings often face high levels of food insecurity, which disproportionately affect households living in poverty. Children are particularly vulnerable to food insecurity, as adequate diets and nutritious foods are crucial for child development. In our review, we found eleven experimental and quasi-experimental studies that reported effects of humanitarian assistance programmes on household-level food security outcomes, eight of which compared the intervention to a pure control group, and three of which compared different modalities (without a pure control group).[16] These studies used various ways to measure food security, ranging from its simplest form (e.g., number of meals eaten per day) to standard indicators (e.g., Household Dietary Diversity Score, Food Consumption Score, Food Insecurity Experience Scale).[17]

51. Overall, most of the studies in our review find positive and statistically significant effects of humanitarian assistance programmes on food security outcomes (Chaaban et al., 2020; Gilligan and Hoddinot, 2007; Hidrobo et al., 2014; Kurdi et al., 2019; Quattrochi et al., 2020; Tranchant et al., 2019; Tusiime et al., 2013). Among these studies, four of them find improvements on Household Dietary Diversity Score (HDDS), although some of the coefficients are not statistically significant. The only exception is Lombardini and Mager (2019), who find that a cash-for-work humanitarian intervention in a refugee camp in Jordan did not have any positive effect on food security. Overall, these results suggest that most types of humanitarian assistance interventions have large impacts on food security outcomes in fragile and conflict-affected settings, not only through increased consumption, but also through improved quality of diets and less severe experiences of food security. One limitation of the current evidence is that food security measures are mainly measured at the household level, which leaves a gap of knowledge regarding the intra-household distribution of food consumed or gendered effects. One exception is Tusiime et al., 2013, who find that the effect of food transfers on the number of meals taken is bigger for male-headed households than female-headed households.

Food Expenditure

52. While food security is typically measured by looking at consumption and dietary patterns in food groups, one can look at the dollar expenditure on food purchases as a complementary measure of food

16 Appendix Figure 1 summarizes the findings on food security outcomes for the 8 studies with a pure control group by study-intervention. There are thirteen study-interventions across these eight studies (two CCT, two PW, five FT, one School Feeding, one UCT, and two Voucher) that report effects on food security and nutrition. Counts greater than one for the same outcome indicate that the study had multiple ways of measuring the outcome.

17 For detailed descriptions on different indicators, see "Data4Diets: Food Security Indicators" from Tufts University Friedman School of Nutrition Science and Policy. https://inddex.nutrition.tufts.edu/data4diets/indicators

security. Food expenditure can be defined as the amount of money spent on food in any given period. This measure can be particularly useful for people who purchase most of their food rather than grow it themselves. In our review, seven studies look at the impact of humanitarian assistance programmes on food expenditure, four of which compared the intervention to a pure control group, and three of which compared different modalities.[18] Among the former group, three studies find a positive and statistically significant effect on food expenditure compared to the control group (Kurdi et al., 2019; Lehmann and Masterson, 2014; Tranchant et al., 2019), while one study finds a statistically significant reduction in food expenditure (Tusiime et al., 2013).

53. For cash transfer interventions, Lehmann and Masterson (2014) find that unconditional cash transfers (UCTs) to Syrian refugees totaling $575 over five months increased food and water expenditure by $25 per month relative to the control group.19 Similarly, Kurdi et al. (2019) find that $30 monthly CCTs in Yemen increased spending on non-staple food items. However, they find no impact of the intervention on total monthly spending.

54. In terms of food assistance interventions, Tranchant et al. (2019) examined the impact of a food assistance programme in the form of general food distribution (GFD) and SF on food expenditure outcomes during conflict in northern Mali. They find that both GFD and SF increased monthly food expenditures by approximately 20 percent. In contrast, Tusiime et al. (2013) find that GFD of a WFP intervention in northern Uganda, which provided at least 40 percent of recommended dietary allowance, decreased food expenditure by 35 percent. The reduction in food expenditure was similar between female-headed households (33 percent) and male-headed households (36 percent). Overall, these findings suggest that in settings characterized by chronic food insecurity and among conflict-affected populations, UCTs and food transfers can positively impact the food expenditure of vulnerable populations.[20] It also suggests that food expenditure alone is not the best measure of food security; the impact on food expenditure can be positive or negative depending on the intervention type. For example, food expenditure may decrease when direct food transfers are provided to recipients as there is less need to purchase food with their own money. At the same time, expenditure may increase if they spend more on nutritious foods rather than calorie-based staple foods. When the type of aid is cash, it is most likely to increase food expenditure if they were previously food insecure. Similar to food security measures, food expenditure outcomes in the humanitarian literature are mainly measured at the household level, which highlights the need for individual-level or gendered indicators to improve our knowledge of food consumption in fragile settings.

Non-Food Expenditure

55. While food security may be the first priority in social assistance, people in emergencies also need better clothing, housing, health, and education. Housing and health are especially important for those injured and whose homes are damaged by natural disasters. In our review, non-food expenditure is, in fact, the most reported outcome across all the studies. Twelve studies examine the impact of humanitarian assistance programmes on non-food expenditure, seven of which compared the intervention to a pure control group, and five compared different modalities.

56. In general, most studies with a pure control (six out of seven) find that humanitarian assistance recipients significantly increased non-food expenditure, including clothing, heating supplies, housing material, education, health expenses, school fees, agricultural inputs, and assets compared to those that did not (Chaaban et al., 2020; de Hoop et al., 2019; Hidrobo et al., 2014; Hidrobo et al., 2016; Lehmann and

18 Appendix Figure 2 summarizes the findings on food expenditure for the four studies with a pure control group by study intervention. There are six study interventions (one CCT, three FT, one SF and one UCT) that report effects on food expenditure and all of them belong to a conflict setting.

19 In the winterization cash assistance programme for Syrian refugees in Lebanon, both the treatment and control group also received a restricted food voucher of approximately $30 per person per month. In this review, we focus on the winterization cash transfer of $575 which was received only by the treatment group.

20 These effects on food expenditure are similar to those in the general literature on social protection. For example, a recent meta-analysis of social assistance programmes including 48 studies of 39 social protection programmes found that transfers increased monthly food expenditure by 17 percent on average (Hidrobo et al., 2018).

Masterson, 2014; Tranchant et al., 2019).[21] Only Tusiime et al. (2013) find no impact of food transfers on non-food expenditure for both male- and female-headed households in Northern Uganda during a conflict setting.

57. Similar to the food security outcomes, these results also suggest that various modalities of humanitarian assistance programmes effectively improve non-food expenditure compared to the control group, with UCTs having the greatest impact. Once again, the non-food expenditure measures used in these studies are mainly measured at the household level, leaving a knowledge gap regarding the intra-household distribution of the items consumed.

Coping Strategies

58. Many food-insecure households employ various strategies to cope with a lack of food and income. In the humanitarian context, coping mechanisms are typically used in reference to the negative or harmful strategies individuals or households use in difficult economic situations that may produce longer-term negative consequences. Economic-related coping strategies may include skipping meals, selling productive or non-productive assets, and being forced to move, while employment-related coping strategies may include child labour, family separation, sexual exploitation, among others. Most of the outcomes for coping mechanisms in our review are measured mainly at the household level, which leaves a gap in knowledge regarding individual or gendered effects.

59. Seven studies in our review report on the use of coping strategies in humanitarian settings (five with a pure control group, two comparing different modalities), covering mostly conflict-affected populations in DRC, Mali, Niger, Uganda, Lebanon, and Yemen. Overall, three out of five studies with a pure control find that humanitarian assistance beneficiaries switch to better coping strategies (Lehmann and Masterson, 2014; Schwab, 2019; Tusiime et al., 2013), one study finds no effect (Quattrochi et al., 2020), and one study reports mixed results (Aurino et al., 2019).[22]

60. For instance, Lehmann and Masterson (2014) examined the effects of an unconditional cash payment to support Syrian refugees living in Lebanon to support them in the winter months. They find that Syrian refugees who received the winterization cash assistance were less likely to reduce meal frequency and portion size. Notably, treatment households were 50 percent less likely to have their children work and sell their productive assets. Similarly, Schwab (2019) finds that both food and cash transfers decrease child farm labour in the context of the Yemen civil war. Lastly, Tusiime et al. (2013) find that food aid during conflicts in Northern Uganda decreased the likelihood of selling poultry and other livestock, which is driven by male-headed households.

61. It is important to note that some types of social assistance may increase child labour as a coping strategy. Aurino et al. (2019) assessed the impacts of an emergency school feeding programme and a general food distribution programme among children in northern Mali during political and economic turmoil and violent conflict. They find that general food distribution *increases* the likelihood of children, especially boys, participating in farm labour or housework during the conflict in Mali, while school feeding led to lower participation and time spent in work among girls.

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21 Appendix Figure 3 summarizes the findings on non-food expenditure for the seven studies with a pure control group by study intervention. The bulk of these studies evaluate the impact of cash transfers (three UCTs and one CCT) as this type of intervention allows for flexible spending depending on recipients' needs, followed by food transfers (three FT), and voucher (one Voucher).

22

Appendix Figure **4** summarizes the findings on the use of coping strategies for the five studies with a pure control group by study intervention.

3.1.2 Financial Outcomes

Assets

62. Asset ownership, an indicator of household economic status, is one of the most reported outcomes in the humanitarian response literature. Nine studies examined the impact of humanitarian assistance programmes on asset outcomes (six with a pure control group and three without a pure control group). These studies report several asset measures ranging from livestock (e.g., own cattle, poultry), non-farm productive assets (e.g., household assets), farm productive assets (e.g., tractors, knapsack sprayer, hand mill, etc.), and land ownership. None of the studies that report asset accumulation presented heterogeneity analysis by gender.

63. Although one study in our review finds a significant reduction in asset ownership (Gilligan and Hoddinott, 2017), most of the studies find that humanitarian assistance programmes increase asset ownership during emergencies (Ivaschenko et al., 2020; Lehmann and Masterson, 2014; Lombardini and Mager, 2019; Quattrochi et al., 2020; Schwab, 2019).[23] For instance, Lehmann and Masterson (2014) find that Syrian refugees in Lebanon who received labeled cash transfers intended for "winterization" were more likely to own ovens and heaters than households in the control group. Similarly, Schwab (2019) finds that recipients of cash transfers during the Yemeni civil war increased their livestock assets by 15 percent relative to non-recipients, the equivalent of a sheep or goat. Unconditional cash transfers are effective at increasing assets not only in conflict settings but also following natural disasters. For example, households in Fiji who received cash assistance following the 2016 Tropical Cyclone Winston were 13–26 percentage points more likely to recover from the cyclone's damage, and the effectiveness of those transfers increased in the presence of a functioning local market (Ivaschenko et al., 2020).

64. There is also evidence that cash voucher interventions for non-food items and cash-for-work can also increase asset ownership and household wealth. In particular, Quattrochi et al. (2020) find that recipients of asset vouchers in eastern DRC had increased assets by 0.16 standard deviations compared to the control group. Similarly, Lombardini and Mager (2020) find that households involved in cash-for-work activities increased their wealth significantly more than the control group.

65. Conversely, Gilligan and Hoddinott (2007) find that providing emergency food aid in the form of food-for-work to individuals who suffered from the 2002 severe drought in rural Ethiopia led to a negative and statistically significant effect on the growth of livestock holdings. One potential explanation for this decrease in livestock is that programme participants may have had to increase their food consumption to meet higher food energy requirements derived from participating in public works. If these food requirements were large enough, programme participants might have needed to draw down their livestock assets to meet their food needs.

Credit and Savings

66. Compared to asset ownership, a smaller number of studies report impacts on credit and savings. Only five studies looked at the impact of humanitarian assistance programmes on credit and savings (three with a pure control group and two without a pure control group). In these studies, outcomes are expressed mainly in terms of whether the household had any savings, loans/debts, or the total monetary value of the savings. However, none of these studies report any gender-specific outcomes related to credit and savings since this outcome is generally reported at the household level.[24]

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23 Appendix Figure 5 summarizes the results on asset outcomes by study intervention type for the six studies with a pure control group. Among the humanitarian assistance programmes included in our review, unconditional cash transfers, vouchers for essential household items, and cash-for-work interventions are effective at improving asset outcomes, while food transfer and food-for-work programmes have no impacts.

24 Appendix Figure 6 summarizes the results on credit and savings outcomes by study-intervention type for the three studies with a pure control group. These studies evaluate only cash-based programmes, especially UCTs and cash voucher, while other types of interventions such as food transfers and public works have not yet been explored in a humanitarian setting for their impact on credit and savings.

67. Overall, this evidence is too inconclusive to be able to draw any lessons. Cash transfer programmes in conflict settings have not led to statistically significant effects on savings or loans (Lehmann and Masterson, 2014; Schwab, 2019). For instance, levels of debt following the winterization cash transfer programme for Syrian refugees in Lebanon (US$575 transfer value) were statistically similar in treatment and control households at US$500 and US$513 in outstanding loans, respectively. In contrast, Quattrochi et al. (2020) find increased debt among Syrian refugees who received vouchers for non-food items. However, the authors note that the effect may indicate either greater access to credit or increased borrowing to meet daily needs.

Income

68. Measuring household income, especially in a humanitarian setting, can be very challenging since self-reported measures of total income generally suffer from recall bias, increasing the margin of measurement error. In addition, this outcome is also regarded as unreliable given the wide variety of income-generating activities that vulnerable populations engage in during a humanitarian crisis. In this review, only three studies report effects on income (two with a pure control group and one without a pure control group).[25]

69. Keeping in mind measurement limitations, cash for-work (CFW) interventions seem to improve income. For instance, Lombardini and Mager (2020) analysed the effects of a cash-for-work (CFW) programme that provided temporary employment in public projects to Syrian refugees in a Jordanian refugee camp. They find that households with at least one member engaged in CFW in the previous 12 months reported income on average 23 percent higher than comparable households in the camp, and they were 19 percentage points less likely to engage in income-generating opportunities other than CFW. On the other hand, Quattrochi et al. (2020) assessed the impact of providing non-food vouchers ranging from US$55–90 per household to displaced and conflict-affected populations in eastern DRC and finds that this type of intervention did not have a significant effect on household income.

3.1.3 Human Development Outcomes

Education

70. Across many of the world's poorest countries, armed conflict continues to destroy not just school infrastructure, but also the hopes and ambitions of a whole generation of children. Therefore, it is critical to strengthen human capital development not only during sudden onset crises but also during slow-onset crises, in addition to ensuring basic needs like food. While direct interventions targeted to improve human capital are desired, in humanitarian settings, simple cash and food transfers could also affect outcomes like education and economic opportunities. We found five studies that report impacts of humanitarian assistance programmes on children's education outcomes, covering mainly conflict-affected populations in DRC, Lebanon, and Mali (all with pure control groups). There is no comparative impact evaluation that contrasts different modalities in attaining educational goals.[26]

71. Three of the five studies find that UCTs have a positive and statistically significant effect on children's education, with similar effects among both boys and girls. First, Chaaban et al. (2020) find that unconditional cash transfers over 4–22 months had a very large effect on the enrollment rate of Syrian refugees in Lebanon. In particular, children aged 5–14 were 10–30 percentage points more likely to be enrolled on a base of 60 percent for the control group. Second, Lehmann and Masterson (2014) find that after the winterization cash transfer intervention in Lebanon, children who received cash assistance were six percentage points more likely to be enrolled relative to the control group, which suggests that cash assistance in a refugee camp setting increased access to education. Third, de Hoop et al. (2019) find that displaced Syrian children who received the *No Lost Generation* cash transfer programme (US$20–65 monthly

25 Appendix Figure 7 summarizes the results on income by study intervention for the two studies with a pure control group. Cash-for-work (CFW) programmes and cash transfers are the primary intervention used to boost incomes in emergency settings.

26 Appendix Figure 8 summarizes the results on education by study intervention type for the five studies. Overall, the evidence suggests that UCTs and school feeding (SF) interventions are among the most promising in improving education outcomes in humanitarian contexts.

transfer value) were not more likely to be enrolled in school, citing the supply-side capacity constraint of schools as the main reason behind this result.[27] However, the study finds positive and statistically significant effects on school attendance among children who enrolled in school and were benefitting from the cash transfer programme.[28] They also find that the programme significantly increased children's desire to complete primary and secondary schools. Moreover, total education expenditure increased by almost 54–70 percent. These findings highlight the potential of UCTs to make a difference in access to education for displaced children from conflict settings and the need to coordinate demand-side and supply-side interventions in settings of conflict displacement.

72. The remaining two studies that look at education outcomes did not find positive impacts. For instance, Quattrochi et al. (2020) find that providing cash vouchers for non-food items to displaced and conflict-affected populations in eastern DRC did not substantially improve school attendance of children aged 5–18. Lastly, Aurino et al. (2019) caution that well-intended programmes might have unexpected results by distorting the incentives of households. The authors examine the impact of two types of food transfer (FT) on children's education outcomes during conflict in Mali: emergency school feeding and general food distribution (GFD). They find that, while on-site school meals increased school enrolment by ten percentage points and years of schooling by half a year, general food distribution led to a 20 percent *decline* in school attendance over five years, especially among boys. A finding that boys spent more time on farm activities and other household work suggests that there may be an important trade-off between children's education and labour constraints faced by households.

73. It important to note that successful approaches to humanitarian assistance in terms of education outcomes need to be tailored to the specific context in which the crisis takes place and to the availability of educational services. For instance, the opportunity costs of schooling may be larger for adolescent boys, if they are involved in farm work or if schools are perceived as targets of armed conflict, while insecurity and violence may affect girls' access to school if households perceive that girls are more likely to be targets of violence.

Economic Opportunities and Labour

74. In theory, the effects of social assistance on labour are ambiguous. A standard economic model predicts that an increase in unexpected unearned income can induce an individual to work less to enjoy more leisure. On the other hand, additional assistance could incentivize individuals to work more by making them more productive and/or alleviating credit and insurance constraints, e.g., expanding their business and making riskier investments. The extra assistance could also help with job search activities (Baird et al., 2018). In our review, four studies report on the effects of humanitarian assistance programmes on labour outcomes covering mainly conflict-affected populations in Ecuador, Lebanon, and Yemen.[29]

75. The evidence on labour force participation is inconclusive and mixed. For instance, Lehmann and Masterson (2014) find that unconditional cash transfers reduced the number of days worked by recipient households in a refugee environment, suggesting that humanitarian assistance may decrease the incentive to work. Consistent with this finding, Chaaban et al. (2020) find that long-term unconditional cash transfers reduced employment from 53 percent to 36 percent among Syrian refugees, while they find an increase in the percentage of unemployed men seeking work with better employment conditions. Conversely, the long-term unconditional cash transfers gave women the option to leave the labour force and avoid low-paying jobs they would have otherwise had to take part in. Overall, this finding suggests that refugees might face undesirable or hazardous working conditions which they can afford to avoid by being more selective in job

27 The Lebanese public school system incorporated vast numbers of Syrian children in a short time, and, as a result, many schools reached full capacity. The enrollment rate for children aged 5–9 was already high at 91 percent.

28 The programme had significant impacts on afternoon shift attendance, which increased by 0.5 days to 0.7 days per week, which is equivalent to an improvement of around 20 percent in school attendance over the comparison groups. The impact of the programme was similar among younger and older children, and among boys and girls.

29 Appendix Figure 9 summarizes the results on labour force participation by study intervention type for these four studies. In humanitarian contexts, the evidence shows that cash transfers, especially UCTs, are the main intervention used to analyse effects on labour outcomes.

searches or dropping out of the labour market only when cash assistance is available. In contrast, Schwab (2019) finds that those who received food and cash transfers were more likely to do off-farm paid work among households living in the vicinity of the Yemen civil war.

76. Finally, Hidrobo et al. (2016) suggest the importance of gender dynamics when looking at the effects of humanitarian assistance transfers on labour. They evaluated equivalently valued monthly transfers of $40 (in the format of food, vouchers, or cash) targeted at women and investigated how labour participation changes for both women and their partners among Colombian refugees and poor Ecuadorian households. The authors find no impacts on participation and working hours on agriculture and non-agricultural work for both the women and their partners. The null effect of female-targeted transfers, compared to other studies, suggests that female and male beneficiaries may have different preferences over consumption and labour and face different labour market conditions.

Health and Subjective Well-Being

77. Emergency environments tend to be chaotic and are often characterized by the collapse of public service delivery, including water, sanitation, and health care. In such environments, health or human welfare may deteriorate rapidly. Humanitarian assistance programmes can be a powerful tool for mitigating the negative consequences of this type of crisis. In our review, five studies examined the impacts on health outcomes ranging from children's anthropometric measures (e.g., height-for-age, weight-for-height, and mid-upper arm circumference), instances of diseases (e.g., malaria and diarrhea), and mental health, to behaviour changes and nutrition knowledge, as well as access to water and health care.[30] None of the studies that report health outcomes presented heterogeneity analysis by gender, leaving an important gap for future research.

78. In our review, three out of five studies find significant positive effects on most health outcomes, while the remaining two studies do not find any significant effects. For instance, Ecker et al. (2019) find that providing unconditional cash transfers (UCTs) to conflict-affected households during the civil war in Yemen significantly improved children's anthropometric outcomes (measured as weight-for-height z-score and mid-upper arm circumference z-scores). Similarly, Chaaban et al. (2020) find a significant improvement to a broad range of health outcomes among Syrian refugees in Lebanon due to participating in an unconditional cash transfer programme.[31] Lastly, Kurdi et al. (2019) find that a conditional cash transfer (CCT) programme during the civil conflict in Yemen led to a significant decrease in child malnutrition.

79. On the other hand, evidence on the effectiveness of vouchers and food transfers is limited. Quattrochi et al. (2020) find an insignificant positive effect of non-food item vouchers on weight-for-height z-scores, and they did not find any impact on mid-upper arm circumference. Similarly, Tranchant et al. (2019) find an insignificant negative effect of food aid on the height of children aged 2–5. These findings suggest either that vouchers and food transfer interventions might not be very effective at improving children's anthropometric outcomes, or that detecting changes to height and weight requires a larger sample to improve statistical power.

80. Lastly, we found two studies that reported on subjective well-being. Quatrochi et al. (2020) find large positive effects of non-food item (NFI) vouchers on the mental health of displaced and conflict-affected adults in eastern DRC. This positive effect appears to be driven by higher levels of well-being (measured by the WHO scale) and life satisfaction (measured by the question, "All things considered, how satisfied are you with your life as a whole these days on a scale of 1 to 10?"). In the same line, Lombardini and Mager (2020) report the impact of a cash-for-work (CFW) programme on subjective well-being for Syrian refugees in

30 Appendix Figure 10 summarizes the results on health outcomes by study intervention.

31 The authors find a significant increase in the access to safe drinking water by 15–30 percentage points on a base of 67 percent for the control group. Moreover, cash beneficiaries reported that their access to primary healthcare improved and their need for hospitalization decreased. Cash support presumably improved their ability to cover healthcare costs and other indirect costs such as transportation costs. Importantly, the authors find that 55 percent of those who received cash over a longer period (more than 12 months) reported better mental health (measured using Mental Health Inventory–MHI-5), relative to 18.5 percent in the control group. However, similar effects were not detected for those who received cash over a short period (less than 12 months).

Jordan. The questions they used included whether respondents feel they positively contribute to their family and whether they feel satisfied with their lives. They find three positive coefficients among the four questions, but only one of them is statistically significant.

3.1.4 Gender Outcomes

81. Gender outcomes are less explored in humanitarian assistance. Even outside of humanitarian settings, the evidence on policies and programmes that effectively reduce gender-based violence and empower women in the developing world is scarce, and there is still no consensus on theories and mechanisms. While it is often assumed that improving the economic situation of women and ensuring they have an equal share of resources within their households will alleviate gender-based violence and potentially also empower and give them more decision-making in the household, research has also shown that this is not always the case. In particular, concerns have been raised that cash transfers could disadvantage women by reducing their control over assistance in the household. In this review, we found five studies that report on the impact of humanitarian assistance programmes on gender outcomes. In particular, four studies report on women's empowerment (three with a pure control and one without a pure control), while only one study reports on gender-based violence.[32]

82. Similar to the link between cash-based interventions and women's empowerment in the broader literature, the evidence is also ambiguous when focused on humanitarian settings.[33] For example, on the one hand, Kurdi et al. (2019) show that conditional cash transfers as part of the Yemen Emergency Crisis Response Project improved women's empowerment. In particular, treated women were more likely to report taking their child alone to the health center and having higher aspirations for their daughters' education. On the other hand, Lombardini and Mager (2020) find that Syrian refugee households involved in CFW activities in Jordan had a higher proportion of women engaged in income-generating activities. However, they find no evidence that cash-for-work (CFW) improved gender equality outcomes.[34] Relatedly, Hidrobo et al. (2016) show that refugee and poor women who received cash, vouchers, and food transfers as part of a programme designed to reduce poverty and food security in northern Ecuador were more likely to spend more time engaged in domestic labour, which may be interpreted as there were fewer opportunities for women to spend time outside of the home.

83. Hidrobo et al. (2016) is the only study that exclusively focuses on the impacts of humanitarian assistance on gender-based violence. The authors show that equally valued transfers of cash, voucher, and food targeted to Colombian refugee women significantly decreased controlling behaviours and physical/sexual violence compared to the control group. When examined by individual modality, they find that food transfers reduced physical or sexual violence, cash reduced controlling behaviours, and vouchers reduced controlling behaviours and physical or sexual violence. However, these differences across modalities are not significantly different from each other.

3.1.5 Social Cohesion Outcomes

84. There is still no consensus in the literature on the definition of social capital, but in this review we use it to describe characteristics of social relations in a certain community, including cooperation and solidarity between groups and individuals, trust in individuals, lack of discrimination, confidence in institutions, and agency. We found four studies that examined the impacts of humanitarian assistance programmes on social cohesion (three with a pure control and one that compared different modalities), covering mainly

32 In these studies, women's empowerment is measured through indicators such as women's decision-making power and attitudes toward gender roles.

33 Appendix Figure 11 summarizes the results on women's empowerment by study intervention type for the three studies with a pure control group, while Appendix Figure 12 shows the results on gender-based violence.

34 Lombardini and Mager (2020) show that individuals involved in CFW activities were less likely to report that men should support with care work in the home compared to individuals in the control group. However, this is not surprising given that the intervention was not targeted for women, and 80 percent of the respondents were men.

conflict-affected populations in DRC, Ecuador, and Lebanon.[35] Although gender differences in this outcomes are undoubtedly interesting, none of the studies reports how impacts varied by the gender of the target recipient.

85. Despite the limited evidence on social cohesion, the few studies that report this outcome suggest that humanitarian assistance programmes can effectively promote social capital during a humanitarian crisis. For instance, Lehmann and Masterson (2014) find that cash transfer recipients in a refugee camp in Lebanon had significantly fewer disputes among household members. They also find that the relationship between Syrian refugees and Lebanese community members improved, as measured by social interactions in providing and receiving help. Relatedly, Quattrochi et al. (2020) measured the effect of non-food vouchers on social cohesion in DRC based on contributions to other households, contributions to the village, conflicts with other households, trust, and incidences of theft. They find a positive effect on the contributions to the village, but there were no effects on other measures of social cohesion. Similarly, Valli et al. (2019) show that equally valued transfers of cash, vouchers, and food targeted to Colombian refugees in Ecuador improved outcomes on personal agency, attitudes on diversity, confidence in institutions, and social participation. However, the programme did not have any effects on social cohesion among Ecuadorian participants.[36]

86. Even though the included studies in our report find positive effects on social cohesion, it is important to note that humanitarian assistance programmes – in-kind or cash – might also have negative effects by increasing social tensions when certain groups, notably refugees, are provided with a cash transfer that is unavailable to host communities. To alleviate such tensions, interventions in humanitarian settings that aim to improve social cohesion outcomes could either include host communities as beneficiaries or sensitize them to the benefits of cash programmes targeting refugees.

3.2 COST ANALYSIS

87. The types of interventions used by studies in this review can be broadly grouped into cash transfers and food transfers. Cash is handed out manually or delivered as mobile money and/or cash vouchers. Similarly, food is distributed as an in-kind transfer (individually or through schools) or as a voucher that can be exchanged for food in shops or at organized fairs.

88. As humanitarian budgets are limited, a key question is whether one delivery method is more cost-effective than others for equivalently valued transfers. Assessing cost-effectiveness requires estimating total returns on a range of short-term and long-term outcomes, including food security, income, expenditure, health, and education. Depending on the goals and budget constraints of the study, it is not necessary (and is, in fact, difficult) to measure all outcomes. For example, outcomes such as intimate partner violence, empowerment, and subjective well-being are difficult to quantify, and therefore aggregating the returns across outcomes is challenging. Quantifying all costs that go into delivering programmes is equally challenging, especially when multiple organizations provide resources with different or no accounting systems. Identifying and valuing non-monetary items such as volunteers' time and people involved in the programmes is not straightforward either. Only four out of twenty studies report the implementation costs of different transfer modalities with equivalent monetary values. Due to the lack of evidence, it's not possible to conclude which type of assistance is most efficient in terms of the cost of delivery.

89. First, Aker et al. (2011) find that the total programme cost of manual cash transfers is 7 percent lower than the cost of mobile money transfers. One important consideration is that the comparison depends on the frequency of transfers. Given that mobile money transfers require higher fixed costs upfront to open and set up the mobile money accounts, the average cost of each transfer will be lower with a higher number of transfers. Furthermore, the authors find that recipients in the mobile money transfer group

35 Appendix Figure 13 summarizes the results on social cohesion by study intervention for the three studies with a pure control group.

36 The authors suggest that participating in the nutrition and health training sessions, as well as the programme messaging around inclusiveness, might have contributed to the observed rise in social cohesion.

benefited from reduced opportunity costs of their time which is not adequately considered when comparing the implementation cost. Overall, they conclude that the additional benefits from the mobile money transfer outweigh the small cost increase.

90. The other three studies compare the costs of other types of interventions (but not mobile money), and argue that cash transfer method is the most economic intervention to implement. Sandström and Tchatchua (2010) find that cash transfer is at least five percent cheaper to implement than food transfer. Similarly, Aker (2017) finds the per-recipient implementation cost is eight percent less for cash transfer than voucher transfer. Hidrobo et al. (2014) compare all three modalities and find that cash transfer is 9 percent cheaper than voucher transfer and 75 percent cheaper than food transfer.

91. In summary, Aker et al. (2011) suggest that mobile money cash transfer can be the most efficient provided that mobile network infrastructure is available, and it is convenient and clear enough for beneficiaries to withdraw and transfer the mobile money for their use. The remaining few studies agree that manual cash delivery has a lower implementation cost for delivering equally-valued transfers than voucher transfer, with food transfer being the most expensive way to deliver assistance.

4 Comparative Performance of Transfer Modalities Across Sectors

92. The decision on the types of transfers (e.g., cash, voucher, vs. food) and the delivery mechanisms (e.g., mobile money vs. cash-in-envelope, or lump sum vs. multiple transfers) involves multiple factors. First, the condition of market functioning needs to be assessed. As is the case in many humanitarian settings, missing markets can undermine the effectiveness of cash transfers if there are limited opportunities to use the cash transfer. Second, the existing physical and financial infrastructure needs to be taken into account. These different modalities require delivery systems for getting them to their intended beneficiaries. The system may vary from staff traveling to communities distributing manual cash or goods, to payment service providers such as post offices disbursing cash over the counter, to electronic mechanisms such as transfers by mobile phone or directly into bank accounts. In particular, conflict and rapid-onset natural disasters can disrupt payment systems, damage infrastructure, and displace people and businesses. Delivering cash digitally may not be the most effective delivery method if the cost of cashing it out is high for villagers in remote areas with poor road conditions. Third, the selection of food items matters. If the in-kind food items are *infra-marginal* (the consumption quantity even without transfer is greater than the quantity provided), in-kind will have little to no distortion effects. On the other hand, if some food items are provided more than households would consume, then in-kind transfers can be distortionary in a sense it might induce households to consume more food items than they desire, or those food items may go waste if they are not easily storable.

93. Recognizing that the effectiveness and efficiency of cash largely depend on context-specific factors like the availability of financial service providers, functioning markets, and security, humanitarian actors have committed to increasing the use of cash (instead of, or in addition to, in-kind) whenever feasible (UNOCHA, 2017). Reasons for cash preference include ethical motivations, as it is generally believed to respect beneficiary preference, empowering them to address their own needs by affording them more choice in local markets. On the other hand, governments may prefer in-kind transfers under the assumption that households may be short-sighted and spend money for immediate gratification (Hanna and Karlan, 2017), or they may not take into account social benefits when making individual decisions. Nonetheless, donors and practitioners continue to call for additional evidence from the humanitarian space on how the benefits and impacts of cash-based transfers compare to in-kind, with an eye to outcomes regarding risk and cost-effectiveness (HLPHF, 2016).

94. In this section, we examine the impact evaluation studies that have deliberately compared the relative effectiveness of alternative transfer modalities according to different dimensions of outcomes. A summary of the impacts is presented in **Table 6**, which displays the most effective transfer modality according to different outcome dimensions.

4.1 EFFECTIVENESS BY TRANSFER MODALITIES

4.1.1 Basic Needs Outcomes

95. We found six studies that report the most effective modality in terms of basic needs outcomes, such as food security, food expenditure, non-food expenditure, and coping strategies.

96. **Food security**. Even though food security is one of the most explored outcomes in humanitarian settings, the debate over the most effective modality in improving food security outcomes remains inconclusive. When comparing different modalities of transfers, the data show that, on average, cash and in-kind transfers are similarly effective in improving overall food security. Certain differences among cash and in-kind transfers are not very significant and depend on the indicator used to measure them. For instance, one of the most used indicators is food consumption. Hidrobo et al. (2014) used a randomized controlled trial to assess the impacts of cash (CCT), food vouchers, and food transfers in a refugee camp in Ecuador, and they find that all three modalities significantly improved the quantity and quality of food

consumed. However, while the impacts on food consumption were larger for food-receiving beneficiaries relative to both cash and voucher transfers, they were not statistically significant.[37] On the other hand, Aker (2017) did not find any significant differences in food consumption between food vouchers and cash, partly because voucher households could resell part of what they had purchased. However, Aker (2017) also noted that food transfers were distorting because those receiving cash spent more money on health and education items.

97. Another indicator that provides information on the impact on food security at the household level is caloric intake. In contrast to food consumption, food transfers tend to have a larger impact on caloric intake relative to cash in most contexts. For example, in Ecuador, Hidrobo et al. (2014) find that food transfers led to a significantly larger increase in consumed calories (relative to cash transfers) mainly due to larger increases in consumption of cereals (41 percent of households' caloric intake). A potential mechanism behind this effect is a change in diet, where cash beneficiaries shift from highly caloric foods to a diverse diet, including eggs, milk and dairy, vegetables, meat, etc.

98. Lastly, to analyse the quality of consumption patterns and diets, another indicator used in the literature is dietary diversity (e.g., dietary diversity index, food consumption scores, and household dietary diversity score). In the humanitarian literature, results are mixed. On the one hand, Hidrobo et al. (2014) find that vouchers led to significantly larger increases in dietary diversity (relative to both cash and food transfers). This effect was mainly due to larger increases in the number of days consuming vegetables, eggs, milk, and dairy. Similarly, Sandström and Tchatchua (2010) find that those receiving cash increased dietary diversity by consuming more meat, dairy products, and processed foods (relative to the food transfer group), but the differences are quite small. On the other hand, Aker (2017) finds that dietary diversity was similar across food voucher-receiving households and cash-receiving households.[38]

99. This literature also examines different modalities of delivering cash (mobile vs. manual). For instance, Aker et al. (2011) compared the effect of mobile money cash transfers and manual cash transfers. They found that those who received mobile money transfers increased dietary diversity (as measured through HDDS) more than those who received cash manually. The authors suggested that this may be due to lower transaction costs and greater privacy.

100. **Food expenditure**. Two studies examined the impacts of different modalities of transfers on food expenditure. Sandström and Tchatchua (2010) randomly assigned beneficiaries into cash transfer and food transfer groups during WFP operations in Sri Lanka. They find that total food expenditure was similar for both groups, but cash households spent more on meat, dairy products, and processed foods and less on rice and wheat, relative to food transfer households. In contrast, in DRC, Aker (2017) finds that total weekly food expenditures were 13 percent lower for households receiving cash than those receiving food vouchers. This was largely because vouchers were commodity-based. Once again, the data shows mixed results for cash and in-kind transfers, suggesting that their effectiveness is similar on average.

101. **Coping strategies.** There is limited evidence on how coping strategies are differentially affected by different transfer modalities. For this outcome group, the data also show that in-kind and cash transfers have similar effectiveness. For instance, Schwab (2019) finds that cash transfers and food transfers did not

37 Evidence from the development literature on the relative effectiveness of cash versus food indicates that impacts on food consumption are higher for cash than for food beneficiaries (Ahmed, et al., 2010; Barker, et al., 2014; Cunha, 2014). In the case of Ahmed et al. (2020), who compared the relative effectiveness of cash and food transfers to the ultra-poor in Bangladesh, one potential explanation is that the size of the cash transfer was significantly higher than the food transfer.

38 The findings in non-humanitarian settings are also consistent. For example, Skoufias et al. (2008) evaluated randomized cash and in-kind transfers of Mexican government's food assistance programme, the Programa de Apoyo Alimentario (PAL), and find similar effects on food and total consumption. Using the same programme, Cunha (2014) reaches the same conclusion and explains that it is because the in-kind food transfers of this programme were infra-marginal in terms of total food consumption. However, he also noted there was a large variation in over- or under-consumption across the ten items provided (e.g., bean transfer amounts were smaller than consumption needs, while milk powder was provided significantly more than consumption needs). One exception to this overall literature is Hoddinott et al., 2018, who find that households randomized to receive in-kind transfers in Niger had higher increases in food consumption score (FCS) and dietary diversity relative to the cash group.

have any significant difference on child labour during civil unrest in Yemen. Similarly, Aker et al. (2011) did not find any differences between mobile money transfers and manual cash transfers on coping strategies measured by selling land and cutting trees. These studies do not include conventional coping strategies, including reducing the portions of meals, working as a casual labourer, selling livestock, or borrowing. Therefore, more evidence on this outcome would be particularly useful.

102. **Non-food expenditure:** Similar to the previous basic needs outcomes, six studies in our review compare the effectiveness of different modalities on non-food expenditure. In this case, there is some suggestive evidence that unconditional cash transfers increase non-food expenditure more than other types of interventions, but overall the evidence is still inconclusive (Aker, 2017; Sandström and Tchatchua, 2010; Schwab, 2019).

103. The initial findings from the literature on basic needs outcomes are threefold. First, for food security, the effects are similar across modalities. Therefore, it might be useful to consider other factors when determining the type of transfer, such as implementation cost, presence of functioning local markets, and, importantly, beneficiary preference. Second, the specific types of food consumed are different depending on the food basket provided, restrictions placed on food vouchers, and the availability and prices of food items in local stores. It is possible to make specific food items more accessible and affordable to increase the intake of specific micronutrients. Third, cash tends to increase non-food expenditures such as clothing or agricultural inputs. Assuming households know how to best spend their money, this suggests that in-kind transfers could be distortionary.

4.1.2 Financial Outcomes

104. Evidence from a direct comparison of cash versus in-kind transfers within the same intervention in humanitarian settings is more limited for this outcome category. In our sample, three studies assess the relative effectiveness of different modalities on financial outcomes. Two evaluated different unconditional cash transfer modalities in Niger and the Philippines (Aker et al., 2011; Mercy Corps, 2015), while one compared cash transfers and vouchers in a refugee camp setting in the DRC (Aker, 2017).

105. **Asset ownership.** Following Typhoon Haiyan in the Philippines in 2013, households who received unconditional cash transfers in a lump sum (single payment) had more productive assets compared with households that received three payments (multiple payments) of the same amount (Mercy Corps, 2015). In Niger, Aker et al. (2011) find that households who received cash transfers through mobile phones had more non-durable assets than those who received manual cash, though there was no difference in durable asset ownership. The study suggests that households receiving mobile transfers are less likely to sell non-durable assets (e.g., lamps and flashlights) less frequently than those receiving manual cash transfers. Lastly, Aker (2017) finds no difference in asset ownership between households receiving cash vs. vouchers in a refugee camp setting in DRC.

106. **Savings.** Regarding the relative effectiveness of different modalities on savings, Mercy Corps (2015) evaluated several unconditional cash transfer modalities in a natural disaster setting. Following Typhoon Haiyan in the Philippines, Mercy Corps' cash transfer programme compared four UCT treatment arms: (i) a lump sum cash transfer, (ii) a multiple payment cash transfer, (iii) a multiple payment cash transfer plus a financial literacy training, and (iv) a multiple payment cash transfer plus a financial literacy training and savings encouragements through messages. First, the authors find no evidence that the lump sum and the multiple payment disbursements were different when it came to encouraging savings behaviour. Second, for households that received multiple cash payments, the addition of the financial literacy training component did not have any effect on savings behaviour. The authors note that one-off trainings often included in relief efforts are likely insufficient to affect financial behaviours, but that as communities move forward with recovery, ensuring that households have access to the benefits of financial products will play a role in accelerating improvement and reducing vulnerability. Third, for households that received multiple cash payments and the financial literacy training, also receiving nudges through voice messages to encourage saving led to a statistically significant increase in the usage of both informal and formal savings products among beneficiaries who reported receiving the messages, suggesting that nudges can be a powerful tool for improving savings behaviour in a humanitarian setting.

107. On the other hand, Aker (2017) compared the effectiveness of unconditional cash transfers and vouchers in an informal camp for internally displaced persons in the DRC. The author finds that households receiving cash transfers saved slightly more during the intervention than households receiving vouchers. Similarly, nine percent of households receiving cash had savings at endline compared to only one percent of households that received vouchers. Even though these results suggest that cash may be more conducive to monetary savings, while vouchers are more conducive to asset purchases, the study did not provide evidence that one modality has a greater effect on asset ownership than the other.

108. **Income.** Regarding the relative effectiveness of different modalities, household income is examined only by Aker (2017), who compared the effectiveness of unconditional cash transfers and vouchers in increasing access to food and essential non-food items in an informal camp for internally displaced persons in DRC. The author does not find a statistically significant difference in endline household incomes between unconditional cash transfer and voucher groups, suggesting that one modality does not have a greater effect than the other.

4.1.3 Human Development Outcomes

109. In terms of education, health, and labour outcomes, there is not a single evaluation on the relative effectiveness of different modalities in improving human capital outcomes in humanitarian settings, which highlights the urgent need for more research in this field.

110. However, a handful of studies present data on the relative effectiveness of cash and in-kind transfers in non-humanitarian settings on short and longer-term nutrition-related outcomes from which we can extrapolate some lessons to inform humanitarian debates. For instance, Cunha (2014) measured the impact of a food assistance programme in Mexico and shows that both food and cash transfers increased the intake of micronutrients (iron) among children. However, the difference is not statistically significant. Anemia prevalence was also reduced in both food and cash receiving households.

111. In Uganda, Gilligan and Roy (2013) examined the impact of two transfer modalities – cash vs. food – linked to preschool enrollment. They find that cash transfers decreased anemia prevalence by approximately ten percentage points among children, while food transfers had no significant impacts. The authors interpret the limited impact of food as potentially driven by factors such as (i) households sharing food ratios across all household members, reducing ratios targeted only for children; and (ii) households not valuing the food ratio as much because it was difficult to sell in the market in exchange for cash. In another example, Baker, Filmer, and Rigolini (2014) evaluated the impact of a food-cash scholarship programme in Cambodia and found that neither treatment modality had significant impacts on anthropometric indicators, possibly because of the small transfer size and short treatment exposure.

112. Lastly, Langendorf et al. (2014) compared several types of cash and food combinations that aim to reduce severe malnutrition and mortality rates among children. Their findings suggest that combining cash and food transfers may reduce the incidence of malnutrition at about twice the rate compared to either cash transfers or supplementary food alone.

113. While the cash versus in-kind transfer debate is largely about demand-side issues, there is a much larger agenda around the supply-side services, such as health and education, especially in humanitarian settings. In particular, it is important to note that transfers cannot replace services and when it comes to the effectiveness and efficiency of transfer-based interventions, whether cash or in-kind. In terms of human development outcomes, the availability and quality of health and education services is indispensable. In other words, there is little rationale to implement cash or in-kind transfers to improve health and/or education outcomes if the supply of such services is unavailable or of inadequate quality. For instance, de Hoop et al. (2019) find that cash provided to children increased school attendance among Syrian children in Lebanon, but the effects of the humanitarian response were limited to overcrowding in schools. This evaluation highlights the importance of being mindful of supply changes when increasing the demand for services.

4.1.4 Gender Outcomes

114. There is minimal literature that investigates the relative effectiveness of cash and in-kind transfers on gender-based violence, women's empowerment, and social cohesion in humanitarian settings

115. **Gender-based violence.** In the context of the Colombian refugee crisis, Hidrobo et al. (2016) studied whether equally valued transfers of cash, vouchers, and food targeted to women have different impacts on gender-based violence (GBV). Overall, the study shows that transfer interventions (CCT, FT, and vouchers) significantly decreased controlling behaviours and physical/sexual violence compared to the control group. When examined by individual modality, they find that food transfers reduced physical or sexual violence, cash reduced controlling behaviours, and vouchers reduced controlling behaviours as well as physical or sexual violence. This finding suggests that partners do not use violence to extract resources because the effects are similar for cash, which can be easily extracted, as well as for food transfers and food vouchers, which cannot be easily extracted. However, differences across modalities are not statistically significant.

116. **Women's empowerment.** Aker (2017) is the only study that compared the relative effectiveness of female-targeted unconditional cash transfers and vouchers on intra-household decision-making in a humanitarian context (a refugee camp in eastern DRC). The author finds that most respondents reported making joint decisions on children's education, inter-household sharing, and savings, which did not differ by transfer modality. Interestingly, however, the cash group is less likely to discuss the use of transfers with other family members (relative to the voucher group).[39]

4.1.5 Social Cohesion Outcomes

117. **Social cohesion.** In terms of studies that measure the relative effectiveness of different modalities in humanitarian contexts, only one study looked at impacts on social cohesion. Aker (2017) compared the relative effectiveness of unconditional cash transfers and vouchers in a refugee camp context in eastern DRC. This study measured social cohesion as a willingness to share part of the transfer with other households. The author finds that both types of programme recipients shared part of their transfer, suggesting that sharing is an important coping mechanism within the refugee camp. While cash transfer households were 15 percentage points more likely to share the money received with other households, voucher households were 15 percentage points more likely to share goods purchased with the transfer.

39 Aker et al. (2011) also find that the mobile money transfer system, compared to manual cash transfers, resulted in an increase in the diversity of crops grown by the household. The impact was driven by an increase in two marginal cash crops which are primarily grown by women. While not an explicit measure of control over resources, this evidence suggests there may be positive impacts of the mobile money modality on women's decision-making power beyond the cash transferred. Authors theorize that this is due to the increased privacy that mobile money affords women. However, more evidence is needed on the potentially empowering aspects of digital modalities.

Box 1. Implications of Targeting Choices in Humanitarian Settings

While targeting is at the forefront of the minds of practitioners in humanitarian assistance, there is little to no quasi- or experimental literature evaluating different targeting methods in humanitarian settings, potentially because of urgency and ethical issues on the ground. Most experimental studies that exist come from outside humanitarian settings.[40]

Three recent studies compare proxy means testing (PMT) versus community-based targeting (CBT) methods with each study using different CBT methods: (i) community meetings where either leaders or everyone was invited in Alatas et al. (2012), (ii) committees were formed in Premand and Schnitzer (2018), and (iii) allocation decisions led by the village chief in Basurto et al. (2020).

First, Alatas et al. (2012) compared PMT, CBT (where villagers ranked everyone from richest to poorest), and the hybrid method (communities pre-identified the list before conducting PMT) in Indonesia for a cash transfer programme. CBT and the hybrid method appeared to perform worse than PMT at identifying the true poor, but CBT performed well when focused on the very poorest. The authors interpreted that communities may have a different concept of poverty. For example, even if consumption per capita is the same, communities considered widowed households poorer due to their lower earnings capacity. Ultimately, differences across the methods were small and had no impact on calculated poverty rates.

Second, Premand and Schnitzer (2018) find that PMT performed better at identifying households with lower consumption per capita than the method based on community committees in Niger. On the other hand, PMT was more likely to exclude households with recent shocks than CBT. However, these targeting methods performed similarly when looking at other proxies of poverty (i.e., food security, asset ownership, income, and malnutrition). They also find that committee members attempted to benefit themselves, but this was easily mitigated with small checks.[41]

Third, Basurto et al. (2020) compared PMT with CBT (where village chiefs decided allocation) in Malawi for subsidy programmes for agricultural inputs and food. Both PMT and CBT were inaccurate, missing a large fraction of the poor. Chiefs were more likely to provide subsidies to those who experienced recent droughts, floods, livestock death, or crop diseases, suggesting that they utilized local knowledge that may be hard to capture through other targeting methods. The authors also find evidence of corruption; chiefs provided more food subsidies to relatives. However, this had little welfare consequences because those relatives were similarly poor.

In addition to the PMT and CBT methods, the literature has evaluated other alternative ways of targeting. For instance, Alatas et al. (2016) studied a novel way to improve targeting using a self-selection mechanism by imposing small time and travel costs. Program Keluarga Harapan (PKH), a conditional cash transfer project in Indonesia, determines eligibility based on 30 observable assets. In one group, households were asked to visit a registration site to go through the asset test with an official by traveling a few kilometers and waiting in line. And in the other group, the government conducted the asset test without requiring potential beneficiaries to travel. They find that the group that required visits to registration sites was poorer, suggesting that relatively richer people were less likely to travel a long distance in the face of uncertainty of not getting selected into the programme. One downside of the self-targeting method is that the poorest people who need the benefit the most may not be able to participate at all because of the time and travel costs imposed.

40 More details on the different targeting methods are found in the Appendix.

41 Beath et al. (2013) also find that the presence of elected councils increases embezzlement when their responsibilities of distributing and managing aid are not explicitly mandated.

A non-experimental study by Altindağ et al. (2021) shows that by applying a statistical technique called LASSO (least absolute shrinkage and selection operator) to administrative data, one can predict the target as well as a short-form of PMT in the context of cash transfers to Syrian refugees. Since relying on existing administrative data does not incur new costs and can be implemented quickly, this method can be useful in a setting where administrative data exists.

Overall, the non-humanitarian literature suggests that the community-based targeting (CBT) method works as well as PMT. In addition, a combination of targeting methods can be most effective for targeting beneficiaries to achieve the programme objectives than relying on a single method (Coady et al., 2004; Grosh et al., 2008; Handa et al., 2012; Leite, 2014; Schnitzer, 2019). For instance, CBT can be used in combination with PMT, where the community is engaged at the project preparation stage to provide a pre-list of potential programme beneficiaries, while PMT is applied over the pre-identified households.

Despite the strengths and weaknesses of each targeting method, it is important to note that the design and implementation of the method (rather than the choice of the method) play a key role in targeting performance. One key question to ask in humanitarian settings is how fast these targeting methods can be implemented. Because urgency is a critical factor, implementing organizations need to consider the trade-offs between targeting accuracy versus the speed of delivering assistance to people in need. For example, imperfect information at the local level and manipulation can affect the efficiency and performance of CBT targeting, even though CBT is more effective to capture short-term shocks. In this sense, organizing community meetings may take longer than quickly administering short-form PMT surveys, resulting in worse welfare consequences from delayed assistance at the cost of accuracy.[42]

42 New technologies such as satellite imagery, phone metadata, and drone imagery are also becoming available to assist beneficiary targeting during humanitarian crises. These innovative methods can provide cheaper, faster, and more frequent data than previous approaches, especially where survey data are scare or inexistent. In particular, satellite and drone imagery data can be used to assess the level of destruction in a certain location, as well as to predict various economic and livelihood outcomes or household poverty, potentially improving targeting of beneficiaries and subsequent evaluation of humanitarian assistance programmes (Burke et al., 2021; Jean et al., 2016; Yeh et al., 2020).

5 Evidence Gaps and Areas for Future Research

118. Given the relatively limited evidence on the impact of humanitarian assistance programmes, and especially the lack of evidence on the relative effectiveness of modalities, it is very challenging to draw conclusions on the generalizability and the applicability of such evidence to other contexts. Most studies in our review report very little information on operational aspects and mechanisms behind the results, which limits the understanding of what makes a particular intervention successful and the possibility of policymakers for replicating programmes in similar contexts. In this section, we propose several areas of focus for future research.

Basic Needs

119. First, we need to better understand how different modalities affect types of food consumed and consumption at the individual level (e.g., children vs. adults or male vs. female). The impacts of among cash versus in-kind transfers depend on the type of indicators used to measure them (e.g., caloric intake, dietary diversity) and on other factors such as the characteristics of the targeted population and the capacity of local markets. Second, the effect of food assistance on food expenditure is unclear because food expenditure can increase or decrease. We suggest studies focus more on food consumption when aid is in-kind. Third, there is modest evidence that cash transfers increase non-food expenditure more than other types of interventions. This implies that, in general, cash transfers better reflect the preferences of beneficiaries, which should be considered when deciding the types of interventions.

120. Despite most evidence in humanitarian settings relating to basic needs outcomes such as food security, food/non-food expenditure, and coping strategies, the evidence base on the comparative performance of transfer modalities in this cluster is still emerging and inconclusive. While cash allows beneficiaries to spend the money in their best interests, they might not be aware of the nutritional composition of different food groups. On the other hand, food transfers have the benefit of providing the most balanced diet, but it might be difficult to identify which nutrients households are deficient in, and this may vary across households. Therefore, the existing evidence suggests that what makes one modality more effective than another depends on other factors such as the characteristics of the targeted population and the capacity of local markets, among others. Future research could provide a better understanding of the interactions between different transfer modalities, the context, and the capacity of local markets.

Financial Outcomes

121. To enhance livelihoods and earning opportunities in humanitarian settings, it is important to identify key constraints faced by vulnerable populations, such as a lack of capital or information and skills. Therefore, for this cluster of outcomes, a successful intervention could provide a blend of cash and in-kind interventions, where here, “in-kind” could refer to physical capital, asset, materials, training, or nudges. One example of this type of intervention that has not been explored much in humanitarian settings is graduation programmes or “cash plus” interventions, which include not only cash transfers, but also the provision of livestock, life-skills coaching, training in income-generating activities, or access to saving facilities and microcredit. A gender gap in financial inclusion is well-documented in the literature, so such programming would benefit from an added focus on addressing these gender inequalities. However, such programmes can be difficult to implement in humanitarian settings because many fundamental services that complement the cash transfer might be destroyed during conflict or natural disasters. Despite this, even in such contexts, there are still opportunities to put together a package of support that would help people move out of vulnerability or better cope with risks and shocks. Cash transfers alone are not always

the most effective modality for livelihoods, but a combination of both cash and in-kind modalities could do better in humanitarian contexts.[43]

Human Development

122. The evidence is inconclusive for the human development field, which includes education, labour market participation, and health outcomes. In addition, there is no documentation on the relative effectiveness of different modalities in improving human capital outcomes, which highlights the need for more research in this field.

123. In terms of education outcomes, important areas for future research remain. For instance, similar to cash transfers, variation in the size and duration of food assistance may influence educational effectiveness. Moreover, understanding to what extent complementary interventions such as adapted materials for at-home learning, tablet-based learning, or other ed-tech interventions, as well as supply-side educational interventions, may enhance the effects of humanitarian assistance interventions. Another direction for future research related to education and child development in humanitarian settings is the quality of education and learning outcomes.

124. Conflict-affected populations (such as forcibly displaced individuals) face multiple obstacles in humanitarian settings such as legal restrictions, loss of assets, physical and mental health issues, skills mismatches, lack of social networks, excessive labour supply, and discrimination, among others. Overall, the findings suggest that labour market participation outcomes depend highly on the characteristics of those forcibly displaced, the labour market conditions, and available job opportunities. Therefore, more evidence on this area will be particularly useful to generate generalized findings.

125. In terms of health and nutrition outcomes, future studies need to investigate the frequency and types of illness among adults and the treatment conditions of such events. For instance, cash transfers combined with interventions addressing the psychological and mental health effects of forced displacement (e.g., therapy interventions) or vouchers labelled to pay for medical costs related to mental health issues can be very promising.

126. To summarize, these findings point to a clear need for more research on human development in humanitarian settings. In this field, "cash plus" interventions (a blend between cash and in-kind interventions that provide not only cash but also education, health, skills training, early childhood development, or nutrition services) may be more effective than either cash transfers or supplementary food alone.

Gender Outcomes

127. There is an evidence gap regarding the effectiveness and efficiency of social protection programmes in terms of gender outcomes, with gender-based violence being the least explored area in the humanitarian literature. Women and girls are at increased risk of various negative outcomes in conflicts and humanitarian crises, including harm to their physical and mental health and increased exposure to violence and exploitation.

128. The existing evidence is scarce and ambiguous when focused on humanitarian settings. Since the studies that tried to examine women's empowerment were only based on a few questions, including the perception of gender norms, we suggest that future research include more extensive measures of women's empowerment by having a standalone module to contribute to the literature. Moreover, since gender-based violence is the least explored outcome in humanitarian settings, it would be interesting to explore whether humanitarian assistance interventions effectively reduce gender-based violence by carefully accounting for potential mechanisms in the intra-household dynamics. In addition, variations in recipient gender, marital status, and the size and duration of the transfer may impact gender outcomes differently.

43 The analysis from this review suggests that "cash plus" interventions, such as the Mercy Corps' cash transfer programme that combined cash transfers with financial literacy training and savings encouragements, might have the potential for greater impact on livelihoods and household economic outcomes than cash alone.

For example, it would be interesting to explore whether female-targeted transfers can decrease gender-based violence and improve women's well-being in humanitarian settings.[44] More analysis on the comparative effectiveness and cost-efficiency of different modalities for gender objectives is also needed.

129. Other gender outcomes worth exploring in humanitarian settings are child marriage, teenage pregnancy, sexual exploitation, and abuse, especially in conflict-affected settings. Complementary components to cash transfers could also be considered. In addition, further investigation is needed to understand the medium- and long-term impacts of social protection interventions on women's and girl's socioeconomic vulnerability in humanitarian settings, as these may change over time. Lastly, considerations must be made concerning programme design, such as the targeting and registration process, to reduce risks to women related to the changing household dynamics caused by social protection programmes.

Social Cohesion

130. As the use of social protection programmes among conflict-affected populations in humanitarian settings increases, further research is needed. Sharing and social cohesion is an area where investigating different modalities is especially interesting as some transfers like mobile money transfers are much easier to hide than other types of transfers like food assistance. Refugees and internally displaced individuals lack social networks in host communities to help them overcome information asymmetries and integrate into the labour market. In this sense, interventions that complement social assistance with ways to build social networks for the forcibly displaced could lead to promising results. Given that there is little consensus on the exact domains and indicators necessary to measure social cohesion comprehensively, a more unified framework and consensus on the relevant components and measurement tools would contribute significantly to this literature. It would also be interesting to collect information on overall community dynamics, including spillover effects on non-recipient households in treatment communities, to assess potential negative effects on those not eligible for benefits. Lastly, future research could also focus on heterogeneous impacts by gender, urban/rural, or by programme design components, particularly related to complementary programming and the transparency and inclusiveness of targeting.

44 In a non-humanitarian setting, Haushofer et al (2019) explore how giving unconditional cash transfers to both women and men in Kenya reduced different types of intimate partner violence. Transfers to women reduced physical and sexual violence, while transfers to men reduced only physical violence.

6 Conclusion

131. This report reviewed the existing evidence on the effectiveness and efficiency of humanitarian assistance programmes across different domains. Following a standard procedure for systematic reviews, we constructed a database of 20 studies that reported causal impacts of humanitarian assistance programmes on a wide range of outcomes. This systematic review complements existing evidence on the effectiveness of these programmes in improving individual and household level outcomes, and informs the debate surrounding the comparative performance of different transfer modalities. Based on the available evidence, our review suggests the following conclusions:

1) ***Despite the growing use of social protection programmes in humanitarian settings, there is relatively little rigorous research on what works, for whom, and why.*** From our review, we find that only 20 studies have used experimental or quasi-experimental methods to rigorously assess the impact of humanitarian assistance programmes, and almost none of them discuss the cost-effectiveness of such programmes. This is consistent with previous reviews that carry out a systematic review of cash-based approaches in humanitarian settings and find that only a few studies (e.g., five) rigorously measured the impact of cash-based schemes (Doocy and Tappis, 2018).

2) ***There is a large variation in the availability of evidence for humanitarian assistance programmes across different sectors.*** On the one hand, the evidence base for studies that report on basic needs such as food security, expenditures, and coping strategies is quite substantial, followed by studies that report on the household economy and financial outcomes where the evidence can be categorized as emerging. On the other hand, the evidence base for studies that report on human development outcomes, such as health, education, labour, as well as gender and social cohesion, is much more limited. In particular, we find that women's empowerment and gender-based violence outcomes are the least explored in the context of humanitarian assistance programmes. This imbalance suggests that policy decisions, especially in terms of human development, should be made with caution due to the limited generalization of the results, and also indicates the need for research to fill key evidence gaps.

3) ***In terms of the impact of humanitarian assistance programmes, the limited evidence points to mixed and inconclusive results.*** The literature suggests that most humanitarian assistance programmes can effectively improve individual and household-level outcomes compared to the control group. However, the evidence is too limited to be able to draw general conclusions.

4) ***Regarding the relative effectiveness of different modalities, the decision about the most appropriate modality versus another cannot be generalized and pre-determined.*** The existing evidence suggests that modality performance and their differences depend on a series of factors such as the nature of the humanitarian crisis (sudden onset vs. slow onset), the objective of the programme or the main outcome of interest, the profile of the targeted population, implementation costs, and local market capacity, among others. All these factors must be considered when deciding between transfer modalities. Given the limited evidence on the relative effectiveness of transfer modalities in humanitarian settings, future research could provide a better understanding of the conditions for which cash transfers are more effective than in-kind transfers. In addition, it would be beneficial to explore complementarities between different interventions, such as blended interventions or "cash plus" interventions.

5) ***While the effectiveness of cash and food transfers is similar, the efficiency is generally in favour of cash.*** The evidence from our review indicates that cash transfers seem to be more efficient to deliver than in-kind modalities, suggesting that they might be more cost-effective on average. In particular, studies suggest that mobile money cash transfers are the most efficient transfer method provided that mobile network infrastructure is available, it is convenient and, beneficiaries understand how to withdraw and transfer the mobile money. The second most efficient transfer method is manual cash delivery, followed by voucher transfers, with food transfers being the most expensive way to deliver assistance. Given that none of the included studies included a cost-effectiveness analysis, we argue that future impact evaluations need to provide a more robust analysis for cost calculations of humanitarian programmes.

6) ***Given the lack of rigorous causal evidence on humanitarian assistance programmes, there is a high dividend to be earned from conducting more impact evaluations in humanitarian settings.*** To better understand implementation design choices, such as which population to target, what type of modality to transfer, and the duration and frequency of transfers, among others, substantial evidence gaps need to be filled. In this review, we identified several cross-cutting evidence gaps where more studies would be needed: (i) more evidence is needed on the impact of humanitarian assistance on human development, gender, and social cohesion; (ii) a better understanding of the conditions for which cash transfers can be more effective than in-kind transfers; (iii) a need to improve the targeting mechanisms in humanitarian settings; and (iv) a need to better understand not only the immediate impacts of humanitarian assistance programmes but also the long-term effects that arise in the recovery period.

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8 Tables

Table 1. Literature Sources and Search Terms

Sources	Search Terms
Peer-reviewed sources: Google Scholar, Microsoft Academic, JSTOR, ResearchGate, Stanford University Journals Database, ScienceDirect, Social Science Research Network (SSRN), Web of Science Grey literature sources: *Humanitarian Agency Websites:* Oxfam, MercyCorps, International Federation of Red Cross and Red Crescent Societies, International Rescue Committee, UNICEF, OCHA, World Food Programme, Action Aid, Save the Children, World Vision, Concern Worldwide; *Research institution and network websites:* Center for Global Development, International Initiative for Impact Evaluation (3ie), International Food Policy Research Institute (IFPRI), ALNAP	(social protection OR cash transfer OR cash voucher OR food voucher OR food transfer OR humanitarian response OR humanitarian assistance OR humanitarian setting OR disaster response OR emergency relief OR humanitarian disaster OR emergency aid) *AND* (impact evaluation OR impact assessment OR refugee OR refugee camp OR IDP OR internally displaced OR conflict OR war OR civil war OR armed conflict OR conflict affected OR natural disaster OR earthquake OR flood OR tsunami OR avalanche OR landslide OR rockslide OR mudslide OR cyclone OR hurricane OR tidal wave OR typhoon OR drought)

Table 2. Inclusion Criteria

Inclusion Criteria	
Type of emergency	A humanitarian crisis is defined as a singular event or a series of events that threaten the health, safety, or well-being of a community or large group of people (Humanitarian Coalition). Types of humanitarian crises included in the review are (i) natural disasters, (ii) armed conflicts and refugee crises, and (iii) health outbreaks. These include both sudden onset and slow onset or protracted crises.
Programme beneficiary	Populations affected by humanitarian crises (e.g., refugees, IDPs, vulnerable populations, etc.). Affected populations could include those that were not displaced, those displaced within their home country, or refugees displaced in neighbouring countries.
Programme timeline	Programmes implemented before the onset of the emergency and evaluated during the humanitarian setting were excluded from the review. Only programmes implemented as a direct response following the humanitarian crises were included.
Type of intervention	Types of humanitarian assistance programmes that were included are: (i) unconditional cash transfer programmes, (ii) conditional cash transfer programmes, (iii) voucher programmes, (iv) food transfer programmes (including school feeding), and (v) public works.
Type of study	Types of studies that were included are mainly impact evaluation studies. Peer-reviewed journal articles, Working Paper series, and other comparative studies/discussion papers only if they included a formal institution/citation
Study design	Studies implementing experimental and quasi-experimental methods with a credible source of exogenous variation. We excluded studies that do not employ one of the following: Randomized control trial (RCT), Regression discontinuity design (RDD), Diff-in-diff (DID), Instrumental variables (IV), Propensity Score Matching (PSM).
Type of outcome	Primary outcomes: Individual and/or household level sector-specific outcomes such as changes in food security, household expenditures (food and non-food), household assets, credit and savings, income, social cohesion, health and nutrition, education, labour, women's empowerment, gender-based violence. Secondary outcomes: costs of implementing humanitarian assistance interventions (efficiency or value for money).
Publication date range	Any
Geographic focus	Global (LMICs)

Table 3. Characteristics of the Humanitarian Assistance Studies

Panel A. Study level characteristics (N=20)	Number	%
Publication year		
2005–2010	2	10%
2011–2015	5	25%
2016–2020	13	65%
Publication type		
Journal article	11	55%
Technical report	6	30%
Working paper	3	15%
Humanitarian crisis category		
Conflict	15	75%
Refugee-camp setting	7	35%
Non-refugee camp setting	8	40%
Natural disaster	5	25%
Health outbreak	0	0%
Study design		
Experimental design (RCT)	9	45%
RCT with pure control	5	25%
RCT without pure control	4	20%
Quasi-experimental design	11	55%
Difference-in-differences	2	10%
Regression discontinuity design	5	25%
Propensity score matching	4	20%
Costing analysis		
Costing analysis	6	30%
No costing analysis	14	70%
Type of intervention		
UCT	10	33%
FT	9	30%
Voucher	5	17%
CCT	4	13%
PW	2	7%
Regional distribution		
Africa	7	35%
Middle East	7	35%
Asia	3	15%
Latin America	3	15%

Note: This table presents the characteristics of the 20 studies included in the analysis. UCT=unconditional cash transfers, FT= food transfer (includes school feeding), CCT=conditional cash transfer, PW=public works (cash for work or food for work)

Table 4. Characteristics of the Humanitarian Assistance Interventions

Panel B. Intervention level characteristics (N=40)	Number	%
Type of humanitarian assistance interventions		
UCT	18	45%
FT	11	27%
Voucher	5	13%
CCT	4	10%
PW	2	5%
Target population		
Refugees/IDPs	20	50%
Severely food-insecure households	14	35%
Refugees/IDPs and food-insecure households	6	15%
Area of implementation		
Rural	23	58%
Urban	14	35%
Rural & Urban	3	7%
Identity of the recipient		
Adult or household head	23	57%
Adult female	16	40%
Primary caregiver of child 5–14	1	3%
Implementer type		
International organization (IO)	23	57%
NGO	11	27%
Government	3	8%
Government & IO	2	5%
Government & NGO	1	3%

Panel C. Study level characteristics, continuous (N=20)	Mean	SD
Number of studies per programme	1.2	0.523
Number of interventions per study	2.05	0.989
Total transfer amount (in USD)	472	510.2
Length exposure (in months)	9	5.4

Note: This table presents characteristics of the 40 interventions or contrasts included in the analysis. UCT=unconditional cash transfers, FT= food transfer (includes school feeding), CCT=conditional cash transfer, CFW=cash for work, and FFW= food for work.

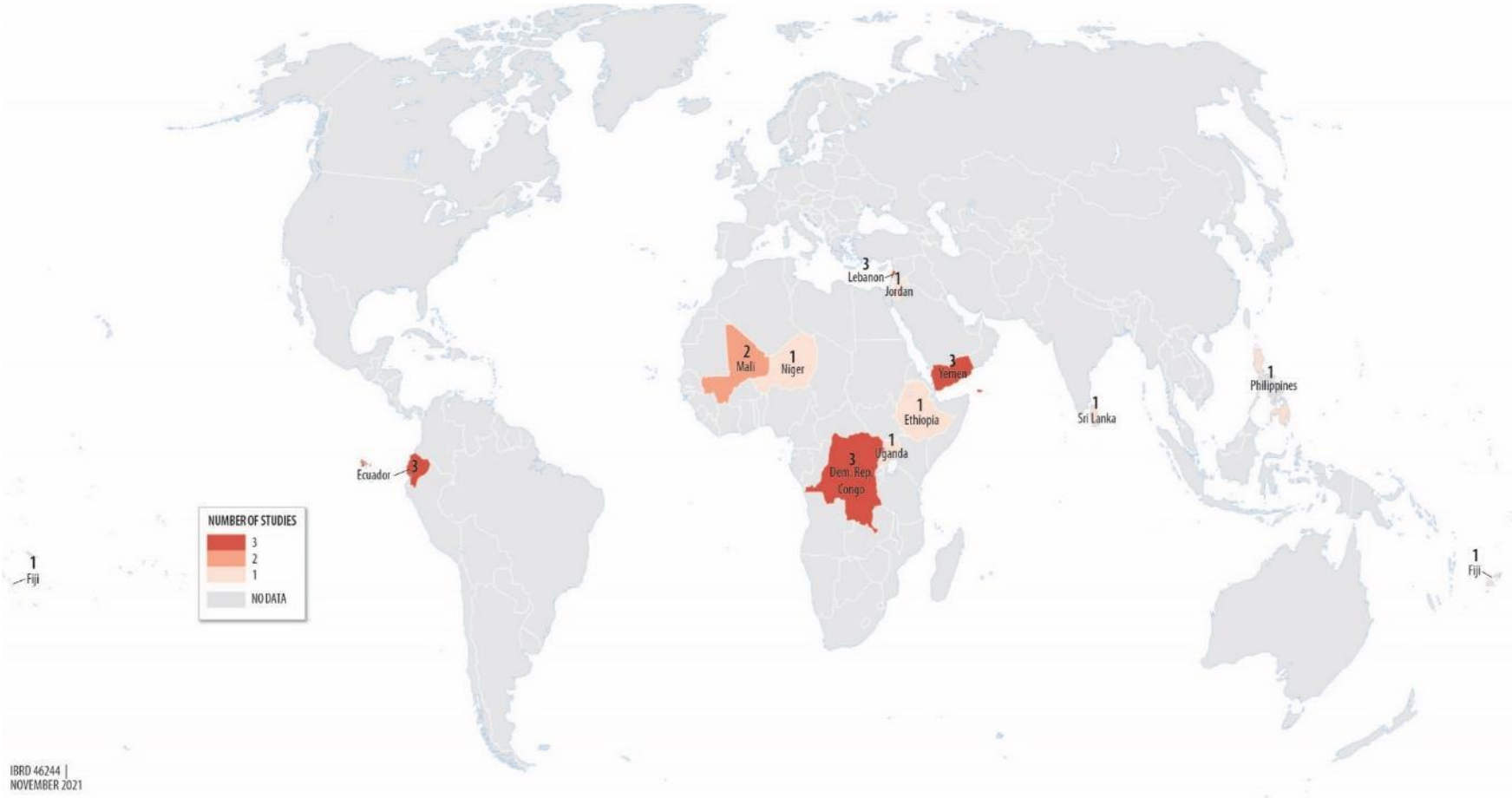
Table 5. Level of Evidence in Humanitarian Settings by Outcome Category

Category	Outcome	Number of Studies	Evidence Base	Overall Evidence Base
Basic Needs	Food Security	11	Substantial	Substantial
	Food Expenditure	7	Emerging	
	Non-food Consumption	12	Substantial	
	Coping Strategies	7	Emerging	
Financial Outcomes	Asset Ownership	9	Emerging	Emerging
	Credit and Savings	5	Limited	
	Income	3	Limited	
Human Development	Education	5	Limited	Limited
	Health	5	Limited	
	Labour	4	Limited	
Gender	Women's Empowerment	4	Limited	Limited
	GBV	1	Very Limited	
Social Cohesion	Social cohesion	4	Limited	Limited

Table 6. Effectiveness of Different Modalities by Sector-Specific Areas

Without a pure control group			***Most Effective Modality***					
			Basic Needs					
Study	*Country*	*Transfer type*	*Food Consumption*	*Calorie Intake*	*Dietary Diversity*	*Food Expenditure*	*Non-Food Expenditure*	*Coping Strategies*
(Aker, 2017)	DRC	UCT/Voucher	UCT/Voucher	------	UCT/Voucher	Voucher	UCT	------
(Hidrobo et al., 2014)	Ecuador	CCT/Voucher/FT	FT	FT	Vouchers	------	CCT/Voucher/FT	------
(Aker et al., 2011)	Niger	UCT mobile/manual	------	------	UCT mobile	------	UCT mobile/manual	UCT mobile/manual
(Mercy Corps, 2015)	Philippines	UCT single/multiple	------	------	------	------	UCT single/multiple	------
(Sandström and Tchatchua, 2010)	Sri Lanka	UCT/FT	------	------	UCT	UCT/FT	UCT	
(Schwab, 2019)	Yemen	UCT/FT	------	------	------	------	UCT	UCT/FT
			Financial Outcomes					
Study	*Country*	*Transfer type*	*Asset ownership*	*Savings*	*Income*			
(Aker, 2017)	DRC	UCT/Voucher	UCT/Voucher	UCT	UCT/Voucher			
(Aker et al., 2011)	Niger	UCT mobile/manual	UCT mobile	------	------			
(Mercy Corps, 2015)	Philippines	UCT	UCT single	UCT + nudges	------			
			Human Development					
Study	*Country*	*Transfer type*	*Education*	*Health*	*Labour*	*Subjective well-being*		
(No Evidence)	------	------	------	------	------	------		
			Gender					
Study	*Country*	*Transfer type*	*GBV*	*Women's Empowerment*				
(Aker, 2017)	DRC	UCT/Voucher	------	UCT/Voucher				
(Hidrobo et al., 2014)	Ecuador	CCT/Voucher/FT	CCT/Voucher/FT	------				
			Social Cohesion					
Study	*Country*	*Transfer type*	*Social Cohesion*					
(Aker, 2017)	DRC	UCT/Voucher	UCT/Voucher					

Figure 1. Geographic Distribution of Humanitarian Assistance Studies



Note: The sample of 20 studies included in our review covers the following countries: Democratic Republic of Congo, Ecuador, Ethiopia, Fiji, Jordan, Lebanon, Mali, Niger, Philippines, Sri Lanka, Uganda, and Yemen.

Figure 2. Number of Included Studies by Publication Year

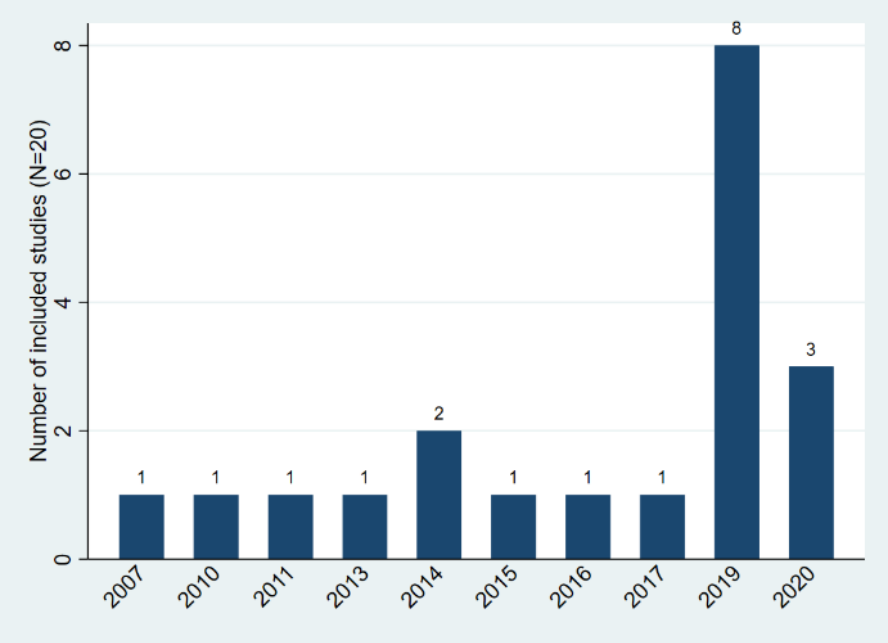
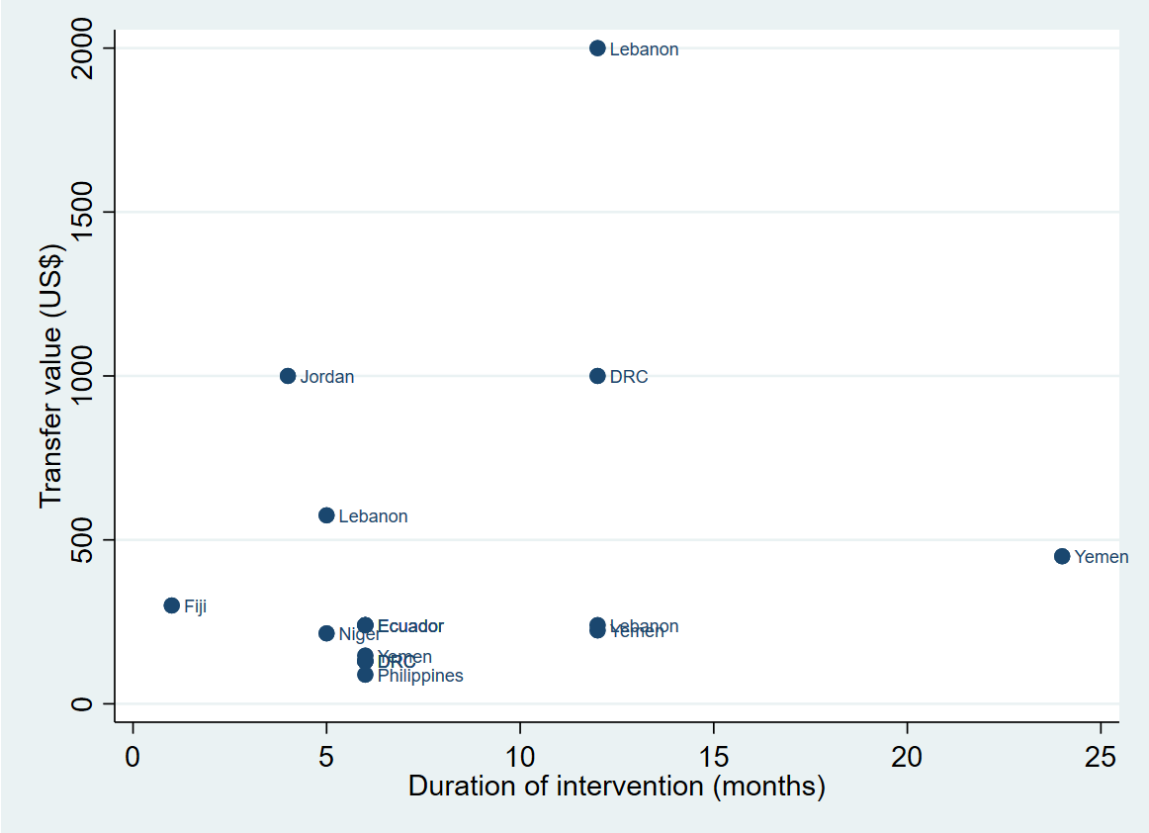


Figure 3. Duration of the Intervention and Total Transfer Value in US$



9 Appendix

TARGETING METHODS IN HUMANITARIAN SETTINGS

As humanitarian crises spread across the globe combined with increasing pressure on funding, the questions of who needs assistance, what support is required, and how best to target aid are frequently debated. In a crisis setting, targeting humanitarian response can improve the effectiveness of the intervention by allocating benefits to the poor and vulnerable, or to the most needed populations. The choice of targeting methods for a particular humanitarian programme depends on the objective of the programme and the specific context and circumstances of the country. Development and humanitarian interventions tend to rely on different methods for targeting beneficiaries for various reasons. First, intrinsic differences in objectives determine whether to address persistent (long-term) versus temporary (short-term) deprivations. Second, the emergency nature of humanitarian interventions may require quick beneficiary identification processes. Lastly, access, security, and limited staff capacity in the context of an emergency may make some targeting choices unfeasible or less appropriate.

Targeting typically requires agreement on two main factors: (i) the identification of priority geographic areas for support (except for a generalized economic shock, where the response may be more universal); and (ii) the identification of specific households or individuals for support in those areas. Five well-established methods exist for identifying potential beneficiaries both in development and humanitarian settings (**Appendix Table 5**):[45]

- **Means testing**: actual consumption or income is compared to the eligibility threshold. This method is very accurate with good income or consumption data, but it is generally very expensive to collect income or consumption data for all potential beneficiaries, especially in low- and middle-income countries.

- **Proxy means testing (PMT)**: relies on a formula that approximates household consumption base on a limited set of household characteristics that are believed to be highly correlated with well-being or deprivation (Grosh and Baker, 1995). The characteristics include variables such as roof and wall materials of the house, household assets, coping mechanisms, reported expenditures, and the social and demographic characteristics of the head of the household. In contexts where the means-testing of benefits is not an administratively feasible option (as in most low-income settings), PMT provides the advantage of relying on information that can be measured relatively quickly and is easier to verify than a consumption aggregate, which requires listing all items purchased or self-consumed over a reference period. However, a downside of the PMT approach is that it is costly and time-consuming to collect the necessary detailed data about households. In addition, based on various studies on sub-Saharan Africa, Del Ninno and Mills (2015) suggest that, while PMT can effectively identify households suffering from persistent poverty (e.g., chronic poor), its efficacy in identifying households in the context of a crisis may be limited, given its substantial reliance on long-term household characteristics. PMT can be highly inaccurate (with high exclusion errors) in a humanitarian context, particularly in refugee settings, where most people need assistance and large databases do not exist. In other words, the PMT targeting method is not very well suited to address the impact of short-term shocks.

45 Rapid assessment methods have also been used to identify vulnerable households affected by shocks. For example, the World Food Programme (WFP) has used indicators such as food consumption scores (FCS), dietary diversity indexes, and food frequency indexes to identify food-insecure households.

- **Community-based targeting (CBT)**: community leaders and village members determine household eligibility or select beneficiaries. The process to implement CBT can vary widely in practice, ranging from simple nomination by local leaders to participatory wealth ranking approaches, whereby villagers are asked to rank households according to their poverty level (Coady et al., 2004; McCord, 2013). Two advantages of CBT are that it incorporates local knowledge and it is responsive to short-term shocks. This method can also be useful to generate community support for the programme. However, CBT can be vulnerable to elite capture, and may be undermined when eligibility decisions lack transparency. In some cases, committee members may attempt to manipulate the CBT process, which may lead to substantial exclusion errors due to imperfect local knowledge (Premand and Schnitzer, 2018).

- **Geographic targeting:** targets by location, including all residents within a location (e.g., an area affected by a natural disaster or a district with high poverty prevalence). This method is generally easy to implement and transparent. In addition, it can rapidly target in response to natural disasters and other large covariate shocks.

- **Self-targeting:** recipients self-select to be part of assistance programmes. The features of the programmes allow for screening between those who believe they are not entitled or find the benefits unattractive from the right people who need assistance. Examples of such design features include filling out an application form, waiting in line, or conditional cash transfers. This method is relatively easy to implement and has low implementation costs, but a lack of programme knowledge may discourage participation or lead to oversubscription.

Appendix Table 1. Characteristics of Included Experimental and Quasi-Experimental Studies

Country	Study	Emergency type	Programme Name	IE Design	Intervention type	Publication year	Publication Type
DRC	(Aker, 2017)	Ongoing DRC Conflict	DRC Cash and Voucher Programme in the Bushani Camp	RCT without pure control	UCT/Voucher	2017	Academic Journal
DRC	(Quattrochi et al., 2020)	Ongoing DRC Conflict	DRC Vouchers for Essential Household Items (EHIs) Programme	RCT with pure control	Voucher	2020	Technical Report
Ecuador	(Hidrobo et al., 2014)	Colombian Refugee Crisis	Ecuador WFP Food, Cash, and Voucher Transfer Programme	RCT with pure control	CCT/Voucher/FT	2014	Academic Journal
Ecuador	(Hidrobo et al., 2016)	Colombian Refugee Crisis	Ecuador WFP Food, Cash, and Voucher Transfer Programme	RCT with pure control	CCT/Voucher/FT	2016	Academic Journal
Ecuador	(Valli et al., 2019)	Colombian Refugee Crisis	Ecuador WFP Food, Cash, and Voucher Transfer Programme	RCT with pure control	CCT/Voucher/FT	2019	Academic Journal
Ethiopia	(Gilligan and Hoddinott, 2007)	2002 Ethiopian Drought	Ethiopia Food Distribution and Employment Generation Schemes (EGS)	Difference-in-Difference (DID)	FT/FFW	2007	Academic Journal
Fiji	(Ivaschenko et al., 2020)	Fiji Tropical Cyclone Winston	Fiji Poverty Benefit Scheme (PBS) - Cash Transfer Programme	Regression Discontinuity Design (RDD)	UCT	2019	Academic Journal
Jordan	(Lombardini and Mager, 2020)	Syrian Refugee Crisis	Refugees Cash for Work (CFW) Programme	Propensity Score Matching (PSM)	CFW	2020	Technical Report
Lebanon	(Lehmann and Masterson, 2014)	Syrian Refugee Crisis	Lebanon Winterization Cash Transfer Programme	Regression Discontinuity Design (RDD)	UCT	2014	Technical Report
Lebanon	(de Hoop, 2019)	Syrian Refugee Crisis	Lebanon No Lost Generation (NLG) Cash Transfer Programme	Regression Discontinuity Design (RDD)	UCT	2019	Academic Journal

Lebanon	(Chaaban et al., 2020)	Syrian Refugee Crisis	Lebanon Multi-Purpose Cash (MPC) Programme	Regression Discontinuity Design (RDD)	UCT	2020	Technical Report
Mali	(Tranchant et al., 2019)	Mali War	Mali Food Assistance Programme (GFD + School Feeding)	Propensity Score Matching (PSM)	FT	2019	Academic Journal
Mali	(Aurino et al., 2019)	Mali War	Mali Food Assistance Programme (GFD + School Feeding)	Propensity Score Matching (PSM)	FT	2019	Academic Journal
Niger	(Aker et al., 2011)	Niger Shock Drought	Niger Mobile Cash Transfer Programme	RCT without pure control	UCT	2011	Working paper series
Philippines	(Mercy Corps, 2015)	Philippines Typhoon Haiyan	Philippines TabangKO Cash Transfer Programme	RCT without pure control	UCT	2015	Technical Report
Sri Lanka	(Sandström and Tchatchua, 2010)	2004 Indian Ocean Tsunami	Sri Lanka WFP Cash Transfer Pilot (CTPP) Programme	RCT without pure control	UCT/FT	2010	Technical Report
Uganda	(Tusiime et al., 2013)	Ongoing Uganda Conflict	Uganda General Food Distribution (GFD) Programme	Propensity Score Matching (PSM)	FT	2013	Academic Journal
Yemen	(Ecker et al., 2019)	Yemen Civil War	Yemen Social Welfare Fund (SWF) Cash Transfer programme	Difference-in-Difference (DID)	UCT	2019	Working paper series
Yemen	(Kurdi et al., 2019)	Yemen Civil War	Yemen Cash for Nutrition Programme	RCT with pure control	CCT	2019	Working paper series
Yemen	(Schwab, 2019)	Civil Unrest in Yemen	Yemen Seasonal Emergency Safety Net (ESN) Transfer Programme	Regression Discontinuity Design (RDD)	UCT/FT	2019	Academic Journal

Appendix Table 2. Programme and Intervention Characteristics

Country	Study	Programme Name	Arms	Intervention	Time Frame	Population	Location	Implementer	Identity of Recipient	Transfer value	Total Sample	Unit of Obs.	Length Exposure
DRC	(Aker, 2017)	DRC Cash and Voucher Programme in the Bushani Camp	T1	**UCT**	2011–2012	IDP households in informal refugee camp	Rural	Concern Worldwide	Adult female	US$ 130	252	Households	6 months
DRC	(Aker, 2017)	DRC Cash and Voucher Programme in the Bushani Camp	T2	**Cash Voucher**	2011–2012	IDP households in informal refugee camp	Rural	Concern Worldwide	Adult female	US$ 130	252	Households	6 months
DRC	(Quattrochi et al., 2020)	DRC Vouchers for Essential Household Items (EHIs) Programme	T	**Non-food Voucher**	2017–2018	IDP and conflicted affected households in Eastern DRC	Rural	UNICEF, OCHA	Adult female	US$ 660 - 1080	856	Households	12 months
Ecuador	(Hidrobo et al., 2014)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T1	**FT**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	2,087	Households	6 months
Ecuador	(Hidrobo et al., 2014)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T2	**CCT**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	2,087	Households	6 months
Ecuador	(Hidrobo et al., 2014)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T3	**Food Voucher**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	2,087	Households	6 months
Ecuador	(Hidrobo et al., 2016)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T1	**FT**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	1,226	Women	6 months
Ecuador	(Hidrobo et al., 2016)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T2	**CCT**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	1,226	Women	6 months
Ecuador	(Hidrobo et al., 2016)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T3	**Food Voucher**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	1,226	Women	6 months
Ecuador	(Valli et al., 2019)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T1	**FT**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	1,878	Households	6 months

Ecuador	(Valli et al., 2019)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T2	**CCT**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	1,878	Households	6 months
Ecuador	(Valli et al., 2019)	Ecuador WFP Food, Cash, and Voucher Transfer Programme	T3	**Food Voucher**	2011	Columbian refugees and vulnerable Ecuadorian households	Urban	WFP	Adult female	US$ 240	1,878	Households	6 months
Ethiopia	(Gilligan and Hoddinott, 2007)	Ethiopia Food Distribution and Employment Generation Schemes (EGS)	T1	**FT**	1994–2004	Rural households at risk of famine	Rural	Government of Ethiopia	Adult or household head	N/A	2,283	Households	18 months
Ethiopia	(Gilligan and Hoddinott, 2007)	Ethiopia Food Distribution and Employment Generation Schemes (EGS)	T2	**Food for Work**	1994–2004	Rural households at risk of famine	Rural	Government of Ethiopia	Adult or household head	N/A	2,283	Households	18 months
Fiji	(Ivaschenko et al., 2020)	Fiji Poverty Benefit Scheme (PBS) - Cash Transfer Programme	T	**UCT**	2016	Low income, cyclone-affected households	Rural	Government of Fiji	Adult or household head	US$ 300	432	Households	Single instant
Jordan	(Lombardini and Mager, 2020)	Jordan Refugees Cash for Work (CFW) Programme	T	**Cash for Work**	2017–2018	Syrian refugees in the Za'atari refugee camp in Jordan	Urban	Oxfam	Adult or household head	US$ 500 - 1500	1,136	Households	4 months
Lebanon	(Chaaban et al., 2020)	Lebanon Multi-Purpose Cash (MPC) Programme	T1	**UCT (Discont.)**	2017–2018	Vulnerable Syrian refugee households in Lebanon	Urban	WFP, UNHCR	Adult or household head	US$ 1392 - 4176	11,457	Households	12 months
Lebanon	(Chaaban et al., 2020)	Lebanon Multi-Purpose Cash (MPC) Programme	T2	**UCT (Short)**	2017–2018	Vulnerable Syrian refugee households in Lebanon	Urban	WFP, UNHCR	Adult or household head	US$ 1392 - 4176	11,457	Households	4-12 months
Lebanon	(Chaaban et al., 2020)	Lebanon Multi-Purpose Cash (MPC) Programme	T3	**UCT (Long)**	2017–2018	Vulnerable Syrian refugee households in Lebanon	Urban	WFP, UNHCR	Adult or household head	USS 5568 - 7656	11,457	Households	16-22 months
Lebanon	(Lehmann and Masterson, 2014)	Lebanon Winterization Cash Transfer Programme	T	**UCT**	2013–2014	Severely food-insecure Syrian refugee households	Urban	IRC	Adult or household head	US$ 575	1,363	Households	5 months
Lebanon	(de Hoop, 2019)	Lebanon No Lost Generation (NLG) Cash Transfer Programme	T	**UCT**	2016–2017	Vulnerable Syrian refugee households with children in Lebanon	Rural	UNICEF, WFP	Primary caregiver of child 5–14	US$ 240	2,767	Children	12 months
Mali	(Aurino et al., 2019)	Mali Food Assistance Programme (GFD + School Feeding)	T1	**FT**	2012–2017	Vulnerable, food-insecure IDP households	Rural	WFP	Adult or household head	N/A	1,264	Households	12 months
Mali	(Aurino et al., 2019)	Mali Food Assistance Programme (GFD + School Feeding)	T2	**SF**	2012–2017	Vulnerable, food-insecure IDP	Rural	WFP	Adult or household head	N/A	1,264	Households	12 months

						households with children							
Mali	(Tranchant et al., 2019)	Mali Food Assistance Programme (GFD + School Feeding)	T1	**FT**	2012–2017	Vulnerable, food-insecure IDP households	Rural	WFP	Adult or household head	N/A	1,422	Households	12 months
Mali	(Tranchant et al., 2019)	Mali Food Assistance Programme (GFD + School Feeding)	T2	**SF**	2012–2017	Vulnerable, food-insecure IDP households	Rural	WFP	Adult or household head	N/A	1,422	Households	12 months
Niger	(Aker et al., 2011)	Niger Mobile Cash Transfer Programme	T1	**UCT**	2010	Drought-affected households in the Tahoua region	Rural	Concern Worldwide	Adult female	US$ 215	1200	Households	5 months
Niger	(Aker et al., 2011)	Niger Mobile Cash Transfer Programme	T2	**UCT (Mobile)**	2010	Drought-affected households in the Tahoua region	Rural	Concern Worldwide	Adult female	US$ 215	1,200	Households	5 months
Niger	(Aker et al., 2011)	Niger Mobile Cash Transfer Programme	T3	**UCT & Phone**	2010	Drought-affected households in the Tahoua region	Rural	Concern Worldwide	Adult female	US$ 215	1,200	Households	5 months
Philippines	(Mercy Corps, 2015)	Philippines TabangKO Cash Transfer Programme	T1	**UCT (S)**	2014–2015	Typhoon affected households	Rural	Mercy Corps	Adult or household head	US$ 89	1,659	Households	6 months
Philippines	(Mercy Corps, 2015)	Philippines TabangKO Cash Transfer Programme	T2	**UCT (M)**	2014–2015	Typhoon affected households	Rural	Mercy Corps	Adult or household head	US$ 89	1,659	Households	6 months
Philippines	(Mercy Corps, 2015)	Philippines TabangKO Cash Transfer Programme	T3	**UCT (M) & FO**	2014–2015	Typhoon affected households	Rural	Mercy Corps	Adult or household head	US$ 89	1,659	Households	6 months
Philippines	(Mercy Corps, 2015)	Philippines TabangKO Cash Transfer Programme	T4	**UCT (M) & FO & SMS**	2014–2015	Typhoon affected households	Rural	Mercy Corps	Adult or household head	US$ 89	1,659	Households	6 months
Sri Lanka	(Sandström and Tchatchua, 2010)	Sri Lanka WFP Cash Transfer Pilot (CTPP) Programme	T1	**UCT**	2005–2006	Tsunami affected households	Rural	WFP	Adult or household head	US$ 24	1,360	Households	4 months
Sri Lanka	(Sandström and Tchatchua, 2010)	Sri Lanka WFP Cash Transfer Pilot (CTPP) Programme	T2	**FT**	2005–2006	Tsunami affected households	Rural	WFP	Adult or household head	N/A	1,360	Households	4 months
Uganda	(Tusiime et al., 2013)	Uganda General Food Distribution (GFD) Programme	T	**FT**	2008	Conflict-affected and food-insecure households	Rural	WFP	Adult or household head	N/A	1,254	Households	12 months
Yemen	(Ecker et al., 2019)	Yemen Social Welfare Fund (SWF) Cash Transfer programme	T1	**UCT (Old)**	2012–2013	Socially and economically vulnerable populations	Urban + Rural	Government of Yemen, World Bank	Adult or household head	US$ 224	3,316	Households	12 months

Yemen	(Ecker et al., 2019)	Yemen Social Welfare Fund (SWF) Cash Transfer programme	T2	**UCT (New)**	2012–2013	Socially and economically vulnerable populations	Urban + Rural	Government of Yemen, World Bank	Adult or household head	US$ 224	3,316	Households	12 months
Yemen	(Kurdi et al., 2019)	Yemen Cash for Nutrition Programme	T	**CCT**	2015-2017	Vulnerable and poor mothers and pregnant women	Urban + Rural	Government of Yemen & Yemen SFD	Adult female	US$ 450	2,000	Households	24 months
Yemen	(Schwab, 2019)	Yemen Seasonal Emergency Safety Net (ESN) Transfer Programme	T1	**FT**	2010–2011	Food-insecure rural households	Rural	WFP	Adult or household head	US$ 147	3,350	Households	6 months
Yemen	(Schwab, 2019)	Yemen Seasonal Emergency Safety Net (ESN) Transfer Programme	T2	**UCT**	2010–2011	Food-insecure rural households	Rural	WFP	Adult or household head	US$ 147	3,350	Households	6 months

Appendix Table 3. Outcomes Reported in Each Study

Country	Study	Assets	Coping	Credit and Savings	Education	Food Expenditure	Food Security	Gender-based violence	Health	Income	Labour	Non-Food Expenditure	Social Cohesion	Subjective well-being	Women's Empowerment
DRC	(Aker, 2017)	1	0	1	0	1	1	0	0	1	0	1	1	0	1
DRC	(Quattrochi et al., 2020)	1	1	1	1	0	1	0	1	1	0	0	1	1	0
Ecuador	(Hidrobo et al., 2014)	0	0	0	0	0	1	0	0	0	0	1	0	0	0
Ecuador	(Hidrobo et al., 2016)	0	0	0	0	0	0	1	0	0	1	1	0	0	1
Ecuador	(Valli et al., 2019)	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Ethiopia	(Gilligan and Hoddinott, 2007)	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Fiji	(Ivaschenko et al., 2019)	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Jordan	(Lombardini and Mager, 2020)	1	0	0	0	0	1	0	0	1	0	0	0	1	1
Lebanon	(Chaaban et al., 2020)	0	0	0	1	0	1	0	1	0	1	1	0	0	0
Lebanon	(de Hoop, 2019)	0	0	0	1	0	0	0	0	0	0	1	0	0	0
Lebanon	(Lehmann and Masterson, 2014)	1	1	1	1	1	0	0	0	0	1	1	1	0	0
Mali	(Aurino et al., 2019)	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Mali	(Tranchant et al., 2019)	0	0	0	0	1	1	0	1	0	0	1	0	0	0
Niger	(Aker et al., 2011)	1	1	0	0	1	1	0	0	0	0	1	0	0	0
Philippines	(Mercy Corps, 2015)	1	0	1	0	0	0	0	0	0	0	1	0	0	0
Sri Lanka	(Sandström and Tchatchua, 2010)	0	0	0	0	1	1	0	0	0	0	1	0	0	0
Uganda	(Tusiime et al., 2013)	0	1	0	0	1	1	0	0	0	0	1	0	0	0
Yemen	(Ecker et al., 2019)	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Yemen	(Kurdi et al., 2019)	0	1	0	0	1	1	0	1	0	0	0	0	0	1
Yemen	(Schwab, 2019)	1	1	1	0	0	0	0	0	0	1	1	0	0	0
	With a pure control group	6	6	3	5	4	8	1	5	2	4	8	3	2	3
	Without a pure control group	3	1	2	0	3	3	0	0	1	0	4	1	0	1
		9	**7**	**5**	**5**	**7**	**11**	**1**	**5**	**3**	**4**	**12**	**4**	**2**	**4**

Appendix Table 4. Value for Money and Cost-Effectiveness

Country	Study	Transfer modality	Transfer schedule ($US)	Payments	Transfer frequency	Length exposure	Total value ($US)	Cost Efficiency
DRC	(Aker, 2017)	Cash Transfer	US$ 90 & US$ 20 & US$ 20	Multiple	Three times per household	6 months	US$ 130	US$ 11.34 per recipient
DRC	(Aker 2017)	Cash Voucher	US$ 90 & US$ 20 & US$ 20	Multiple	Three times per household	6 months	US$ 130	US$ 14.35 per recipient
DRC	(Quattrochi et al., 2020)	Non-food Voucher	US$55–$90	Multiple	Per household per month	12 months	US$ 660 – 1080	US$ 14.53 per beneficiary
Ecuador	(Hidrobo et al., 2014)	Food Transfer	US$ 40	Multiple	Per household per month	6 months	US$ 240	US$11.46 per transfer
Ecuador	(Hidrobo et al., 2014)	Cash Transfer	US$ 40	Multiple	Per household per month	6 months	US$ 240	US$ 2.99 per transfer
Ecuador	(Hidrobo et al., 2014)	Food Voucher	US$ 40	Multiple	Per household per month	6 months	US$ 240	US$ 3.27 per transfer
Ecuador	(Hidrobo et al., 2016)	Food Transfer	US$ 40	Multiple	Per household per month	6 months	US$ 240	Value not reported
Ecuador	(Hidrobo et al., 2016)	Cash Transfer	US$ 40	Multiple	Per household per month	6 months	US$ 240	Value not reported
Ecuador	(Hidrobo et al., 2016)	Food Voucher	US$ 40	Multiple	Per household per month	6 months	US$ 240	Value not reported
Ecuador	(Valli et al., 2019)	Food Transfer	US$ 40	Multiple	Per household per month	6 months	US$ 240	US$ 26 per beneficiary
Ecuador	(Valli et al., 2019)	Cash Transfer	US$ 40	Multiple	Per household per month	6 months	US$ 240	US$ 15 per beneficiary
Ecuador	(Valli et al., 2019)	Food Voucher	US$ 40	Multiple	Per household per month	6 months	US$ 240	US$ 14 per beneficiary
Ethiopia	(Gilligan and Hoddinott, 2007)	Food Transfer	N/A	N/A	N/A	18 months	N/A	Value not reported
Ethiopia	(Gilligan and Hoddinott, 2007)	Food for Work	N/A	N/A	N/A	18 months	N/A	Value not reported
Fiji	(Ivaschenko et al., 2020)	Cash Transfer	US$ 300	Single	One time per household	Single instant	US$ 300	Value not reported
Jordan	(Lombardini and Mager, 2020)	Cash for Work	US$ 118 - 200	Multiple	Per beneficiary per month	4 months	US$ 500 - 1500	Value not reported

Lebanon	(Chaaban et al., 2020)	Cash Transfer (Discontinued)	US$173.50 & US$ 175	Multiple	Per household per month	12 months	US$ 1392 - 4176	Value not reported
Lebanon	(Chaaban et al., 2020)	Cash Transfer (Short term)	US$173.50 & US$ 175	Multiple	Per household per month	4-12 months	US$ 1392 - 4176	Value not reported
Lebanon	(Chaaban et al., 2020)	Cash Transfer (Long term)	US$173.50 & US$ 175	Multiple	Per household per month	16-22 months	USS 5568 - 7656	Value not reported
Lebanon	(Lehmann and Masterson, 2014)	Cash Transfer	US$ 147 & US$ 107/month	Multiple	Per household [$147 1st payment, then $107/month (4 months)]	5 months	US$ 575	Value not reported
Lebanon	(de Hoop, 2019)	Cash Transfer	US$ 20	Multiple	Per household per month	12 months	US$ 240	Value not reported
Mali	(Aurino et al., 2019)	Food Transfer	N/A	N/A	N/A	12 months	N/A	Value not reported
Mali	(Aurino et al., 2019)	School Feeding	N/A	N/A	N/A	12 months	N/A	Value not reported
Mali	(Tranchant et al., 2019)	Food Transfer	N/A	N/A	N/A	12 months	N/A	Value not reported
Mali	(Tranchant et al., 2019)	School Feeding	N/A	N/A	N/A	12 months	N/A	Value not reported
Niger	(Aker et al., 2011)	Cash Transfer	US$ 45	Multiple	Per household per month	5 months	US$ 215	US$ 12.76 per beneficiary
Niger	(Aker et al., 2011)	Mobile Money Transfer	US$ 45	Multiple	Per household per month	5 months	US$ 215	US$ 13.65 per beneficiary
Niger	(Aker et al., 2011)	Cash Transfer & Phone	US$ 45	Multiple	Per household per month	5 months	US$ 215	US$ 12.76 per beneficiary
Philippines	(Mercy Corps, 2015)	Cash Transfer (Single)	US$ 89	Single	One time per household	6 months	US$ 89	US$ 0.56 - $1.30 per transfer
Philippines	(Mercy Corps, 2015)	Cash Transfer (Multiple)	US$ 45 & US$ 27 & US$ 16	Multiple	Per household	6 months	US$ 89	US$ 0.56 - $1.30 per transfer
Philippines	(Mercy Corps, 2015)	Cash Transfer & Financial Overview	US$ 45 & US$ 27 & US$ 16	Multiple	Per household	6 months	US$ 89	US$ 4.47 per transfer
Philippines	(Mercy Corps, 2015)	Cash Transfer & Financial Overview & Messages	US$ 45 & US$ 27 & US$ 16	Multiple	Per household	6 months	US$ 89	US$ 6 per transfer
Sri Lanka	(Sandström and Tchatchua, 2010)	Cash Transfer	US$ 6	Multiple	Per household per month	4 months	US$ 24	More cost-efficient
Sri Lanka	(Sandström and Tchatchua, 2010)	Food Transfer	N/A	N/A	N/A	4 months	N/A	Less cost-efficient

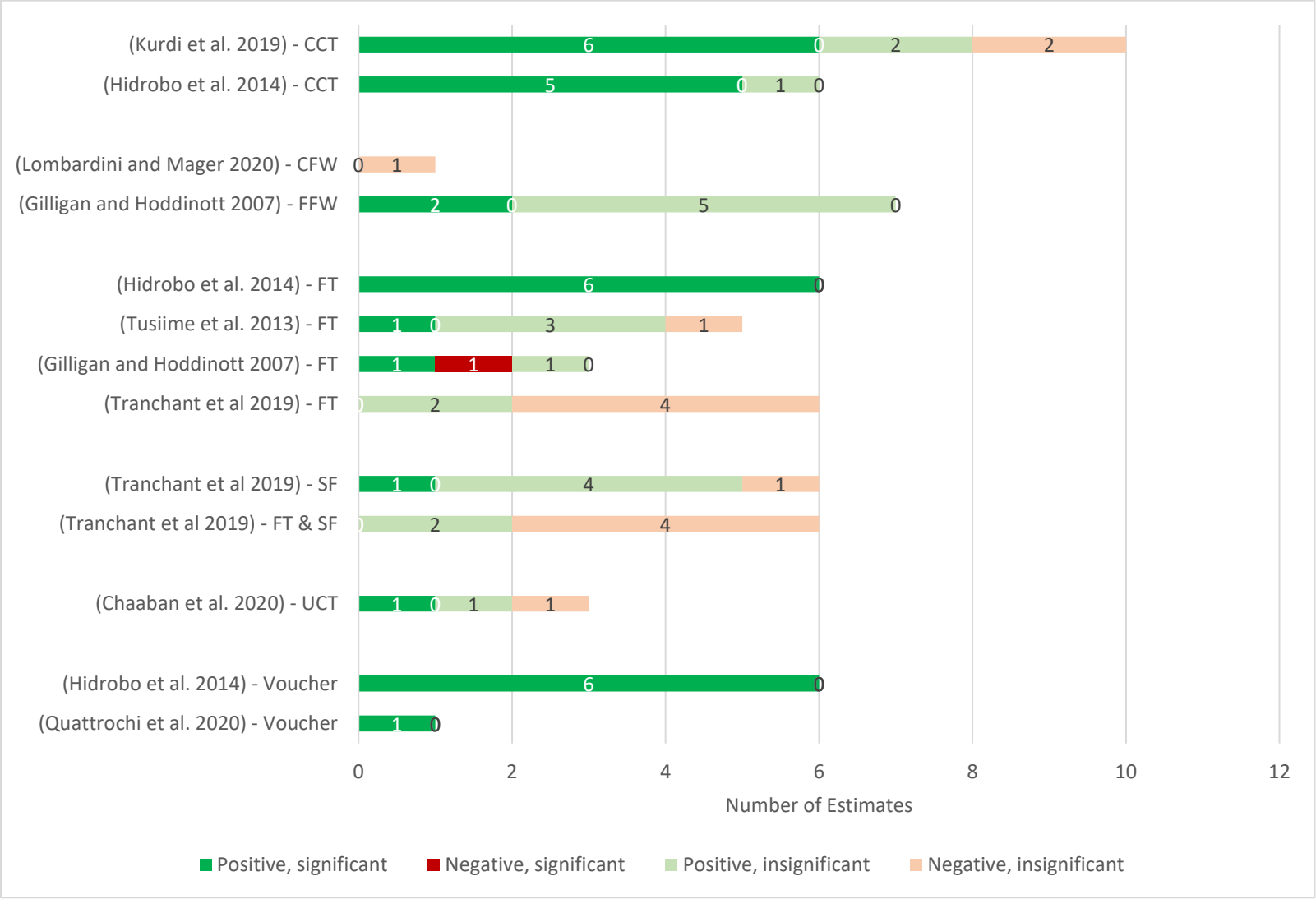
Uganda	(Tusiime et al., 2013)	Food Transfer	N/A	N/A	N/A	12 months	N/A	Value not reported
Yemen	(Ecker et al., 2019)	Cash Transfer (Old Benef.)	US$ 18.64	Multiple	Per household per month	12 months	US$ 224	Value not reported
Yemen	(Ecker et al., 2019)	Cash Transfer (New Benef.)	US$ 18.64	Multiple	Per household per month	12 months	US$ 224	Value not reported
Yemen	(Kurdi et al., 2019)	Cash Transfer	US$ 10/month & US$ 30/month	Multiple	Per household [US$ 10 for 9 months & US$ 30 for 12 months]	24 months	US$ 450	Value not reported
Yemen	(Schwab, 2019)	Food Transfer	US$ 24.5 bi-monthly	Multiple	Per household bi-monthly	6 months	US$ 147	US$ 181.49 per beneficiary
Yemen	(Schwab, 2019)	Cash Transfer	US$ 24.5 bi-monthly	Multiple	Per household bi-monthly	6 months	US$ 147	US$ 162.65 per beneficiary

Appendix Table 5. Strengths and Weaknesses of Five Targeting Methods

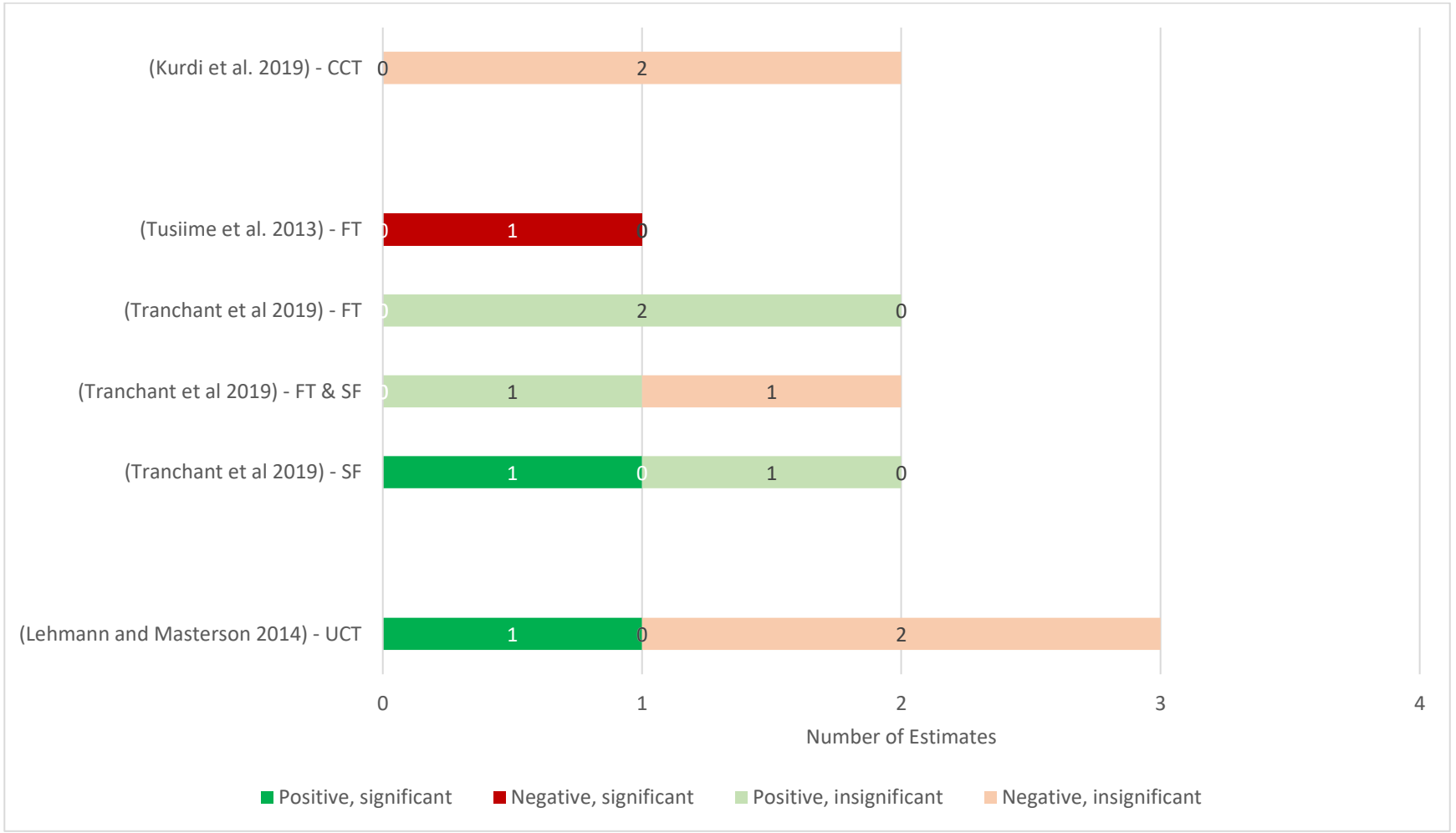
Method	Pros	Cons	Context where most applicable
Means tests: Actual consumption or income is compared to the eligibility threshold	Very accurate with good income or consumption data	Expensive to collect income or consumption data for all potential beneficiaries	Works in rural and urban settings where a complete database on income exists.
Proxy means test (PMT): Consumption is proxied through readily observable and verifiable variables and compared to the eligibility threshold	Can accurately and cost-effectively target the chronic poor	Does not address the impact of short-term shocks and it is difficult to communicate the rationale behind this targeting approach to affected communities	Works in rural and urban contexts. It can be used in large refugee/IDP populations where households visits and community-based targeting are not feasible, but a complete registration database exists.
Community-based targeting (CBT): Groups of community leaders and members determine household eligibility	Incorporates local knowledge and is responsive to short-term shocks. Can generate community support.	Vulnerable to elite capture, discrimination, and eligibility decisions can lack transparency. It may also create tensions within the communities	Works better in rural contexts with a high level of social cohesion. It is more challenging in urban or new refugee populations as the community is not easily identifiable. It's hard to implement in insecure/fragile contexts with limited social cohesion.
Geographic targeting: Targets by location, including all residents within a location	Easy to implement and transparent. Can rapidly target in response to natural disasters and other large covariate shocks	Does not account for differences in household well-being in the area	Works better when vulnerable households are concentrated in a defined geographic area (e.g., refugee camps, poor urban neighbourhoods).
Self-targeting: Benefits and transaction costs are set so that only needy households enroll	Easy to implement and low implementation cost	Risk of stigmatization of particularly vulnerable groups and lack of programme knowledge may discourage participation	Works well for new assistance programmes with new entries (e.g., conditional programmes such as FFA, CCTs).

Sources: Del Ninno and Mills, 2015; WFP, 2021

Appendix Figure 1. Effect of Humanitarian Assistance Interventions on Food Security

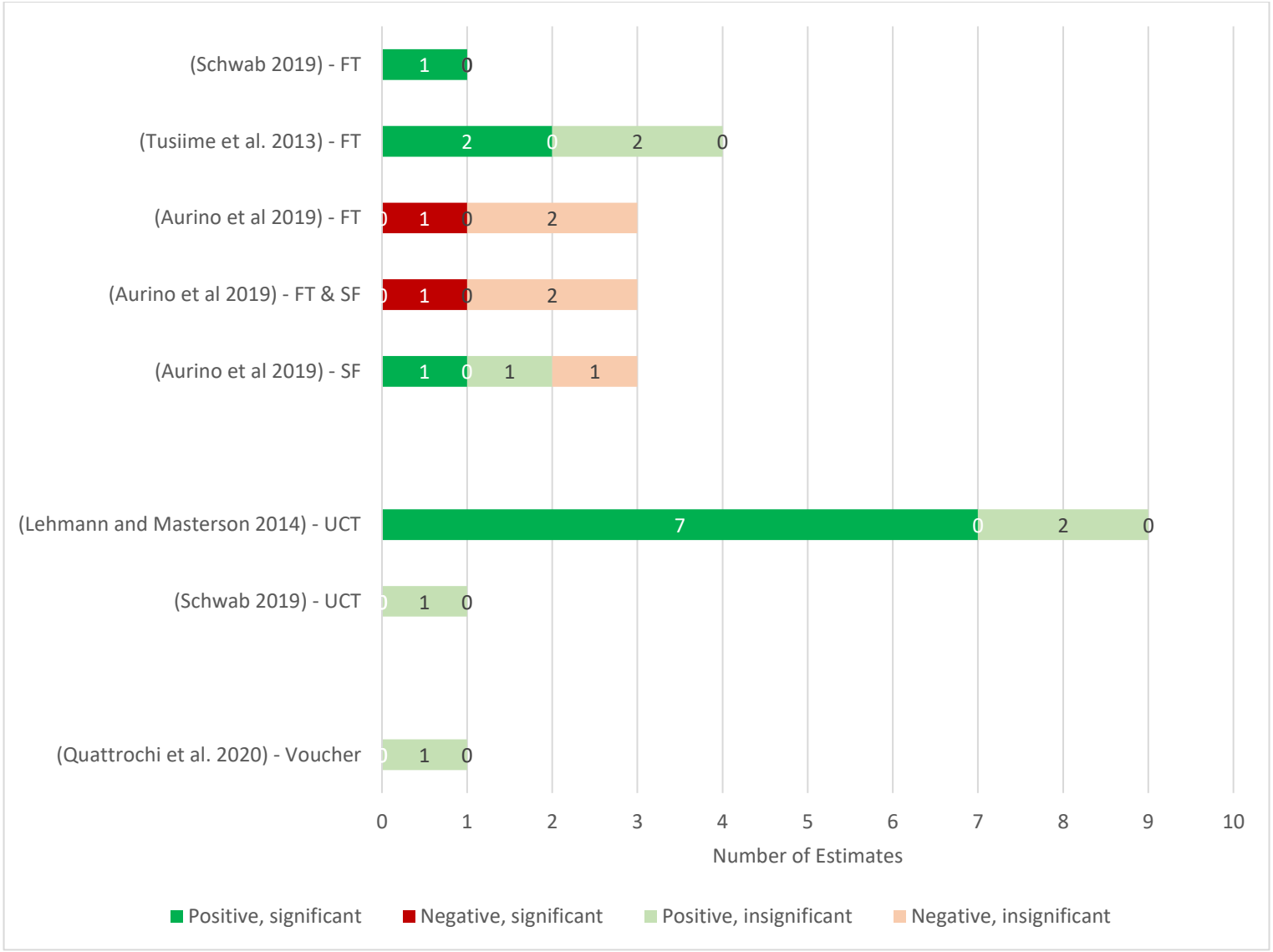


Appendix Figure 2. Effect of Humanitarian Assistance Interventions on Food Expenditure

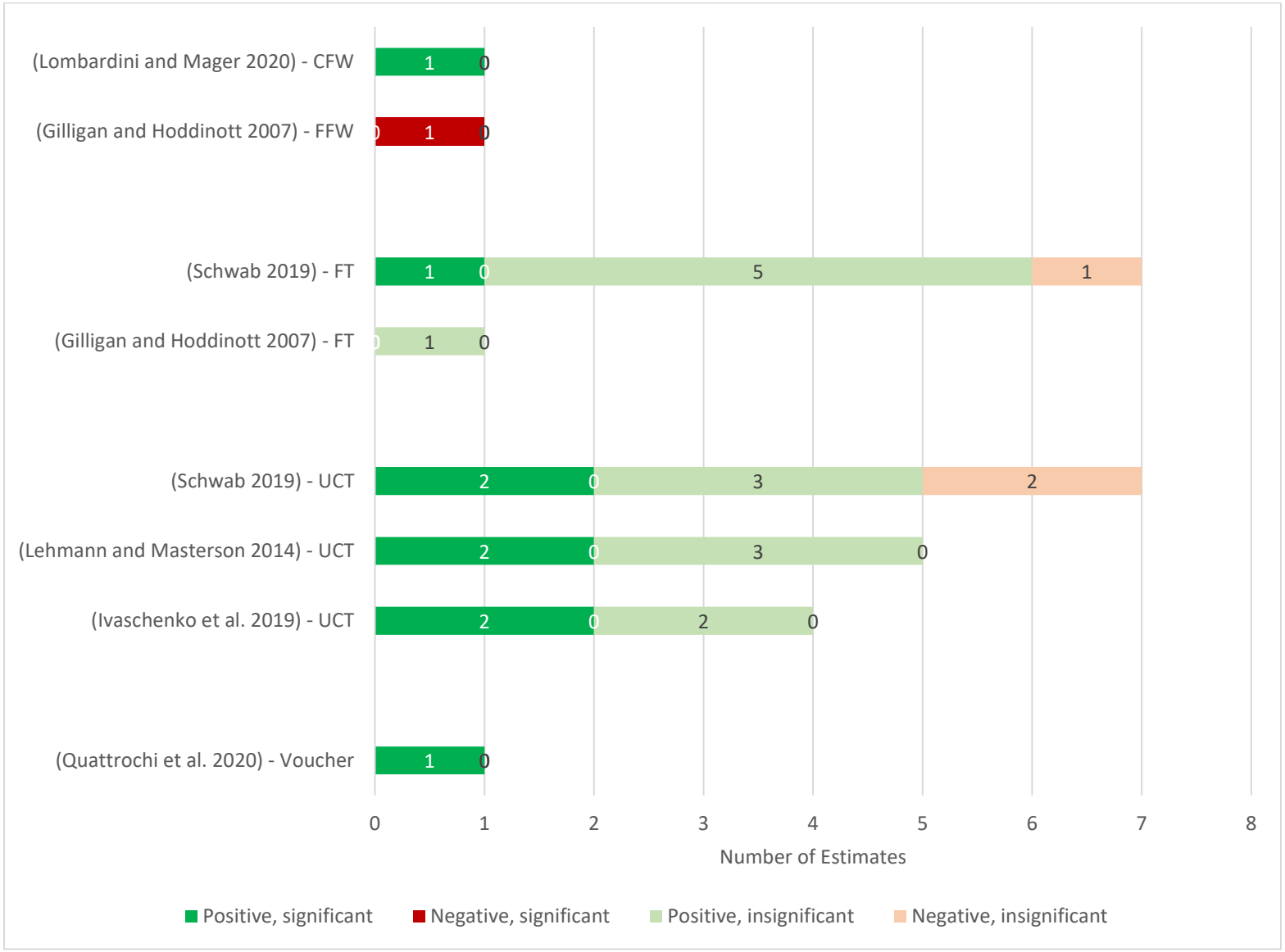


Appendix Figure 3. Effect of Humanitarian Assistance Interventions on Non-Food Expenditure

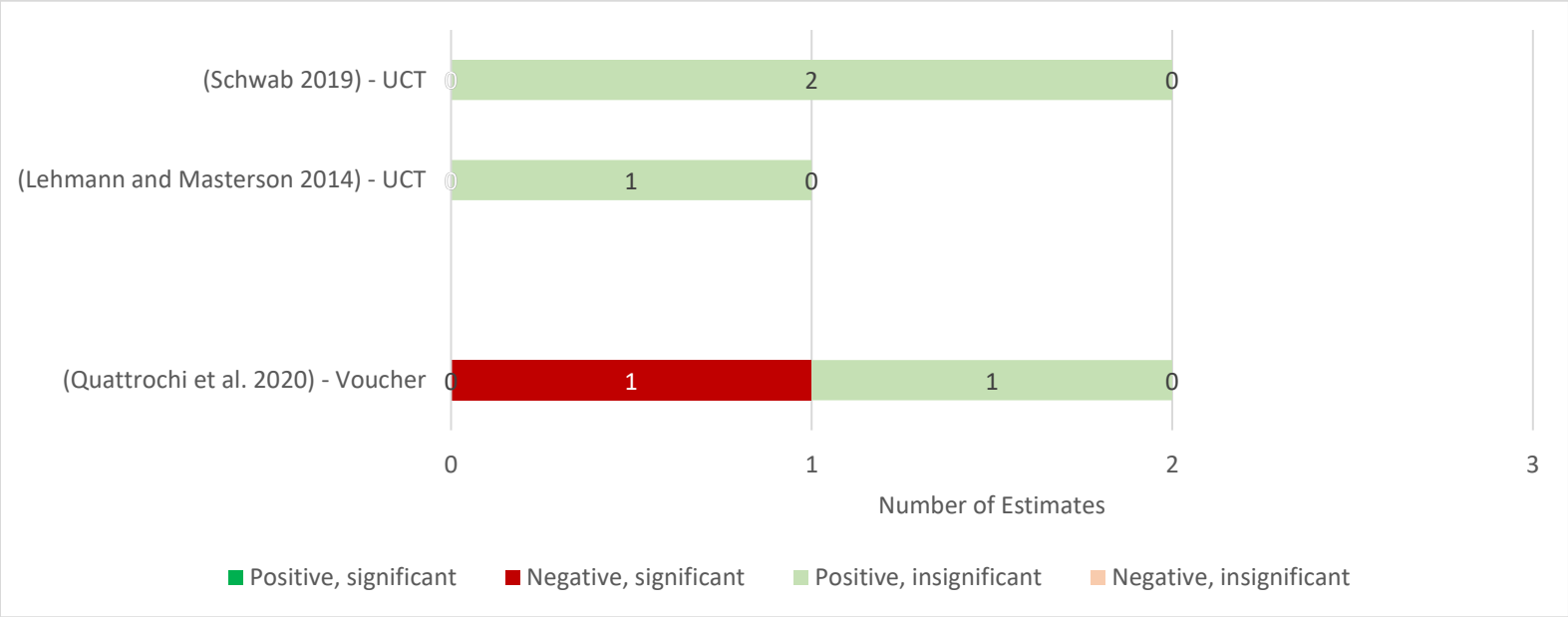
Appendix Figure 4. Effect of Humanitarian Assistance Interventions on Coping Strategies



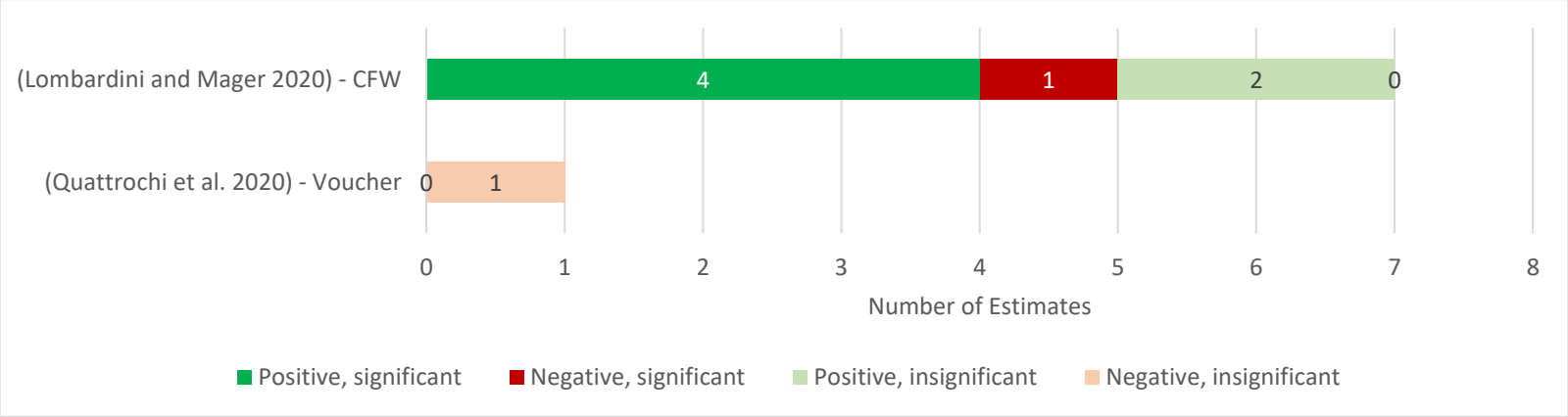
Appendix Figure 5. Effect of Humanitarian Assistance Interventions on Assets



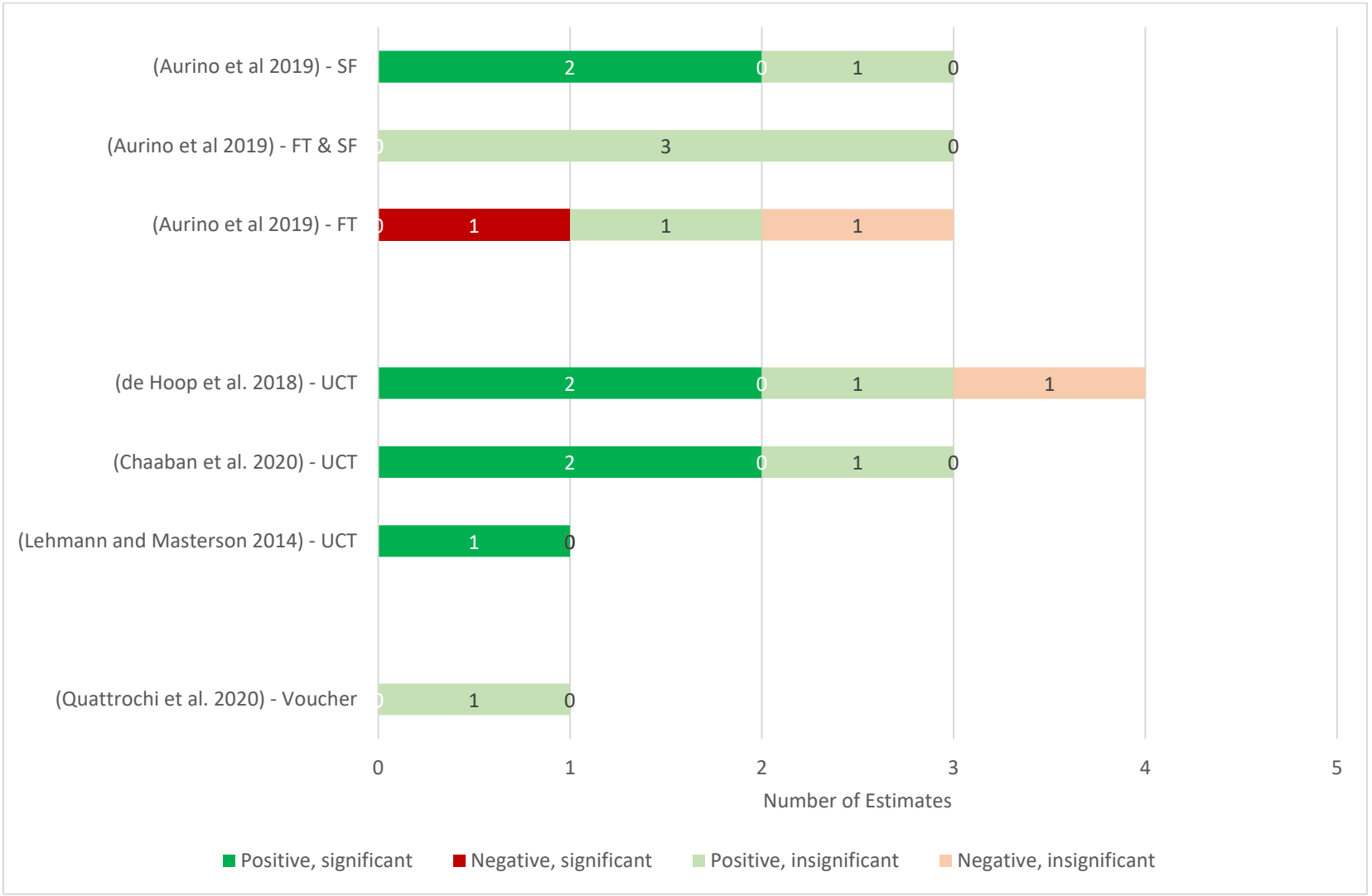
Appendix Figure 6. Effect of Humanitarian Assistance Interventions on Savings



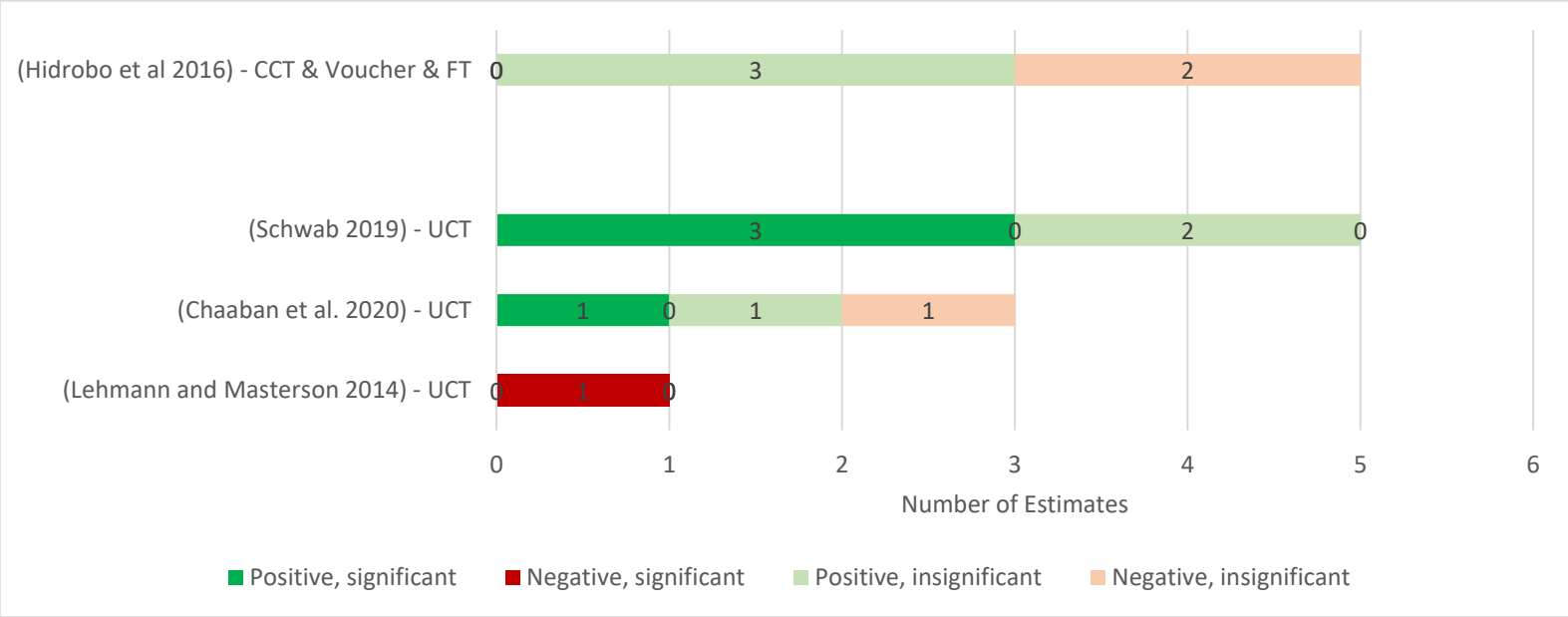
Appendix Figure 7. Effect of Humanitarian Assistance Interventions on Income Outcomes



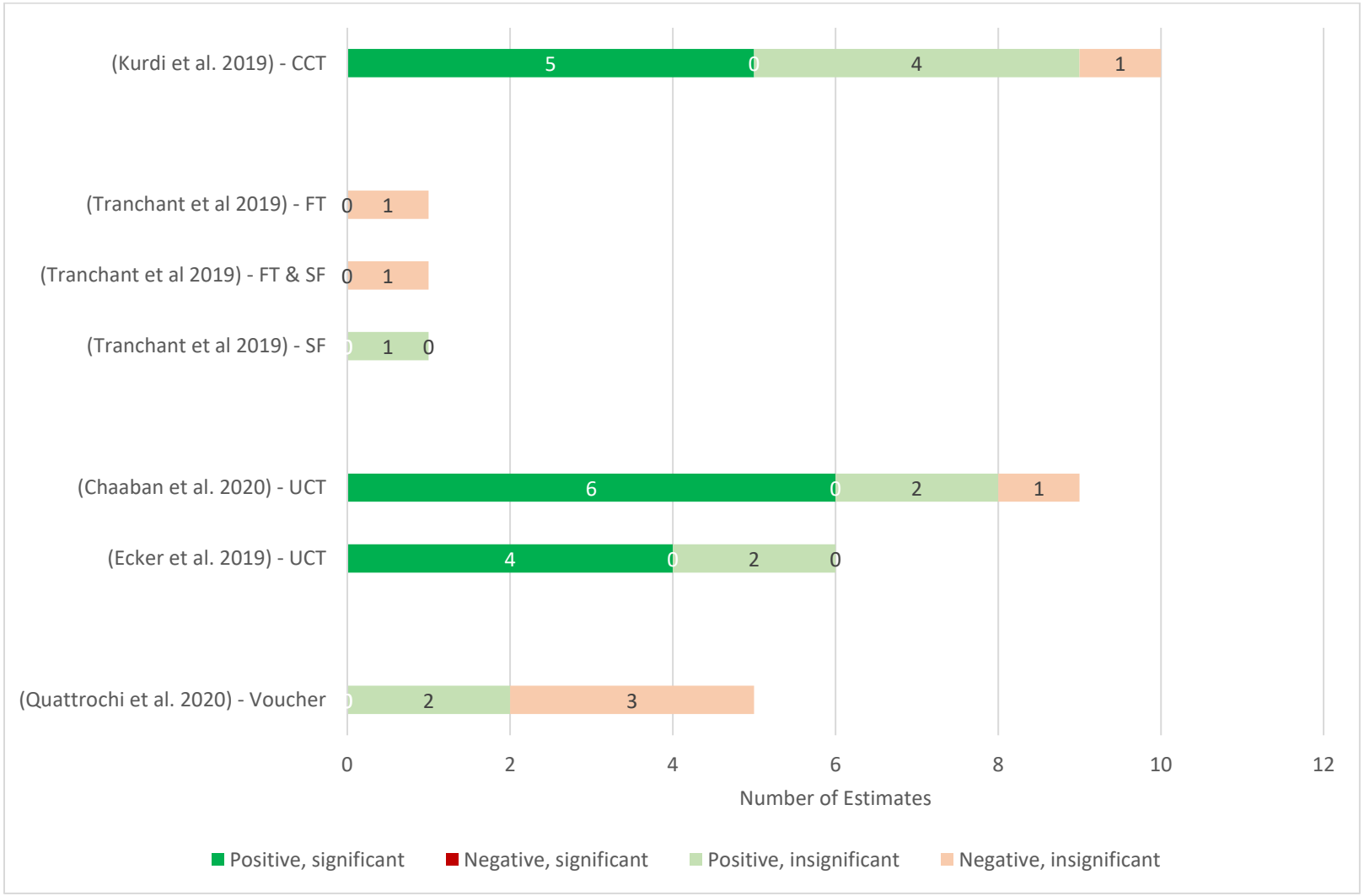
Appendix Figure 8. Effect of Humanitarian Assistance Interventions on Education



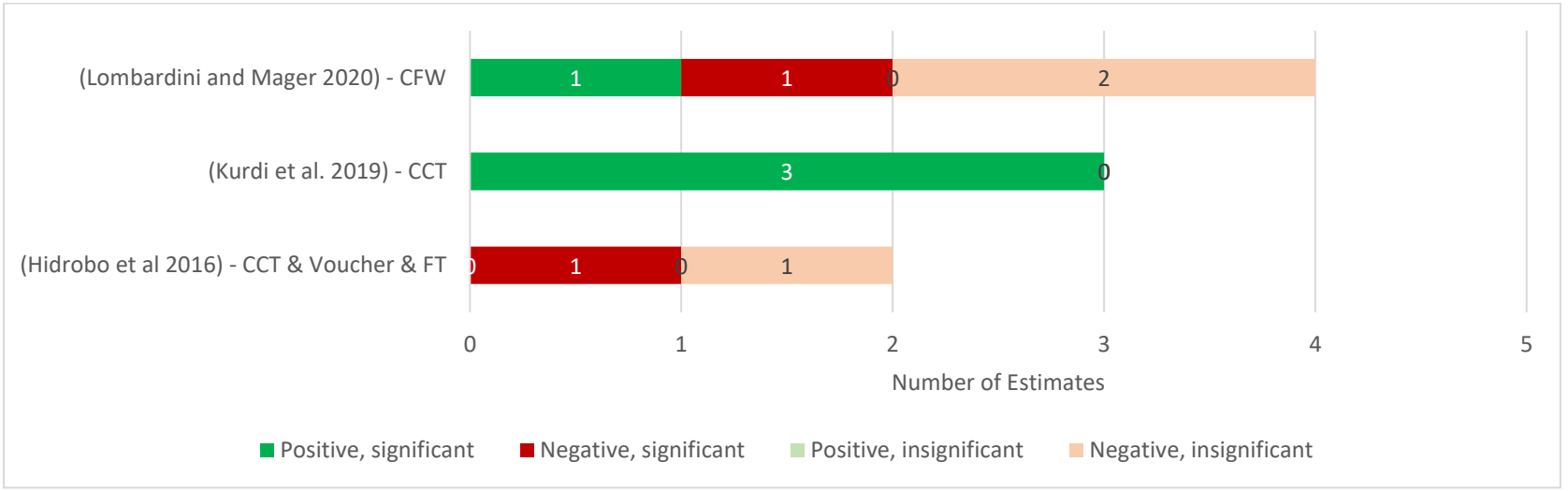
Appendix Figure 9. Effect of Humanitarian Assistance Interventions on Labour Force Participation



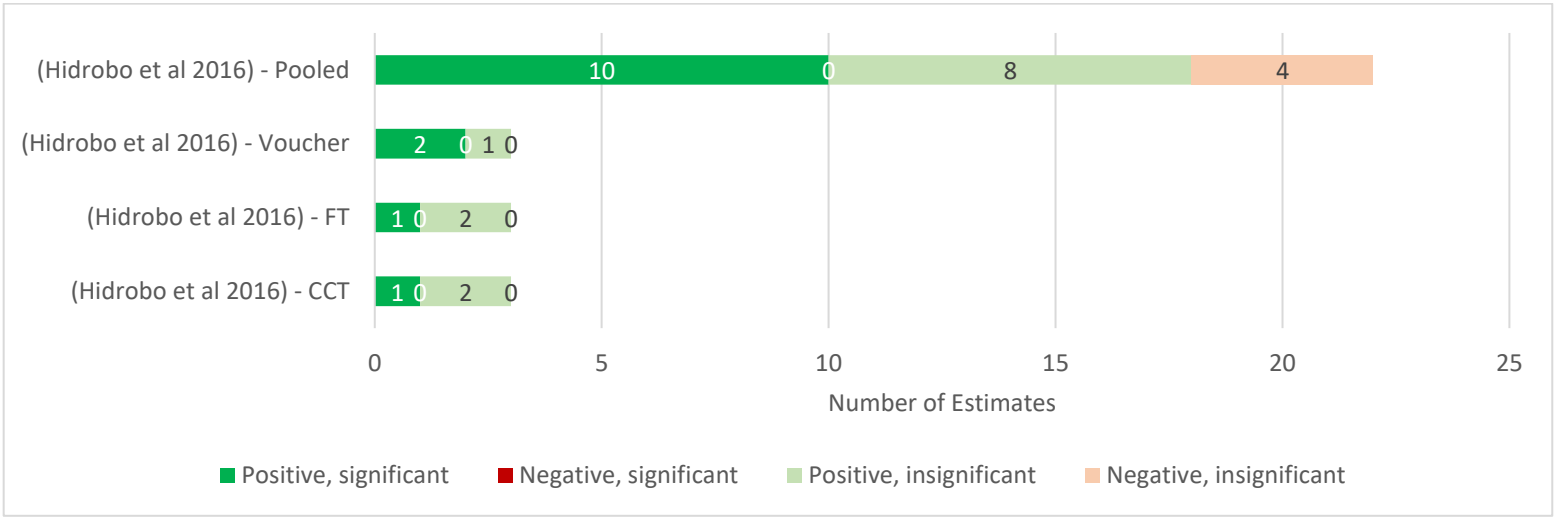
Appendix Figure 10. Effect of Humanitarian Assistance Interventions on Health Outcomes



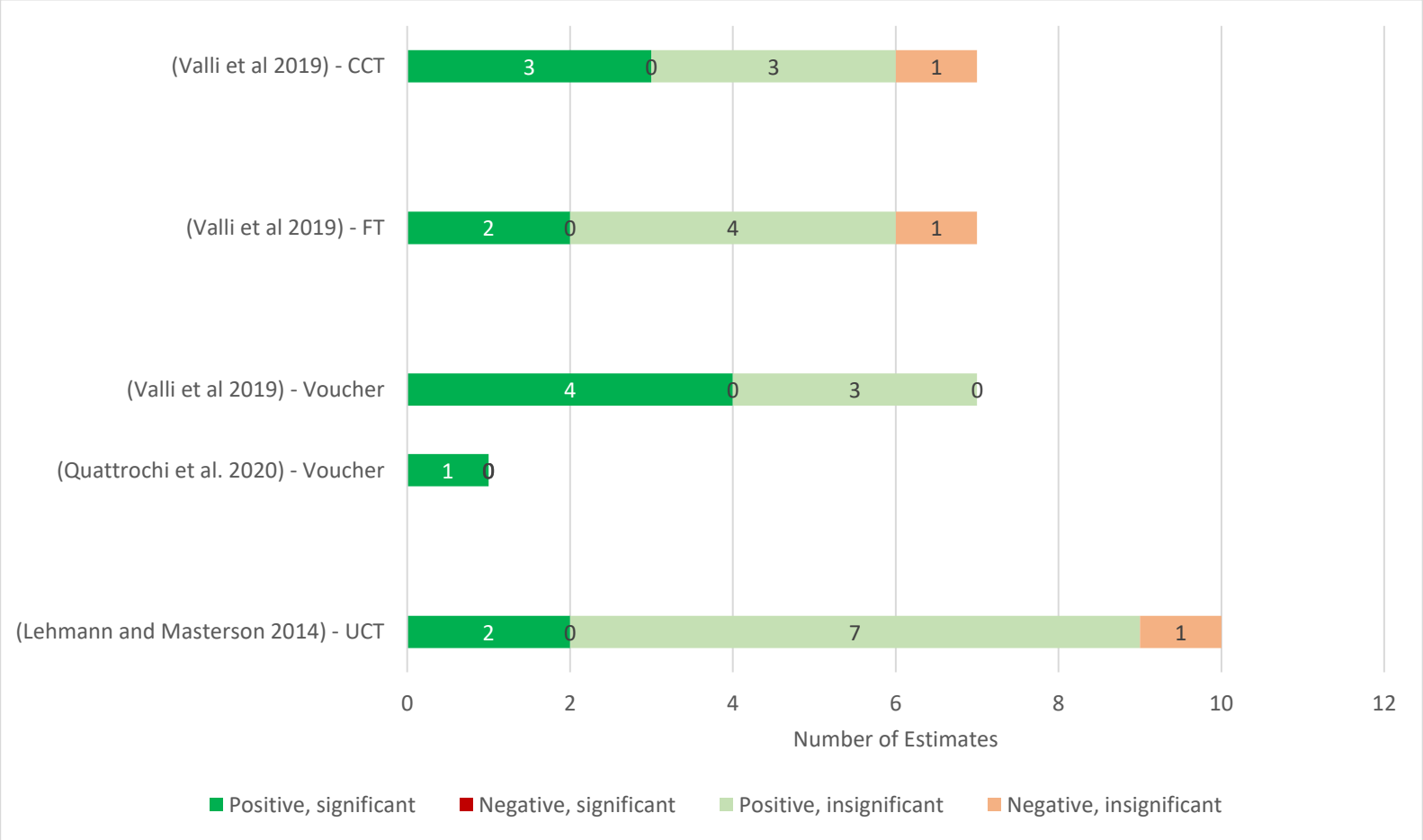
Appendix Figure 11. Effect of Humanitarian Assistance Interventions on Women's Empowerment



Appendix Figure 12. Effect of Humanitarian Assistance Interventions on GBV Reduction



Appendix Figure 13. Effect of Humanitarian Assistance Interventions on Social Cohesion

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