

Our Daily Bread: What is the Evidence on Comparing Cash versus Food Transfers?

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Abstract. This paper reviews key issues in the ‘cash versus food’ debate, including as they relate to political economy, theory, evidence, and practice. In doing so, it benefited from a new generation of 12 impact evaluations deliberately comparing alternative transfer modalities. Findings show that differences in effectiveness vary by indicator, although they tend to be moderate on average. In some cases differences are more marked (i.e., food consumption and calorie availability), but in most instances they are not statistically significant. In general, transfers’ performance and their difference seem a function of the organic and fluid interactions among factors like the profile and ‘initial conditions’ of beneficiaries, the capacity of local markets, and program objectives and design. Costs associated with cash transfers and vouchers tend to be substantially lower relative to food. Yet methods for cost-effectiveness analysis vary and need to be more standardized and nuanced. The reviewed evaluations are helping to shift the debate from one shaped by ideology, political economy and ‘inference’ of evidence to one centering on robust and context-specific results.

Keywords: social protection, safety nets, food security, political economy, cash transfers, in-kind transfers, food aid, vouchers, impact evaluations, cost-effectiveness.

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Executive summary

Currently, one of the ‘hottest’ social protection debates is whether India should replace its public food distribution system with cash transfers. The issue has been widely covered in the literature and media, with arguments made for and against the transition. Similar discussions on ‘cash versus food’ are unfolding in countries in the process of reforming their subsidy regimes, some of which in the Middle-East; the issue equally arises in contexts of responding to chronic food insecurity, such as in Ethiopia and Niger, or to sudden disasters, such as in Bangladesh and the Philippines. All these examples beg the question of when is it best to provide food instead of cash – a longstanding quandary part of a larger in-kind versus cash controversy. While evidence is mounting on the effectiveness of cash in general, what do we know about its performance *relative* to food in particular?

Until recently, a key limiting factor in informing the debate in developing countries has been the paucity of robust *comparative* evidence. As a result, the discussion on transfer selection has been largely based on inference – that is, based on findings from individual programs implemented in diverse contexts, relying on different evaluation methods, or designed for differing purposes. Such extrapolation and comparison of findings could, at best, be suggestive of relative effectiveness. Drawing from a new generation of evaluations deliberately comparing alternative transfers, this paper takes stock of key issues and evidence on the cash versus food debate.

Conceptually, the most fundamental dilemma is the trade-off between providing choice and promoting a given externality. In-kind transfers are often considered ‘paternalistic’ since they constrain recipients from maximizing their utility through choice – that is, the mainstream argument in favor of cash is that it provides choice and empowers. This is a strong rationale, although it also stimulates some reflections: for example, can choice be exercised where there is no or limited availability of food? Or, is choice just the ability to freely dispose of a given transfer (e.g., cash), or should such definition also include the opportunity to choose what to get in the first place (e.g., cash or food)? It is not unlikely, and it is indeed desirable, that these quandaries will keep fomenting debates in the years to come. Also, the political economy of transfer provision would most probably continue to play an important role in shaping what is provided to recipients. Yet those issues should not substitute for, or distract from, designing and advocating for assistance based on contextual evidence and performance on the ground.

So what do we know about the impacts of alternative transfer modalities? The traditional source of comparative evidence draws from studies on the ex-food stamp program, now SNAP, in the United States. Contrary to predictions of standard theory, these overwhelmingly show that inframarginal in-kind transfers are more effective than an equivalent cash transfer in increasing food consumption. A comprehensive review showed that “... virtually every study finds food stamps increase household nutrient availability at 2 to 10 times the rate of a like value of cash income”. Why such difference? While a ‘cash-out puzzle’ is an empirical regularity, the debate is inconclusive on the reasons behind it.

But what’s the state of the evidence in developing countries? The paper reviewed 12 comparative studies in 10 countries, including responses to droughts (Niger), man-made crises (Democratic

Republic of Congo, and Ecuador), and natural disasters (Sri Lanka); others were implemented as part of social protection systems, such as Bangladesh, Ethiopia, Mexico, and Cambodia; while others envisaged developmental interventions in fragile contexts, such as Yemen and Uganda. While conditions and design differed between country studies, programs within countries put cash and food (and vouchers when considered) on an equal methodological footing.

By examining the performance of transfers on a dozen indicators, most of which food security-related, we paper finds that differences in effectiveness vary by indicator, although they tend to be moderate on average. There are cases where differences are more marked (e.g., cash being more effective in enhancing food consumption, while food seems to outperform cash in increasing household caloric intake), although in most cases they are not statistically significant. In general, transfers' performance and their difference seem a function of the organic and fluid interactions among a number of factors (e.g., profile and 'initial conditions' of beneficiaries, capacity of local markets, and program objectives and design), instead of inherent merits of one modality over the other.

The reviewed studies show that cash transfers tend to be at least twice more efficient than food-based interventions. Yet methods for cost analyses vary in scope, breadth and depth. For example, only in two cases it was possible to examine a fuller measure of program efficiency that account for food procurement costs. Such approach led to widely different results than those based on sole implementation costs. In some cases, efficiency gains may have been achieved by shifting costs to beneficiaries in the form of higher travel costs and waiting time to obtain transfers. It is also likely that both costs and effects are fairly dynamic (e.g., set-up and variable costs), and may follow seasonal patterns, for example. While the challenges in undertaking robust cost analyses should not be underplayed, it is important that future cost-effectiveness studies are more standardized and nuanced.

Finally, a dozen evaluations are just a new beginning, not the end of the debate – while promising, they are dwarfed by, for example, the level of empirical attention devoted to programs like SNAP or conditional cash transfers. While the review has shown the growing knowledge on transfer debate, it also exposed a number of information gaps. For example, the implementation of voucher programs or combined program modalities seem underexplored; also, evidence largely based on food consumption, calories and dietary diversity data may tell us little, for example, about chronic malnutrition. Yet, the reviewed studies are already succeeding in triggering a more fundamental change, namely to shifting the terms of the debate from one largely shaped by ideology, political economy and 'inference' of evidence to one centering on comparable, robust and context-specific results.

1. Introduction

The current ‘hype’ for cash transfers is hard to underplay (Ozler 2013a). Publications titled *Show Them the Money*, *Let Them Eat Cash* and *Just Give Money to the Poor* have made a strong case for supporting vulnerable people with cash (Blattman and Niehaus 2014; Blattman 2014; Hanlon et al. 2011). Evidence and advocacy papers have mushroomed, dedicated learning and training platforms have been established, and operational guidelines were developed for both development and humanitarian contexts (CaLP 2013). Cash transfers are subject to extensive media coverage, while the blogosphere regularly host vibrant discussions on cash in connection, for example, to the distribution of wealth from natural resources, subsidy reforms, enhancing state accountability, or exploring variants in program design (The Economist 2014; Devarajan 2013; Ozler 2013b; Moss 2013; Pritchett 2012).

To be sure, cash transfers are among the most rigorously evaluated fields in social sciences, including a proven track record of performance in attaining intended objectives and broader multipliers (Andrews et al. 2014; Davis et al. 2012; IEG 2011). The basic question that this paper addresses is not whether cash transfers work in general, but whether and when they do so *relative* to in-kind food assistance. Indeed, the cash versus in-kind debate is among the most longstanding, controversial and polarizing social protection quandaries. Take the following quotes:

“[T]he big reason poor people are poor is because they don’t have enough money, and it shouldn’t come as a huge surprise that giving them money is a great way to reduce that problem – considerably more cost-effectively than paternalism [i.e. vouchers and in-kind transfers]. So let’s abandon the huge welfare bureaucracy and just give money to those we should help out.”
(Kenny 2013)

“[T]housands of economics professors across the globe persuade millions of undergraduates that granting the poor distribution of benefits in-kind is less “efficient” than simply transferring to them cash (...). The economist’s traditional, normative dictum on benefits in-kind may be analytically elegant (...) but practically dead wrong.” Reinhardt (2013)

These seem to posit two irreconcilable perspectives. But is there some truth in both? What does the cross-country evidence and experience tell us about transfers’ relative performance? Until recently, a key limiting factor in informing the debate in developing countries has been the paucity of robust *comparative* evidence². As a result, the discussion on transfer selection has been largely based on inference – that is, based on findings from individual programs implemented in diverse contexts, relying on different evaluation methods, or designed for

² A notable exception is the United States’ Supplemental Nutrition Assistance Program (SNAP), or ex-Food Stamp Program. As mentioned in the next section, SNAP has been subject to ample empirical scrutiny in comparison to cash transfers.

differing purposes. Such extrapolation and comparison of findings could, at best, be suggestive of relative effectiveness.

This paper reviews key findings emerging from a new generation of robust impact evaluations in ten developing countries, namely Bangladesh, Cambodia, the Democratic Republic of Congo, Ecuador, Ethiopia, Mexico, Niger, Sri Lanka, Uganda, and Yemen. Those studies deliberately compare cash and food transfers under the same circumstances through randomized controlled trials (RCTs), quasi-experimental methods or regression analysis. The paper frames and discusses emerging results within the broader issues that shape transfer selection debates, such as conceptual and political economy matters. It argues that the debate involves a range of factors that makes it more complex than often assumed; it shows that, in terms of performance, average relative effectiveness cannot be generalized, and that methods for cost-effectiveness analysis should be strengthened. Overall, it argues that the debate is increasingly moving from one largely driven by ideology and political economy to one centering on contextual and robust evidence. As such, while longstanding, the debate is somewhat entering onto a ‘new beginning’.

The analysis is conducted within certain parameters. First, the note examines the transfer debate within the universe of safety net programs³, including interventions such as public works, conditional or unconditional transfers. Under those programs, the size of cash is generally devised for consumption smoothing objectives, including enabling access to food and other essential needs⁴. Therefore, the vast literature on ‘cash grants’ – which involve relatively large sums of money to jump-start entrepreneurship and investment – go beyond the scope of this paper. Similarly, in-kind transfers may encompass a vast gamut of items, such as shelter, agricultural inputs, and subsidized health care. Yet we only consider part of those transfers, namely food commodities; as such, we focus on a subset of the wider ‘cash versus in-kind’ debate. Also, in discussing policy issues we consider food transfers as a single entity, while de facto they are composed by multiple commodities of different monetary and nutritional value.

The remainder of the paper is organized as follows: after this introduction, the next section sets out a framework examining key issues that shape transfer selection debates, including the role of political economy, theory and evidence. Section 3 describes the compilation of evaluations and sets out their results in terms of impacts and costs. Section 4 discusses the implications from the analysis, while summary conclusions are offered in section 5.

2. Anatomy of the debate

The cash versus food dilemma is relevant under a range of poverty-reduction debates, but it is particularly compelling for food security issues. In this respect, the role of social protection in food security is being increasingly examined, including through the lens of its three core pillars: how social protection can enhance food production and agricultural productivity (Tirivayi et al. 2013); how transfers can provide access to food (CFS 2012); and how social protection can, as

³ Safety nets refer to non-contributory, predictable transfers in cash or in-kind and are a component of larger social protection systems (World Bank 2014).

⁴ According to cross-country survey data, the average size of safety net transfers is about 23 percent of the poor’s income or consumption (World Bank 2014).

Alderman (2014) put it, be more nutrition-sensitive. A forth food security pillar, risk or stability, underpins those three dimensions and it is central to the connections between social protection and resilience (Davies et al. 2013). The interactions between social protection transfers and those food security components are mediated by a range of other factors (e.g., food security being only one factor in the nutrition equation), and occur under different timeframes (e.g., the likely timeframe for reducing malnutrition is measured more in terms of a generation rather than of a few years).

Three forms of transfers are considered in the paper, namely cash, food and vouchers. Cash transfers provide people with money, while food transfers (or food aid) include the distribution of commodities. Food transfers can be procured internationally (imported food) or local-sourced in the same country where the program is implemented. Vouchers are also known as stamps or near-cash transfers and can be used in predetermined locations, including selected shops, supermarkets, retail stores and fairs. Vouchers take two forms: on one hand, ‘value-based’ vouchers provide access to commodities for a given monetary amount; on the other hand, vouchers can be ‘commodity-based’, or tied to a pre-defined quantity of given foods. Therefore, vouchers are a hybrid form of transfer that display features of both cash (value-based vouchers allow for some level of choice, although limited to the commodities available in the chosen location) and in-kind food (the implementation of commodity-based vouchers can closely resemble that of public food distributions systems⁵).

In a way, cash transfers provide beneficiaries (consumers) with choice while at the same time stimulating local markets (we’ll come back to the issue of choice in section 2.1). Also vouchers can equally bolster local (food) markets, although the choice they provide is more restricted or none⁶. Food transfers can stimulate markets if procured locally, although at a different level than vouchers. Indeed, the former tend to entail the engagement of a more limited number of upstream, larger producers, while the latter would directly involve a larger number of downstream, smaller actors⁷. From this perspective, vouchers are more ‘local’ in nature.

Against this backdrop, in order to understand the origins of the debate and advance it constructively we need to unpack a set of interconnected domains. These include three broad issues, namely political economy, theory, and evidence which are hereafter discussed.

2.1 Political economy

The transfer debate is not new. Historians found accounts of the quandary in 17th Century England, and even in ancient Edessa around 124 BC (Lindert 2005; Garnsey 1988). More recently, from the late-1990s and mid-2000s, the emergence of cash transfers on the global stage was in part defined by mounting criticism over the international food aid system, particularly in

⁵ In most cases, commodities are provided by private or commercial partners. Yet retailers could also be public or a mix of public-private actors, such as in the case of fixed-price outlets in Syria (Omamo et al. 2010).

⁶ In practice, also commodity-based vouchers can provide some room for choice. There are instances where beneficiaries can choose between commodities so long as their weight does not exceed the limit established by the program (Levan Tchatchua, personal communication).

⁷ Initiatives such as WFP’s Purchase for Progress program deliberately procure food from small farmers, hence spurring local economic gains among well-identifiable actors similar to vouchers’.

terms of transoceanic shipments and local monetization of commodities (Barrett and Maxwell 2006, 2005; Clay 2006; OECD 2005).

While the global food aid model has evolved dramatically toward more targeted, technology-supported, locally-procured and nutritionally-sensitive commodities, some lingering perceptions around food transfers seem hard to fully dispel⁸. In part, the mixed performance of large-scale national public food distribution systems may have contributed to a view of food transfers as intrinsically leak-prone and inefficient (GoI 2005). Conversely, since the mid-2000s the growing application of technology to the delivery has further propelled interest in cash as a ‘smart’ and efficient way of providing assistance (Vincent and Cull 2011). For example, in an experiment comparing alternative cash delivery options in Niger, Aker et al. (2013) found that households receiving cash electronically had higher diet diversity, potentially due, among others, to time saved to collect the transfer⁹. Technology, however, is now also underpinning food-based programs, hence help alleviating a number of traditional concerns around their management. For example, Muralidharan et al. (2014) showed that, based on an experiment in the state of Andhra Pradesh in India, biometric smartcards enhanced the performance of the food-based Targeted Public Distribution System (TPDS).

Yet, in some contexts, food transfers may still evoke the image of truck convoys pouring onto famine-stricken areas (e.g., in the Horn of Africa), or of food distributions driven by commercial and geopolitical interests. More subtly, in-kind food may be more directly associated with the inability of countries or households of feeding themselves, hence making the issue of dignity an important factor accompanying in-kind food provisions; instead, cash transfers tend to conjure just the opposite – i.e., freedom and independence – even if supposed to play the exact same role as food transfers (e.g., providing access to food through public transfers).

The latter observation raises perhaps the most fundamental philosophical dilemma in the debate, namely the trade-off between providing choice and promoting a desired externality (Pritchett 2012, 2005; Lopez- Rodriguez 2011; Currie and Gahvari 2008). Basically, the arguments in favor of in-kind transfers revolve around an ‘over-provision’ of goods. This involves informational, principal-agent, or behavioral arguments that often provide the foundations for much of the debate around conditionalities (Fiszbein and Schady 2009). In broad terms, this suggest that the expected externalities of an in-kind transfer would be desirable when there is a private under-investment – say, in food consumption or nutrition – below an optimal social (or even private) level. Hence, by representing a vehicle to influence behaviors, in-kind transfers are considered ‘paternalistic’ since they constrain recipients from maximizing their utility through choice – that is, the magic of cash lies in its fungibility (Glaeser 2012).

⁸ For instance, since 2000 locally-procured food in developing countries soared by 45 percent, while untargeted bilateral food aid (i.e., food aid sold on local markets) now represents only about 3 percent of total flows. The entire volume of international food aid itself amounts to less than 0.25 percent of total global food production (Barrett et al. 2012). Gradually, innovations such as the use of smart cards, mobile phones, biometric devices and e-monitoring tools were also adopted in food and voucher programs (Omamo et al. 2010).

⁹ Households in villages receiving cash electronically had a household diet diversity value that was .31 points (10 percent) higher as compared with the manually-receiving villages, with a statistically significant difference at the 5 percent level.

Relatedly, cash is often seen not only as a mechanism to transfer income, but to transfer power. As it was recently put, "... cash transfers have the potential to shift not just poverty-reducing policies but also the balance of power between government and its citizens, in favor of the latter" (Devarajan 2013). In other words, the mainstream argument in favor of cash is straightforward: cash provides choice and empowers, hence it is 'redefinitional'¹⁰.

Such distinct properties make a strong case for cash transfers. However, they also stimulate some reflections: can the provision of choice be considered an objective per se? In that case, any cash transfer can be considered effective and would not require evaluations of outcomes or impacts. Or, can choice be exercised effectively when there are limited supplies of goods or they are unaffordable? This is intimately linked to technical issues around market functionality, which will be discussed in the section 2.3. Finally, is choice just the ability to freely dispose of a given transfer (e.g., cash), or should such definition also include the opportunity to choose what to get in the first place (e.g., cash or food)?¹¹ In India, an interesting pilot is testing such broader notion of choice by providing people the chance to select cash or food. Such choice would not be hypothetical, but real and expressed on the spot at TPDS distribution points (Muralidharan 2011). In other words, 'paternalism' seems less about interventions per se, and more about processes to provide them – i.e., whether an intervention is paternalistic hinges on the extent to which it considers beneficiaries as key stakeholders throughout the life of the program.

Similarly, from the supply-side of assistance, political economy regimes may have influenced what is provided to recipients. This may be particularly the case for food-based programs, including at the international level (e.g., Bageant et al. 2010 for the United States) and domestic arenas alike (e.g. Dreze 2011 for India). There are signs, however, of changing approaches as epitomized by legislative and policy provisions devoting larger budget shares for cash-based programs (Elliot and McKitterick 2014; WFP 2011). Providing a menu of transfers (e.g., cash, food) to be used based on local conditions is likely to be conducive to contextual and 'demand-led' approaches; in this vein, simply turning provisions from one modality to another – e.g. from only food to only cash – may constrain recipients (since they can't choose what to get) rather than empowering them. We'll come back to the issue of choices in section 2.3

In general, the inherent tension between fungibility and encouraging a desired outcome will keep being a matter of discussion for many years. This is not only highly likely, but also highly desirable. Similarly, the political economy of transfer provision may continue to play an important role in determining 'what' is provided to recipients. There are important factors behind conceptual and political economy debates, many of which go well beyond the choice of transfers. They nevertheless affect it significantly, including through the contextual definition of what poor people 'deserve', public perceptions and opinions, history, the influence of particular

¹⁰ Paul Niehaus, keynote address at the event "Cash Transfers: The New Benchmark for Foreign Aid?" hosted by the Center for Global Development (9 May 2014, Washington DC). Videos and materials of the event are available at: <http://www.cgdev.org/event/cash-transfers-new-benchmark-foreign-aid>.

¹¹ For example, in 2006 a combined cash and food transfer program was implemented in rural Malawi. The follow-up evaluation explored participants' preferences over one or both transfers and found that "... most beneficiaries were very satisfied with receiving both food and cash" (Devereux 2008). Yet, the redesign of the project in 2007 only envisaged cash transfers.

constituencies and, to some extent, even the symbolic value carried by food in societies¹². However, these issues should not substitute for, or distract from, understanding what works based on technical appropriateness and evidence on performance. So what do we know about the effectiveness of alternative transfer modalities? These will be reviewed in the next two sections.

2.2 Theory

The microeconomic foundations of modern debates tend to draw from standard economic theory, often rooted in the elegant exposition provided by Southworth (1945). The transfer debate received considerable empirical attention in the 1980s and mid-1990s, with a vast share of it examining the United States' Supplemental Nutrition Assistance Program, or SNAP¹³ (Basu 1996; Faminow 1995; Fraker et al. 1995; Devaney and Moffitt 1991; Levedahl 1991; Fraker 1990; Coate 1989; Blackorby and Donaldson 1988)¹⁴.

In a stylized form, the literature shows that at least two factors are key to predicting transfers' relative effectiveness, namely the size of the transfer relative to household consumption and beneficiaries' marginal propensity to consume food out of that transfer. An in-kind transfer is defined as 'extramarginal' when it is provided for an amount greater larger than what households would have normally consumed in the absence of the transfer; conversely, an in-kind transfer is inframarginal if it is smaller than the amount consumed by recipients. According to conventional models, an inframarginal in-kind transfer and a cash transfer of equal value would have the same effect in bolstering household food consumption – i.e., beneficiaries' marginal propensity to consume food out of an additional income out of an in-kind or cash transfer should be the same. Put it differently, there is only an 'income' effect and no 'price' effect associated with inframarginal transfers. However, if in-kind transfers are extramarginal, and three underlying conditions are met¹⁵, then food consumption out of in-kind transfers would be larger than for an equal cash transfer due to the price effect. A more formal illustration is provided in figure 1.

Consider a simple model with food (horizontal axis) and cash (vertical axis). A cash transfer shifts the budget constraint from AB up to CE, while an equal in-kind transfer (e.g., maize for a size of QM) leads to a kinked budget ADE. Then suppose there are two households, I and II. Household I is indifferent between transfer type, moving from indifference curve I to I' under either transfer. Household II, instead, is weakly worse off under the in-kind transfer, consuming at point II' (the kink) if resale is prohibited (or at II'' if resale is costly).

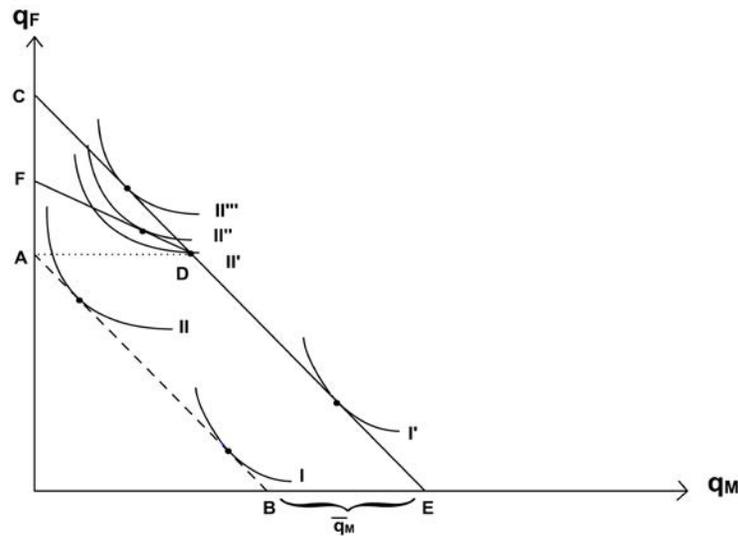
¹² On the history and role of food in societies, see Tannahill (1988). For a discussion on the relationship between food security and social stability, see Barrett (2013).

¹³ The SNAP program is the world's largest food voucher scheme. According to USDA data, about 1 every 7 Americans, or 47.4 million individuals, benefited from the SNAP voucher program in 2013-2014. See: <http://www.fns.usda.gov/pd/34SNAPmonthly.htm>.

¹⁴ During the same period, the debate was also examined in the context of famines relief as laid out in the influential analysis by Dreze and Sen (1989, p.97). See also Josling (2011) and the classic volume edited by Pinstrup-Andersen (1988) for examples of historical food voucher programs in Sri Lanka, Pakistan and Jamaica.

¹⁵ In particular, the ration could not be resold on markets, could not be resold below market prices, or could be done so only at high-transaction costs.

Figure 1. Microeconomic effects of cash and in-kind transfers



Source: adapted from Ahmed et al. (2010)

Note that the household would have chosen II''' under a cash transfer program. If resale is not possible, the in-kind transfer of QM is extramarginal for household II as it consumes more maize than it would have under a cash transfer. Conversely, the in-kind transfer is inframarginal for household I and its effects are equivalent to cash.

Interestingly, an empirical regularity in the SNAP literature is the rejection of the standard model's predictions. Indeed, it is widely demonstrated that in-kind transfers tend to increase food consumption more than cash transfers even when in-kind transfer are inframarginal. In other words, such 'cash-out puzzle' entails that the marginal propensity to consume food out of an in-kind transfer is higher than that out of cash¹⁶. As summarized in a comprehensive review, "... virtually every study finds food stamps increase household nutrient availability at 2 to 10 times the rate of a like value of cash income" (Barrett 2002).

Various explanations have been proposed for difference, with no conclusive answers. Possible reasons include a 'labeling' effect of in-kind transfers that induce a sense of moral obligation among recipients to use in-kind transfers for their intended food consumption purpose (Senauer and Young 1986); different preferences by gender and decision-making behaviors in multi-adult households (Breunig and Dasgupta 2005); alterations in household budgeting and planning of monthly purchases (Wilde and Ranney 1996); or possible marginal stigma associated with in-kind transfers (Levedahl 1995). In other words, the existence of a cash-out puzzle is a generally accepted empirical fact, although our understanding of the reasons behind such puzzle remains incomplete.

Importantly, however, what is referred to as 'in-kind' in the literature is actually a voucher, not a food transfer per se; and, as underscored, the evidence discussed above largely draws from

¹⁶ Similarly, one estimate from Bangladesh showed that, among participants in a number of safety net programs, the marginal propensity of our wheat was 0.33, while for an equivalent cash transfer it was near zero (Del Ninno and Dorosh 2003).

programs in high-income contexts. So what's the state of the debate and evidence in developing countries? This is a subject for the next section.

2.3 Evidence and practice

The available transfer literature in developing countries can be grouped in five broad empirical buckets. First, there is high-quality research conducted on individual cash-based programs. This group mostly includes careful empirical tests of conditional and unconditional cash transfers implemented in various contexts (Evans et al. 2014; Baird et al. 2013; de Brauw et al. 2012; Barham and Maluccio 2008; Duflo 2003). Second, there are comprehensive reviews focusing on cash transfers, often in relation to sectors, themes and regions. These take the form of general literature reviews or cross-country analyses geared to shed light on the relationship between cash transfers and issues such as disaster response, child malnutrition, or HIV/AIDS (Alderman 2014; Adato and Basset 2012; Bailey and Harvey 2011; DFID 2011; Garcia and Moore 2011; Fiszbein and Schady 2009).

Those two threads of literature are mirrored on the food front: in-kind food transfers have been carefully evaluated through the use of experiments and quantitative methods, including examining different food-based interventions such as school feeding, general food distribution, or food-for-work (Kazianga et al. 2014; Singh and Dercon 2012; Hoddinott et al. 2012; Adelman et al. 2008a,b; Gilligan and Hoddinott 2007; Yamano et al. 2005; Del Ninno and Dorosh 2003; Quisumbing 2003). At the same time, food transfers have been subject of generic reviews and more focused meta-analyses in relation to particular regions or interventions (Alderman and Bundy 2012; Webb et al. 2011; Del Ninno et al. 2007; Rogers and Coates 2002). Finally, publications have documented and summarized evidence emerging from all those four sets of studies (Lentz et al. 2013; Gentilini 2007).

While recalling the general caveats on comparability, those studies have generally concluded that transfer appropriateness is context-specific and hinges on multiple factors. These include program objectives, the functioning of markets, administrative capacity, seasonality, security, intra-household preferences, and community dynamics. These factors, which largely shape the performance of transfers across time and space, will be here briefly examined.

Turning 'needs' into 'effective demand' is a key rationale for cash transfers. Yet this might be challenging in presence of weakly-integrated or poorly-competitive markets. In those contexts, price transmissions would not necessarily signal relative scarcities, and localized cash injections may result in price spikes leaving consumers or net buyers worse-off¹⁷. In other words, there are circumstances where local markets may perform poorly, food prices may be excessively high or volatile, and private traders may not have incentives to supply commodities. In those contexts, a cash transfer may neither lead to more choice nor purchasing power, and in-kind food may be a more appropriate response (i.e., it ensures both availability of and access to food). From this

¹⁷ See Devereux (1988) for a clear exposition. For an interesting view on how recent high food prices may have ultimately benefited the poor, see Headey (2014).

perspective, a basic level of market functioning is a prerequisite for the effective provision of cash transfers¹⁸ and to enable local economic multipliers (see box 1).

Box 1. Local economic multipliers

New analyses are exploring the local multiplier effects of transfer programs¹⁹. For example, in Ghana, it is estimated that a major national cash transfer program (LEAP) generated up to USD 2.5 for every dollar provided to beneficiaries. Similarly, the multiplicative effects of social safety nets were found in Ethiopia (USD2.50), in Lesotho (USD2.23), Zambia (USD1.79) and Kenya (USD1.34). These results are helping to build a powerful evidence base on the productive role of safety nets. However, the fact that evidence almost exclusively centers on cash transfers does not necessarily entail that food transfers, or vouchers, do not spark market multipliers. Indeed, in-kind programs are less studied and evaluated from a market-stimulation perspective, although anecdotal evidence from Africa (and initial estimates from some of the evaluations examined in section 3) show they could do so. Food and voucher transfers could bolster markets not only through household-level expenditures, but also via promoting local procurement practices, reducing beneficiaries' exposure to risk, and spurring retail-level development. Yet those channels are somewhat different from the more straightforward liquidity-injection function of cash, hence requiring evaluation strategies able to capture those multipliers.

Source: Davis (2013); Davies and Davey (2008); Maunder (2006); Abdulai et al. (2004)

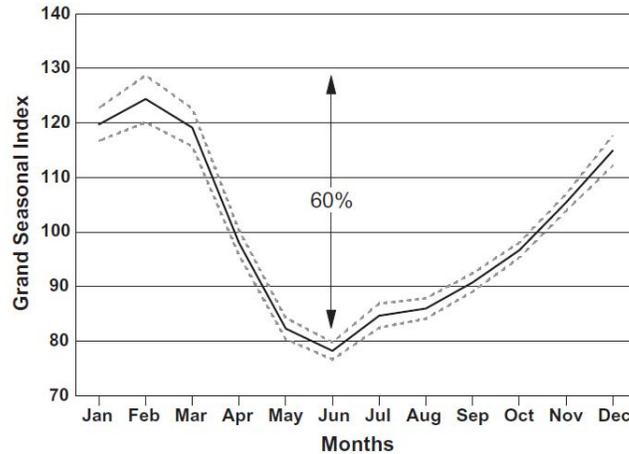
The discussion on market analysis has important practical implications for program design, implementation and efficiency. In some cases, prices may be particularly volatile, with a certain degree of unpredictability in future trajectories. These could turn a program that was efficient in the design stage into a cost-inefficient one during implementation. Indeed, keeping purchasing power constant in the wake of sharp price increases may escalate costs due to extensive use of contingency funds, such as shown in Zambia (Harvey and Savage 2006). Similar issues are also faced in contexts of more predictable price dynamics. For instance, price seasonality has been recognized as one of the key drivers of food insecurity in Africa: in Malawi, for example, analysis on price trends over 20 years shows mean inter-seasonal price fluctuations in the order of 60 percent²⁰ (figure 2).

¹⁸ Counter to this logic, in some cases markets are (physically) brought to locations where a cash program is implemented. This is the case of fairs, for example, including in areas where traders would not operate in the absence of the program. In such cases, cash-based transfers would be provided independently of the presence of working markets. The example of the emergency-hit Democratic Republic of Congo discussed later in the paper falls under this category (Aker 2013). See Michelson et al. (2012) and Barrett et al. (2009) for an analytical framework on market analysis and how it relates to response options. For a step-by-step account of the process to consider and implement cash transfer programs in an emergency, see Gentilini et al. (2010).

¹⁹ For example, see the evaluations carried out under the multi-actor initiative "From Protection to Production", available at <http://www.fao.org/economic/ptop/home/en/>.

²⁰ There are various emerging options to deal with marked seasonal price fluctuations. One is to index-linking cash transfers to food prices, such as in the DECT program in Malawi. In that context, the approach "... protected household food security until prices started falling just before the next harvest, [although] it required a degree of administrative and budgetary flexibility that is inconceivable for most governments and donor agencies" (Devereux 2012, p.7). Yet it might be easier to adjust transfer sizes upwards than scaling them back in size. Another option is to deliver transfers half in cash and half in food. For example, in a program in Swaziland, people were given a half ration of food (maize, beans and oil) plus the equivalent in cash on a monthly basis for 6 consecutive months (Devereux and Jere 2008). A third alternative is the distribution of cash and food transfers by season, with food

Figure 2. Mean seasonal price change in the Malawi maize market, 1989-2009



Source: Ellis and Manda (2012). Dashed lines represent one standard error either side of the 20-year mean.

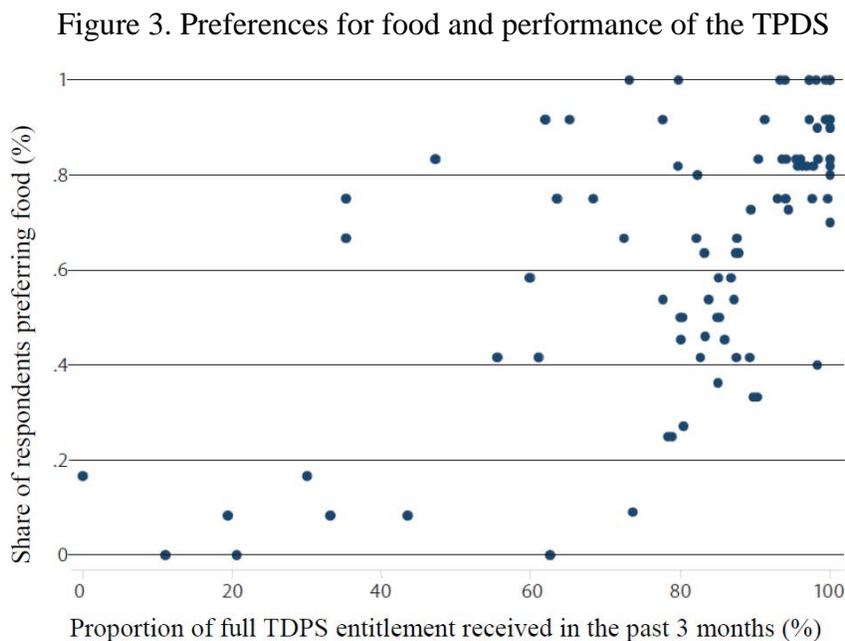
Whether related to market dynamics or other issues, cost-efficiency is one of the key factors in favor of adopting cash-based transfers. Studies that assessed relative costs showed that they tend to be higher for food transfers than for cash transfers and vouchers. This is not surprising, given the logistics that food programs normally entail (e.g., transport, storage, handling, etc.). However, cross-country cost assessments don't seem to adopt the same rigor as impact assessments. Indeed, there are limited standard protocols for cost analyses²¹, with comparisons are often hampered by the lack of consistency and clarity around data quality, estimation strategies and cost structures. For example, a review of 27 programs showed that administrative costs for cash transfers and vouchers vary from 3 to 37 percent of total cost (Meyer 2007). Clearly, such range may have as much to do with different formulas and accounting methods as real differences in cost. For example, sometimes the cost of food commodities is estimated based on market prices at retail-level (which are used to determine the size of cash transfers). This may significantly overestimate food costs, as they ignore the economies of scale from procuring large quantities of commodities at producer-level. Preliminary calculation for a sample of countries have shown that those cost differentials could even offset the larger logistics costs of food programs, making in-kind transfers surprisingly more efficient than cash transfers programs. For example, Creti (2011) estimated that in the West Bank and Gaza the costs for vouchers would be from 2 to 2.5 times higher than for in-kind food commodities of similar energy and nutritional content. Yet this may not necessarily be the case in all contexts, as we'll discuss in the next section (section 3.3 in particular).

provided in the lean season and cash right after the harvest. That approach, for example, is implemented under the PSNP in Ethiopia. This is likely to have a number of advantages, although it may also entail considerable costs in terms of analytical planning and logistical coordination among modalities.

²¹ See Ryckembusch et al. (2013), White et al. (2013), and Gelli et al. (2012), and Caldes et al. (2006).

Returning to the issue of market and prices dynamics, these are often influence people’s preferences. While it is difficult to generalize them, some general patterns can be discerned²². For example, as a result seasonal of price fluctuations, beneficiaries often prefer food in the lean season and cash around the harvest period. More generally, in-kind transfers tend to be preferred when prices are higher. This was clearly documented in the case of Ethiopia during the sudden increase in wheat prices in 2008 (Sabates-Wheeler and Devereux 2010).

An interesting analysis from India shed light on the importance of sound implementation in shaping opinions. The study showed that people’s preferences over cash or food depend “...on a combination of pragmatism, shrewdness and deep understanding of the local circumstances” (Khera 2011, p.44). In particular, the study showed that preferences hinged on the implementation performance of the TPDS: in states where the system worked poorly (left side of the horizontal axis, figure 3) people preferred cash; where existing food distribution worked well, larger shares of people preferred food.



Source: Khera (2011)

Gender tend to be another key factor in shaping preferences, including the fact that, as noted in the SNAP discussion, women may spend resources differently from men (Doss 2013). In a number of societies, women tend to prefer food, which they are more likely to control, while men may prefer cash transfers. Anecdotal evidence shows that the process of intrahousehold decision making also counts (e.g., men and women deciding in concert how to use household resources, even in contexts where women may be constrained in physically reaching markets or

²² Note that the issue of expressing and capturing preferences is a notoriously difficult to handle, including a number of factors that may distort feedback such as how the question is posed, who conducts the survey (e.g., funder of the program), expectations by beneficiaries, etc.

face risks to access them, such as in refugee camps). Yet very few studies, if any, are testing the differential impacts (e.g., on nutrition) of cash versus food transfers as provided to men and women (Braido et al. 2012). Qualitative research is also shedding light on intra-community effects of cash transfers, some of which are positive and empowering, while others may generate undesired consequences in terms of social relations. For example, in Zimbabwe it was observed that, unlike food, cash transfers were not shared within the community, hence hindering informal mutual support and risk management mechanisms among members (MacAuslan and Riemenschneider 2011). Those intra and inter-community effects of alternative transfers is an issue that may deserve further qualitative and quantitative study.

3. Impact evaluations

This section presents new evidence emerging from a set of quantitative evaluations, most of which randomized and quasi-experimental studies. The next two subsections describe those studies and their results.

3.1 Descriptive features

We examine 12 impact evaluations in 10 countries published over the period 2006-2013²³. These include the complete gamut of comparative experimental and quasi-experimental trials that, to our knowledge at the time of writing this paper, have been conducted on the matter in developing countries²⁴. The studies were fielded in different context and include responses to sudden natural disasters (Sri Lanka), slow onset crises (Niger) and man-made emergencies (Congo, Ecuador); others are implemented as part of long-term, institutionalized social protection systems (Bangladesh, Cambodia, Ethiopia and Mexico), or envisage developmental interventions in fragile contexts and regions (Yemen, Uganda). Public works were included in 3 cases, while conditional and unconditional programs were present in 4 and 7 countries, respectively (4 countries had combined interventions).

Some notable differences emerge. For example, the size of transfers range from USD5 in Cambodia to USD50 in Niger; similarly, the share of transfers in household expenditures varies from 2.5 percent (Cambodia) to 30 percent (Bangladesh). The composition of food rations also ranges from one commodity (rice) in Cambodia to up to 11 commodities in Mexico. Programs could have durations as different as a one-off 3 months intervention in Sri Lanka to a full-12 months (for 4 consecutive years) in Bangladesh. Distribution frequency and delivery mechanisms also differ, while evaluation methods include RCTs, quasi-experimental techniques (difference-in-difference, propensity score matching), regressions, and combinations thereof.

In particular, the Programa de Apoyo Alimentario (PAL) in Mexico provides unconditional food transfers to most of the target households while, at the time of data collection (2004-2005), cash transfers were provided to approximately 5 percent of beneficiaries living in isolated

²³ Mexico benefited from two distinct evaluations by Cunha (2014) and Skoufias et al. (2008).

²⁴ A new RCT is currently underway in Bangladesh, including compositions of cash, food and nutrition training (Ahmed et al. 2013). Total sample size include 5,000 households (4,000 of which are treated). Final results are expected to be released in late 2014.

communities. The transfer was of 150 pesos monthly, equivalent to USD 13, which is equal to the cost of the food basket in local markets²⁵. No adjustments to transfer amounts were made for family size or composition. The transfer is delivered bimonthly through stores in the case of food, and biometric debit cards for cash transfer. The PAL experiment was carried out in 208 villages that were randomized into four treatment groups: an in-kind transfer plus educational classes (the standard PAL treatment); in-kind transfer without classes; a pure cash transfer of 150 pesos per month plus classes; and finally a control group. Cunha (2014) uses the experimental PAL data to estimate the impacts between the cash and food transfers using a difference-in-difference estimation strategy. Moreover, we completed the findings by Cunha with two other studies on PAL, namely Skoufias et al. (2008) and Leroy et al. (2010). Both used similar estimation method and sample size (over 5,000 households), with Skoufias et al. (2008) offering insights for poverty and labor market participation, and Leroy et al. (2010) exploring the impacts of transfers on macro and micro-nutrients.

In Niger, a large-scale public works program was implemented in 2011 over a six-month period, from April to September. The program included public works and unconditional transfers implemented in sequence for the same group of beneficiaries. In some villages, registered household received cash while in others they received food. In cash-receiving villages, each beneficiary was provided with 1,000 FCFA (or about USD 2) per day for a maximum of 25,000 FCFA per month. Food payments consisted of commodities similar to those typically consumed in the region (see table 2 for a full list of food commodities provided in the ten countries). In this context, Hoddinott et al. (2014) assessed the relative impacts of cash versus food transfers through a randomized design using a single-difference evaluation approach (no baseline data was available). The results are differentiated by pre-harvest (or ‘hunger’) season in July and the post-harvest season in October.

The Productive Safety Net Programme (PSNP) in Ethiopia is a widely studied flagship safety net program. Launched in 2005, the PSNP provides predictable transfers to about 7.5 million food insecure people for a period of 6 months each year. Transfers are delivered through two components: public works that provide temporary employment at monthly wage of USD 16, and an unconditional arm of direct support for households with limited working capacity. Sabates-Wheeler and Devereux (2010) compared the impacts of those cash and food interventions on food-gap and income using a single difference estimation strategy.

In Uganda, a program was implemented by WFP and UNICEF in the fragile Karamoja region to support early childhood development. The program is a conditional food or cash transfer, where the former were provided as take-home rations, while the latter included a cash transfer of about USD 12 per child for each 6-week cycle. Food transfers were distributed through WFP’s general food distribution program, and cash transfers were added electronically to a card and retrieved from mobile money agent. Gilligan and Roy (2013) estimate the impacts of the program on child cognitive and non-cognitive development through an ANCOVA evaluation.

²⁵ Note that food was of higher value, since the 150 pesos cash transfer could only purchase about 73 percent of the in-kind basket.

In Ecuador, a three-modality transfer program (featuring cash, food and vouchers) was designed to address the food security and nutrition needs of Colombian refugees and to support their integration into Ecuadorian communities. The value of the monthly transfers was standardized across all treatment arms at USD 40 per month per household. The cash was transferred monthly onto preprogrammed ATM cards. Cash transfer households were able to retrieve the cash in bundles of USD 10. Vouchers were given in denominations of USD 20, redeemable for a list of nutritionally approved foods at identified supermarkets. Hidrobo et al. (2014a) use the experimental design of this program to assess the impacts of transfers using an ANCOVA approach.

Aker (2013) evaluates the impacts of unconditional cash transfers and vouchers in the context of a complex emergency in the Democratic Republic of Congo. The program was part of the humanitarian response to internally displaced persons living in informal camps. Cash transfers and vouchers for a total of USD 130 were provided over a seven-month period in three installments²⁶. Cash was directly deposited into an interest-free account at the office of a local cooperative located in the regional market center. Impacts were estimated using a difference-in-difference with fixed effects.

In Yemen, an emergency intervention to address seasonal food shocks was carried out in a 136-village clusters that were randomly assigned to receive either a food or a cash transfer. Over the course of seven months, households received 3 food baskets. Over the same time period, households in the cash treatment group received 3 cash transfers of an amount equivalent to the local value of the food basket (about USD 50). Cash transfers were distributed through ID cards from the Yemen Post and Postal Savings Corporation, and food transfers were delivered through the Ministry of Education. Schwab (2013) compared the impacts of food and cash transfers using single difference, difference-in-difference, and ANCOVA estimation strategies.

A pilot intervention was implemented in Cambodia as an extension to an existing food for education program. Food was provided through two modalities: early morning meals and take-home rations. The expansion included a cash scholarship to test the relative efficacy of the take-home rations and cash scholarships. Both transfers were conditional on a minimum attendance rate of 80 percent. The cash transfer was of USD 60 per year and the take-home ration consisted of 10kg of unfortified rice per month. Barker et al. (2014) estimated the comparative impacts using a difference-in-difference approach.

In post-tsunami Sri Lanka, an emergency cash transfer program was designed to support the needs of affected villages as part of the broader food-based operation ran by WFP. The cash transfer pilot disbursed an average amount of USD 2.44 per week. Food rations were specified for weekly amounts but in most cases transfers were given in bulk. Cash transfers were distributed by the Samurdhi Authority in two-week installments through bank accounts. Sharma (2006) compared the relative impacts using a difference-in-difference estimation strategy.

²⁶ Cash payments were made in three disbursements: September 2011 (USUSD90); November 2011 (USUSD20) and February 2012 (USUSD20). Program recipients had to travel to this market center to receive the cash transfer. Vouchers were provided in three installments, the first of which were commodity-based while the last two were value-based.

In Bangladesh, Ahmed et al. (2010) examined the efficacy of four different programs envisioning food-only, cash-only, and combined cash and food transfers. For the purpose of this paper, we examine only the two ‘pure’ cash and food transfer interventions, namely the food-based Income Generating Vulnerable Group Development (IGVGD) and the cash-based Rural Maintenance Program (RMP). The IGVGD program exclusively targeted poor women, who receive a monthly food ration over a period of 24 months. Also the RMP targeted divorced, widowed, separated, or abandoned women with 4 years of employment to maintain rural roads. RMP participants received a monthly net salary of USD 30. Impacts of both programs were estimated using propensity score matching techniques.

The specific features of the interventions are summarized in table 1, describing the program types, modalities, transfer size, transfer as percentage of household pre-program expenditures, frequency of distribution, household size, duration, delivery mechanisms, sample size, and evaluation method.

Table 1. Descriptive statistics of impact evaluations

Program	Country	Program type*	Modality	Cash size (USD)	Food basket	Size as % of ore-program HH exp.	Transfer frequency	HH Size	Exposure	Years of data	Delivery mechanism	Sample size (HHs at endline)	Evaluation method	Reference
PAL	Mexico	CT, UT	Cash, Food	13	F ¹	11.5	Monthly (cash), bi-monthly (food)	4.2	trial 1 year	2004-2005	Biometric debit cards	(a) 5,028 (b) 5,851 (c) 5,823	DD DD DD	(a) Cunha (2014) (b) Skoufias et al. (2008) (c) Leroy et al. (2010)
Zinder project	Niger	PW, UT	Cash, Food	50	F ²	11.5	Bi-weekly	7	6 months	July - October 2011	Mobile ATMs, smart cards	2,209	SD	Hoddinott et al. (2014)
PSNP	Ethiopia	PW, UT	Cash, Food	16.2	F ³	N/A	Monthly	5	6 months per year	2006-2008	N/A	960	SD	Sabates-Wheeler and Devereux (2010)
Early Childhood Development	Uganda	CT	Cash, Food	10.2	F ⁴	12.7	6-8 week cycle	6.2	12 months	October 2010 – April 2012	Mobile money cards	2,461	ANCOVA	Gilligan and Roy (2013)
Colombian refugees project	Ecuador	CT	Cash, Food, Vouchers	40	F ⁵	10	Monthly	3.8	6 months	April – November 2011	ATM card	2,122	ANCOVA	Hidrobo et al. (2014a)
IDPs project	Democratic Republic of Congo	UT	Cash, Vouchers	18.5	V ⁶	18.96	Bi-monthly	5.5	7 months	September 2011 – March 2012	Bank accounts	252	Fixed effects	Aker (2013)
Unconditional safety net	Yemen	UT	Cash, Food	49	F ⁷	N/A	Bi-monthly	7.9	6 months	2011 –2012	ID card via Postal Savings Corporation	1,581	SD, ANCOVA, DD, DDD	Schwab (2013)
Scholarship pilot program	Cambodia	CT	Cash, Food	5	F ⁸	2.5	Monthly	6	10 months	August 2011 – August 2012	On-site manual distribution	4,091	DD	Barker et al. (2014)
CTPP	Sri Lanka	UT	Cash, Food	9.8	F ⁹	26.3	Bi-weekly (cash), bi-monthly (food)	3.8	3 months	November 2005 – February 2006	Samurthi Bank	1,357 s	DD	Sharma (2006)
IGVGD, RMP	Bangladesh	UT, PW	Cash, Food	19.7	F ¹⁰	30 (cash) 15.5 (food)	Bi-monthly (cash), monthly (food)	4.6	2-4 years	2006	Public banks	1,200	PSM	Ahmed et al. (2010)

¹ Seven basic items — enriched corn flour, rice, beans, dried pasta soup, biscuits, fortified milk powder, and vegetable oil—and two to four supplementary items (including canned sardines, canned tuna fish, dried lentils, chocolate, breakfast cereal, or corn starch; ²3.5 kg of grain (primarily maize in the first transfer period and sorghum in the second), 0.72 kg of pulses (cowpeas, red beans, or lentils), 0.14 kg of vegetable oil, and 0.035 kg of salt; ³ 3 kgs of cereals, plus pulses and oils; ⁴ Food basket of approximately 1,200 calories, includes corn soy blend (“CSB” – highly fortified with iron among other nutrients), vitamin-A fortified oil, and sugar; ⁵ The food basket was valued according to regional market prices at USD 40 and included rice (24 kilograms), vegetable oil (4 liters), lentils (8kilograms), and canned sardines (8 cans of 0.425 kilograms) (voucher: The list of approved foods consists of cereals, tubers, fruits, vegetables, legumes, meats, fish, milk products, and eggs); ⁶ three food fairs, where participants could get palm oil, sugar, cassava flour, beans, rice, vegetable oil, dried fish, salt, potatoes and peanuts; ⁷ For an average household size of seven persons is 50 kg of wheat flour and 5.0 liters of vegetable oil; ⁸10 kg of rice per month; ⁹ 1.4 kg Rice, 1.4 kg Wheat flour, 0.42 kg Pulses, 0.14 kg Oil, 0.14kg Sugar, 0.14 kg Corn soy blend; ¹⁰ up to 20 kilograms (kg) of wheat or 16 kg of rice per month. *CT= conditional transfer. UT = unconditional transfer. PW = public works.

3.2 Impacts

The compilation of evaluation covers a number of dimensions. Table 2 lists 14 of them including their availability across the examined countries. In most cases, cash interventions were conducted as a smaller-scale addition to preexisting large food-based programs or as part of crisis responses. It is somewhat natural, therefore, that the interventions tend to be generally food security-oriented. Indeed, about half of the indicators are food and nutrition-related, while indicators on poverty, income and assets were collected in a more limited number of cases²⁷.

Table 2. Indicators included in the evaluations

	Mexico	Niger	Ethiopia	Uganda	Ecuador	Congo	Yemen	Cambodia	Sri Lanka	Bangladesh
Total Consumption	✓						✓	✓		✓
Food Consumption	✓	✓			✓		✓	✓	✓	✓
Non-food consumption	✓	✓			✓		✓	✓	✓	
Food gap			✓	✓						
Food diversity		✓		✓	✓	✓	✓	✓	✓	
Caloric in-take					✓		✓		✓	✓
Anthropometric measures								✓		
Income			✓					✓		✓
Assets								✓		
Poverty headcount	✓									✓
Labor market participation	✓									
Anemia	✓			✓						
School dropout rates								✓		
Cognitive development				✓						

Importantly, there is a rich literature and debate on the comparative performance of indicators and measurement techniques for food security and nutrition, particularly as they relate to access and utilization of food (Dary and Imhoff-Kunsch 2012; Barrett 2010; Wisemann et al. 2009; Webb et al. 2006). The selected studies show that, in absolute terms and across basically all indicators, cash, food and vouchers are effective in meeting program objectives. They also rejected, in line with Evans and Popova (2014), the anecdote of food being resold on markets²⁸ or cash being spent on non-desirable items, which are confirmed in (box 2).

²⁷ In the case of Niger, Hoddinott et al. (2014) do not report on labour market participation and assets, although their survey includes that information.

²⁸ Importantly, impact evaluations are based on survey data from household interviews and it might be important to complement those findings with market-level checks and appraisals. In general, possible re-sales depend on a range of issues, the quality of food received, the location of the distribution point (e.g., if close to market it may increase the likelihood of transactions), the size of the bags distributed (e.g., a 100 kg bag of maize may be partially resold when provided to people unable to carrying it), and the necessity of liquidity-constrained beneficiaries to meet non-food needs. In general, it is important to understand why possible sales may occur rather than interpret them as a sign of inappropriate provision (Reed and Habicht 1998).

Box 2. Use of cash by beneficiaries

In Mexico, more than half of the cash transfer was spent on food, out of which a quarter was devoted to nutritious food items such as fruits and vegetables. In Niger, cash recipients reported spending 70 percent of the transfer on food items, 10 percent on nonfood items, 9 percent on transfers to the households, saving 7 percent, and 3 percent to pay back loans. In Ecuador, cash beneficiaries used 83 percent of transfer for food expenditures. The remainder was spent on nonfood expenditures (6.3 percent), shared with others outside the household (2.4 percent), and saved for later use (8.3 percent). In Congo, cash households used their transfer to purchase over six different categories of goods, health expenses, school fees and debt reimbursement. In Yemen, cash households report spending 88 percent of their transfer on staple foods. Unlike food households, cash households report spending a portion of their transfers towards repaying debts (5 percent), transportation (2 percent), and near zero on qat (14 out of 10,500 YER). In Uganda, the average cash beneficiary spent 53 percent of the transfer on food (41 percent on staples), while 23 percent was allocated for nonfood goods and 16 percent of the cash was saved.

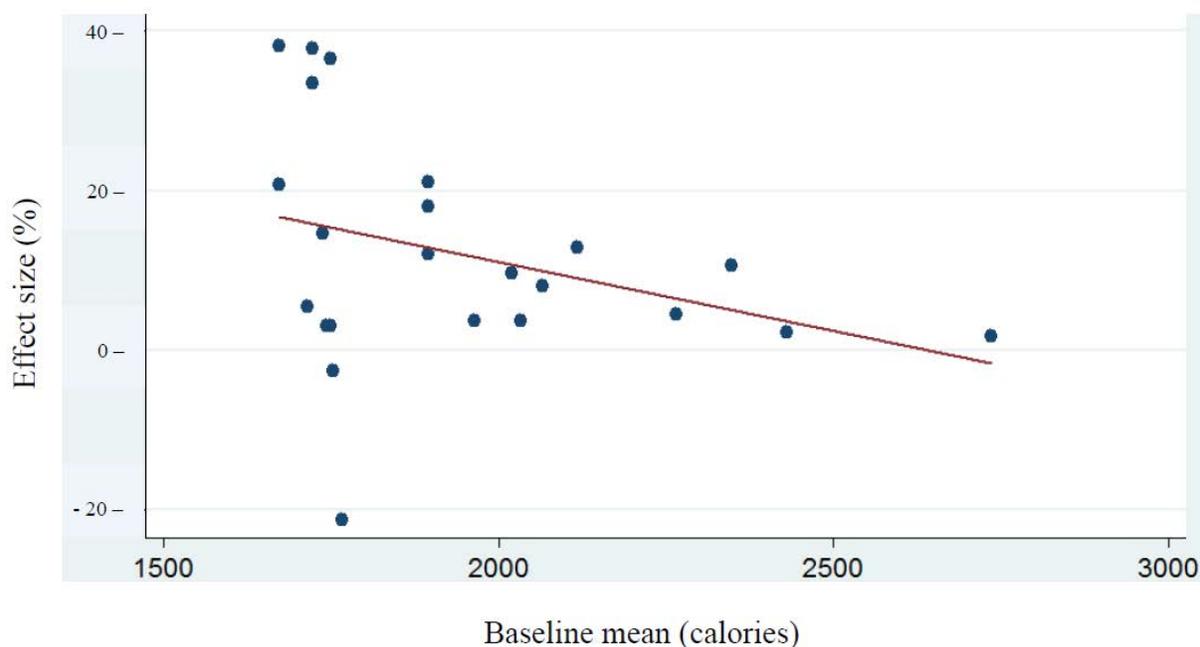
Source: Hidrobo et al. (2014a), Aker (2013), Schwab (2013), Cunha (2014), Hoddinott et al. (2014), Gilligan and Roy (2013)

The evaluations reviewed in this paper vary in terms methodology deployed to estimate impacts and in ways results were presented. For some countries, ‘true’ control groups were available (i.e. people of similar characteristics receiving no transfer). These evaluations report on the effectiveness of each arm separately, as well as on the relative effectiveness of each arm. In other cases, no true control group was available and evaluations examined solely the relative effectiveness. In order to compare the magnitude of impacts in different contexts, this paper only considered relative effectiveness. In particular, relative impacts were calculated in two ways: first, as difference in impacts between food and cash transfers in terms of percentage points. This was the case where results are reported in different measures, hence requiring standardization. For example, food consumption could be expressed in terms of expenditures in USD or Rupees. In such case, we first observed the percentage change against the baseline for food and cash-receiving households (e.g., +16 percent for food and +12 percent for cash), and then examined the difference (in percentage points) between those percentage changes (e.g., food being 4 percentage points more effective than cash). In other cases, the standardization may not be required since impacts were expressed using common measures. Here we considered changes in indicators’ values, which was especially the case for food diversity indicators (as later described in box 3).

Before examining the emerging results, it is important to provide a general framework to interpret them. In this vein, a key issue to consider is the ‘initial conditions’ of beneficiaries in relation to their state in food security (which is the core focus of most of the evaluations). This is related to some of the concepts discussed in section 2.2, such as the marginal propensity to consume food, for example. In practice, this means that the starting point of beneficiaries in terms of, say, calories availability, may likely affect the size of impacts: where the initial level of calories is very low, we may probably observe an impact of larger size compared to the effects on households whose initial level of calories is higher. Hidrobo et al. (2014b) present evidence on this relationship: based on a meta-analysis of

evaluations of transfer programs, the authors show that impacts, or effect size, tend to decrease by about 2 percent every increase in 100 kilocalories²⁹ (figure 4).

Figure 4. Relationship between impact of transfers (effect size) and initial conditions (calories)



Source: Hidrobo et al. (2014b)

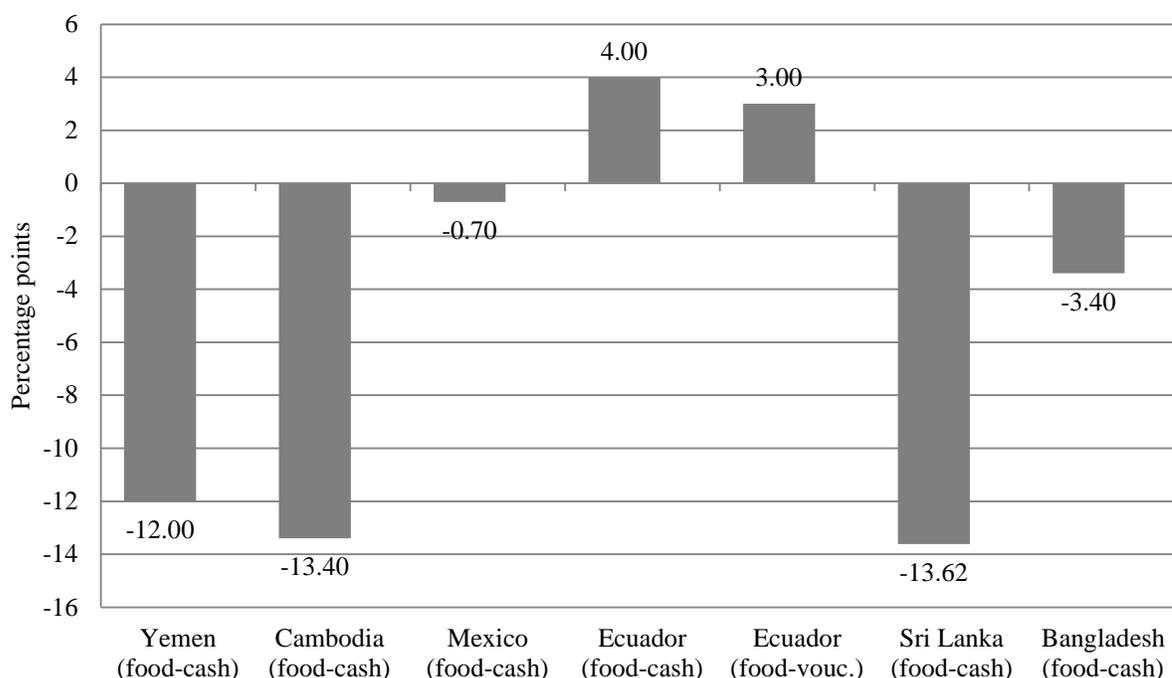
There are important implications stemming from such relationship. As mentioned, it greatly helps to interpreting results. In the case of cross-country comparisons, for example, the differences in impacts between cash and food transfers could depend on where beneficiaries are along the red line in figure 4. Hence this suggests that transfers' effectiveness also depends on the profile of targeted beneficiaries and appropriate objective-setting. In other words, program objectives should be aligned with beneficiaries' profiles: for example, the provision of food transfers with high-caloric content (e.g., grains) to poor populations but with high calories at baseline has raised concern for health risks (e.g., overweight), like observed in Egypt and Mexico (Leroy et al. 2010; Asfaw 2006). Unfortunately, similar analysis was not conducted for other food security dimensions, such as dietary diversity. However, based on the emerging results and basic food policy theory, one could hypothesize that the elasticity of dietary diversity is higher at lower levels of diversification; yet such relationship may well be non-linear and difficult to predict, given the interplay of program design issues (e.g., distribution frequency) and consumption behaviors of liquidity-constrained households (Barrett 2007). These considerations also implicitly underscore the importance of supply-side issues discussed in section 2.3.

²⁹ The effect, however, is not significant at the 5 percent level, which may be the result of the small sample size (23 observations) limiting the statistical power of the analysis. Hidrobo et al. (2014b) also benchmark the effect size of transfers in for different food security indicators: for example, transfers trigger an average 16 percent increase in food consumption and a 13 percent increase in calorie acquisition (the impact is significant at the 1 percent level for both indicators). On the latter, disaggregated analysis by food group shows a 9 percent increase of calories from grains and a 13 percent increase for calories from fruits and vegetables.

Indeed, while transfers operate on the demand-side of the food security equation³⁰ (in this case, beneficiaries' access to food), it is key that local markets are able to supply foods of adequate quality and quantity. This introduces an additional element for interpreting results: even when programs target people with similar profiles, differences in impacts could be explained in terms of functionality of local markets – that is, if, what and at what price beneficiaries are able to purchase commodities³¹.

Against this backdrop, one of the most widely used indicators in the examined compilation of evaluations is food consumption. Adopted in 7 out of the 10 countries, food consumption was measured in terms of expenditures or value of food consumed at household level³². Figure 5 shows the difference in impacts on food consumption in Yemen, Cambodia, Mexico, Ecuador, Sri Lanka and Bangladesh. Differences are expressed in percentage points (namely, average impacts among food-receiving households minus those among cash-recipients), hence with negative values indicating the cases for which cash is more effective, a vice versa.

Figure 5. Difference in impact between food and cash transfers on food consumption (food impact minus cash impact, percentage points)



The figure shows that only in Ecuador impacts of food consumption were larger for food-receiving beneficiaries, including relative to both cash and voucher transfers. In Yemen, Cambodia, Mexico, Sri

³⁰ For a recent discussion on constructing food demand functions, see Attanasio et al. (2012).

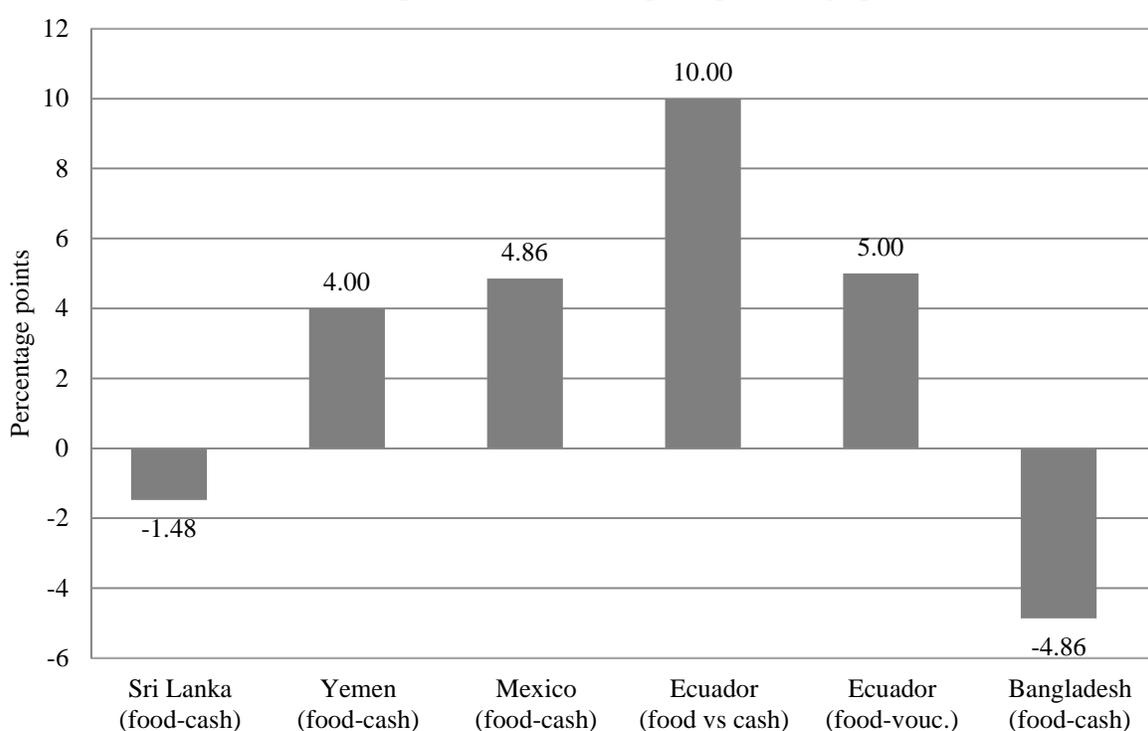
³¹ This goes back to the earlier discussion (section 2) of analyzing markets as a key issue for determining the ex-ante appropriateness of transfers: where they don't work, in-kind food might be more appropriate than cash, and viceversa.

³² Food consumption can be measured in terms of consumption or expenditures. Food expenditures are the amount of money spent on food in any given time period, while food consumption is the value of food actually consumed during the given time period. Food consumption/expenditures can be constructed in reference to daily, monthly or yearly values.

Lanka and Bangladesh the impacts on food consumption are higher for cash than for food-beneficiary households³³. In the case of Bangladesh, one possible explanation is that the size of the cash transfer was 70 percent higher than the food transfer³⁴. In three cases – Yemen, Cambodia, and Sri Lanka – the difference is double digit. However, the difference in impacts is statistically significant only for Yemen and Sri Lanka.

Measures for quantifying calorie in-take may present additional information regarding the difference in impacts on food availability. Figure 6 sets out the impacts of food and cash transfers for programs in Sri Lanka, Yemen, Mexico, Ecuador and Bangladesh. In contrast with measures of food consumption, food transfers have a larger impact on calorie in-take relative to cash in most contexts.

Figure 6. Difference in impact between food and cash transfers on per capita calorie in-take (food impact minus cash impact, percentage points)



In Ecuador, the larger effect on calories from food was mainly due to larger increases in consumption of cereals (which represented 41 percent of households' caloric intake). In Yemen, higher caloric consumption from food stemmed from the basket composition, including wheat and oil. In the case of Sri Lanka, the impact is negative (meaning cash having a larger impact than food), but not significant. The study also showed that calories availability fell in some region. The reason for this spatial difference is that the household baseline survey was conducted the week after Muslim and Hindu

³³ Note that for Mexico, estimates are based on Skoufias et al. (2008) examining the same program and similar data as Cunha (2014). Skoufias et al. show the consumption indicator in percentages, while Cunha in currency terms.

³⁴ Ahmed et al. (2010) address this difference by comparing the change in marginal propensity to consume food, which shows consistent results.

festivities (Sharma 2006). Additionally, the negative effect can be explained by a change in diets, i.e. a shift in consumption from highly caloric foods to diets of higher-quality (e.g., eggs, meat). In the case of Mexico, the result is consistent with another study by Leroy et al. (2010) showing that, compared to the cash group, the effect in the PAL food basket was higher for total energy, energy from animal-source foods, and energy from cereals and legumes. According to the authors, this was most likely due to the fact that the food basket contained relatively large quantities of grains and legumes³⁵.

Hitherto we have examined food consumption and calorie availability indicators, which provide insights on the quantity of food. In order to explore the quality of consumption patterns and diets, evaluations have analyzed dietary diversity indicators. Three include the Dietary Diversity Index (DDI), Food Consumption Scores (FCS) and Household Dietary Diversity Score (HDDS) (see box 3 for definitions and table 3 for level of significance in differences).

Box 3. Indicators for dietary diversity

The Dietary Diversity Index (DDI) is the number of different foods or food groups consumed over a given reference period. The DDI correlates well with household dietary quantity and quality. Increases in dietary diversity are associated with increases in consumption, caloric availability, and calories from staples and non-staples. It provides a useful summary point of comparison within a measured sample.

The Food Consumption Scores (FCS) index predicts the quantitative dimension of household food security, defined as having adequate food quantity or calorie consumption per capita. The FCS is a frequency-weighted diet diversity score, also referred to as a “food frequency indicator.” The FCS is calculated using the frequency of consumption of 8 food groups consumed by a household during the seven days before the survey ((staples, pulses, vegetables, fruit, meat and fish, milk and dairy, sugar and honey, oils and fats). It is calculated by multiplying the number of days by the food group’s weighted frequencies, and summing across categories to obtain a single proxy indicator. Households are then categorized as having poor to borderline consumption if their FCS score is 35 or less.

The Household Dietary Diversity Score (HDDS) is a proxy indicator of household food access. The score is calculated by summing the number of food groups consumed in the previous seven days from 12 groups. It differs from the DDI in that frequency is measured across standardized food groups instead of individual food items. It differs from FCS in the following ways: The reference period is one day and not seven days; main staples are disaggregated into two groups (cereals, and roots and tubers); the meat, fish, and eggs group is disaggregated into its three subgroups; and there is a group for “other foods,” such as condiments, coffee, or tea. In addition, unlike the FCS, it does not take into account the frequency of food consumption and is not weighted.

Source: Weismann et al. (2009)

³⁵ The study also called for norms regulating food transfer provisions based on micronutrients rather than macronutrient requirements. In particular, Leroy et al. (2010) recommended that in order to avoid overconsumption of energy, “... programs should not be implemented without an effective behavior change communication component... [and] the use of low-fat milk (...) or the use of micronutrient supplements not containing energy, such as micronutrient sprinkles, should be considered as alternatives in this program” (p.616).

Table 3. Relative impacts of food and cash transfers on dietary diversity indicators

Country	DDI	HDDS	FCS
Ecuador (food vs cash)	-0.41	0.11	-0.38
Ecuador (food vs voucher)	-0.91**	0.00	-3.31**
Niger (Food vs cash, October)	0.38**		3.53***
Niger (Food vs cash, July)	0.56***		3.91***
Yemen (food vs cash)	-0.63**	-0.41***	-0.45*
Congo (voucher vs cash)		3.23	
Cambodia (food vs cash)			0.52

* Significant at 90 percent level; ** Significant at 95 percent level; *** significant at 99 percent level

Figure 7 shows the relative difference for FCS in Cambodia, Niger (July and October), Ecuador and Yemen. Results are mixed, with cash being more effective in three cases (Ecuador’s cash and vouchers arms and Yemen), and food in the other three (Cambodia and Niger, both seasons). In Ecuador, the larger increase in dietary diversity for vouchers was mainly due to larger increases in the number of days consuming vegetables, eggs, milk and dairy. Similar effects of transfers were noted for the DDI, which included the same sample of countries except Cambodia (figure 8). One reason that the cash recipients had less diverse diets lies in their choice of using a significant proportion of their transfers to buy grains in bulk, the least expensive form of calories present on local markets. As it was pointed out by Hoddinott et al. (2014), such purchasing strategy was a reflection of uncertainty regarding future food prices (as well as being easier at harvest).

Figure 7. Difference in impact between food and cash transfers on Food Consumption Scores (food impact minus cash impact, indicator values)

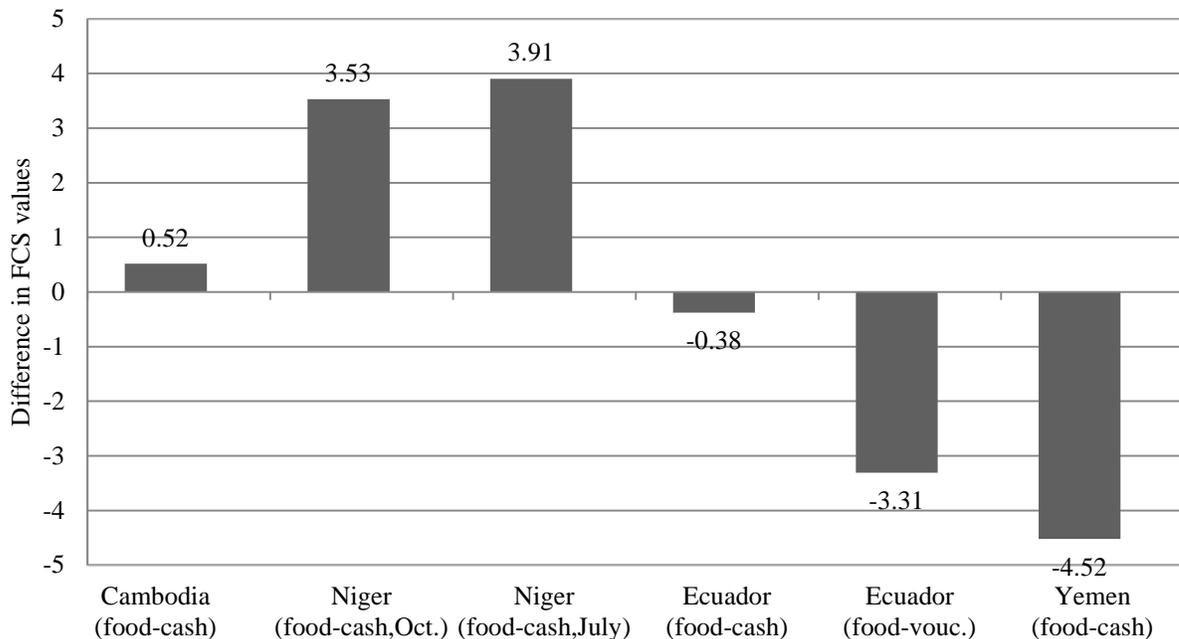
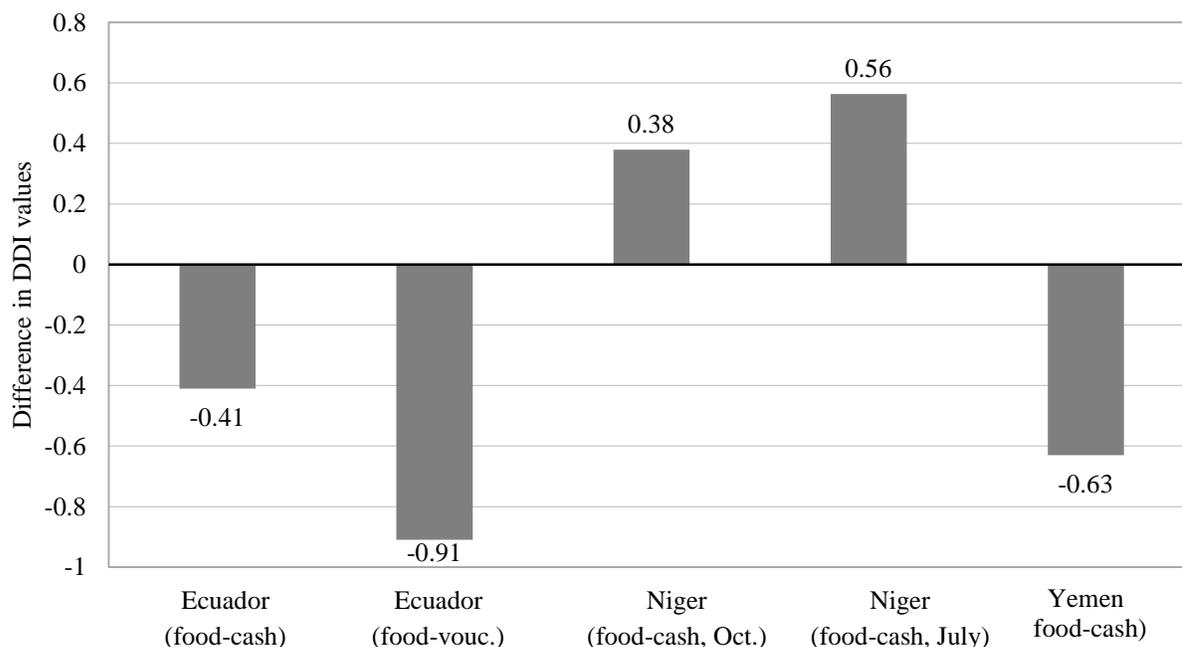


Figure 8. Difference in impact between food and cash transfers on the Dietary Diversity Index (food impact minus cash impact, indicator values)



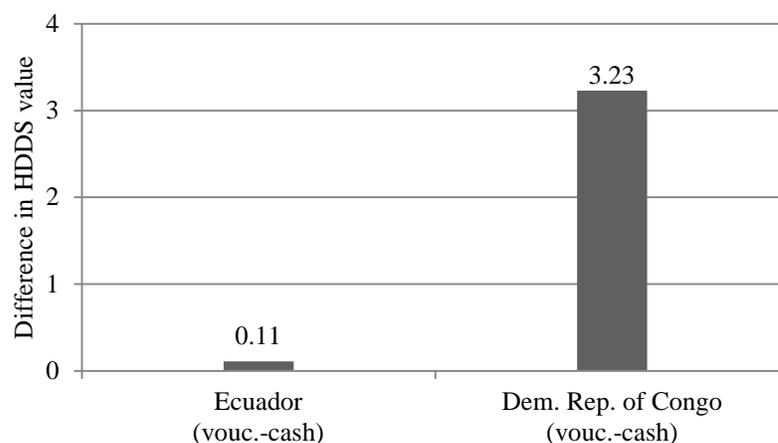
The two studies in the Democratic Republic of Congo and Ecuador also allowed for comparing the HDDS index among cash and voucher-receiving arms (figure 9). In the former country, vouchers had a large impact on dietary diversity of households (by 3.36 food groups), a 15 percent increase in diversity. Despite the comparatively lower impact of cash transfers, the difference in impact between cash transfers and vouchers is not significant. In Ecuador, instead, the impact among cash and voucher recipients is considerably lower and, here too, not significant. Bearing in mind the difference in the size and frequency of the voucher transfers³⁶, in Ecuador cash-receiving households not only invested large share of the transfer for food (i.e., 83 percent, see box 2), but the money was used to purchase various foods in the following 7 groups: such as roots and tubers, vegetables, meat and poultry, eggs, fish and seafood, pulses and legumes, and milk and dairy. Yet vouchers lead to increases in 9 out of 12 food groups and, compared to cash, it sparked an increase in the frequency of consumption of fish and seafood, and pulses and legumes. Instead, in the Democratic Republic of Congo vouchers were completely used for a variety of food purchases, while cash transfers were more likely to be used for alternative purposes, such as for paying for school fees or being saved³⁷. Moreover, following the previous discussion on initial conditions (figure 4), the average household in the Ecuador program was

³⁶ In the Democratic Republic of Congo, the size of the voucher transfer in the first distribution was over twice that of Ecuador (USD 90 versus USD 40), while the subsequent two installments were half the Ecuador's value (USD 20 versus USD 40). The Ecuador project envisaged 6 monthly distributions, while the ones in the Democratic Republic of Congo only three over 7 months (see table 2). Also, in the latter vouchers could be freely spent on foods available, while in Ecuador there were caps on spending by food groups (e.g. out of USD 40, a maximum of USD 10 could be spent on cereals).

³⁷ In the first of three distribution cycles, vouchers could be used for food and non-food items, while in the latter two for food only. Under the project, vouchers could be freely spent on all foods available in the fairs, while in Ecuador there were caps on spending by food groups (e.g. out of USD 40, a maximum of USD 10 could be spent on cereals).

poor but consumed 9.16 out of the 12 food groups at baseline; instead, in the Democratic Republic of Congo households consumed only 2.9 foods out of those 12 groups at baseline; this may indicate a greater marginal propensity to diversify food out of the voucher higher than beneficiaries in Ecuador who started at a higher diversity level.

Figure 9. Difference in impact between vouchers and cash transfers on Household Dietary Diversity Scores (vouchers impact minus cash impact, indicator values)



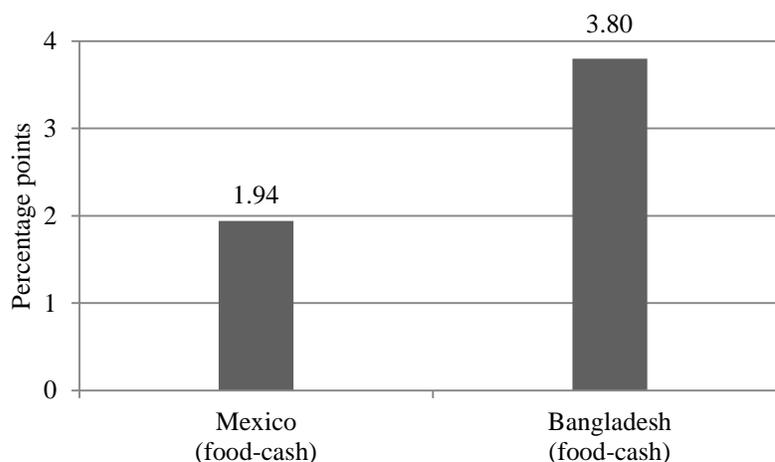
Another reviewed indicator is the food gap, which measures months of food shortage by households. In the case of Ethiopia, a two year exposure to food rations led to less months of food shortage compared to household participating in cash transfers (public works). In Uganda, among cash and food treated household there was a reduction of 0.6 and 0.4 months of food insecurity respectively. However, the difference is not statistically significant.

Some countries present data on relative impacts of transfers on short and longer-term nutrition-related dimensions. In Mexico, both food and cash transfers increased the in-take of micronutrient (iron) amongst children by 1.61 mg and 1.10 mg, respectively. However, the difference is not statistically significant. The same pattern holds for increases in zinc and vitamin C. Similarly, anemia prevalence was reduced by 2 percent in food-receiving households and 4 percent in the cash arm. In Uganda, cash transfers reduced anemia prevalence by about 10 percentage points for young children (at 10 percent confidence level). In this context, food transfers had no significant impact. Finally, in Cambodia neither treatment modality in the food-cash scholarship program had significant impacts on anthropometric indicators, possibly because of the small transfer size and short exposure to treatment. In some context, cash and food transfers had an income multiplier effect on beneficiary households. In Ethiopia, PSNP food beneficiaries had a positive and significant income growth of 59.7 percent (at 1 percent confidence level). In Cambodia, treatment households (both food and cash recipients) increased their net disposable liquidity by about USD54 over the course of the year. In Bangladesh, both food and cash transfers increased income significantly: the cash-based RMP increased beneficiary income by 31.4 percent and the food-based IGVD by 27.8 percent.

Both food and cash transfers reduced poverty in Mexico and Bangladesh (figure 10). Skoufias et al. (2008) showed the impact of cash and food transfers on the headcount ratio as measured by the food

poverty line. Similarly, Ahmed et al. (2009) estimated the impacts of cash transfers from the RMP program and food transfers from the IGVGD on the extreme poverty headcount ratio.

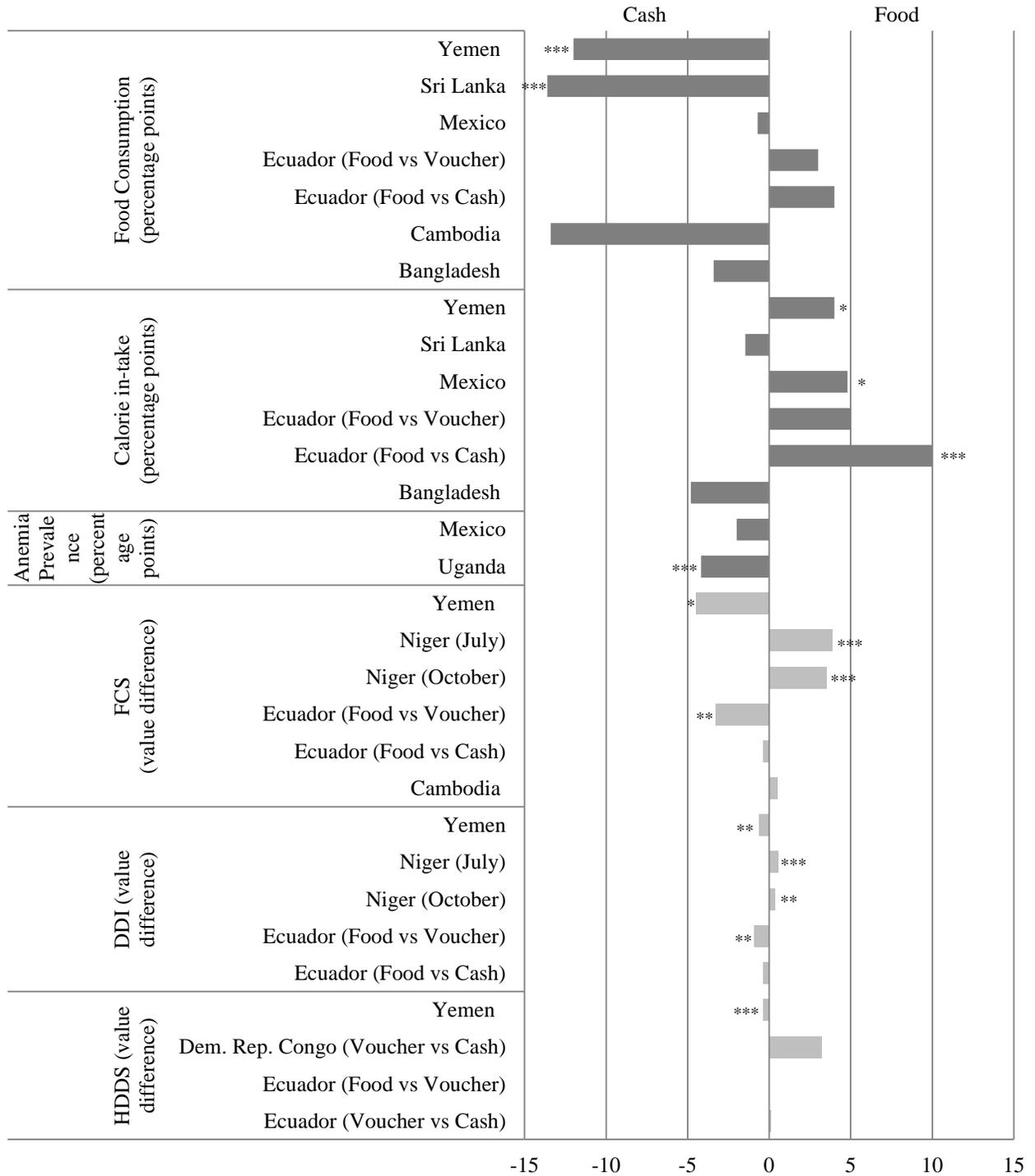
Figure 10. Difference in impact between food and cash transfers on poverty (food impact minus cash impact, percentage points)



In both instances, food transfers had larger impacts, with a difference on 3.8 and 1.94 percentage points in Bangladesh and Mexico, respectively. The overall impacts of transfers on the poverty gap are larger. In the context of Mexico, food transfers decreased the poverty gap by 22.3 percent and cash transfers by 18.9 percent; moreover, the severity of poverty decreased by 27.8 percent and 22.97 percent, respectively. Skoufias et al. (2008) argue that the PAL transfer – equivalent to 11.5 percent of pre-transfer level household consumption – may have generated a multiplier effect that led to a reduction by 13 to 15 percent in the headcount poverty rate in two years. In the case of labor market participation, both food and cash transfer had a negative impact in agricultural activities, but a positive one in non-agricultural ones. Cash-receiving households increased non-agricultural activities by 7.1 percent and food receiving households by 5.8 percent.

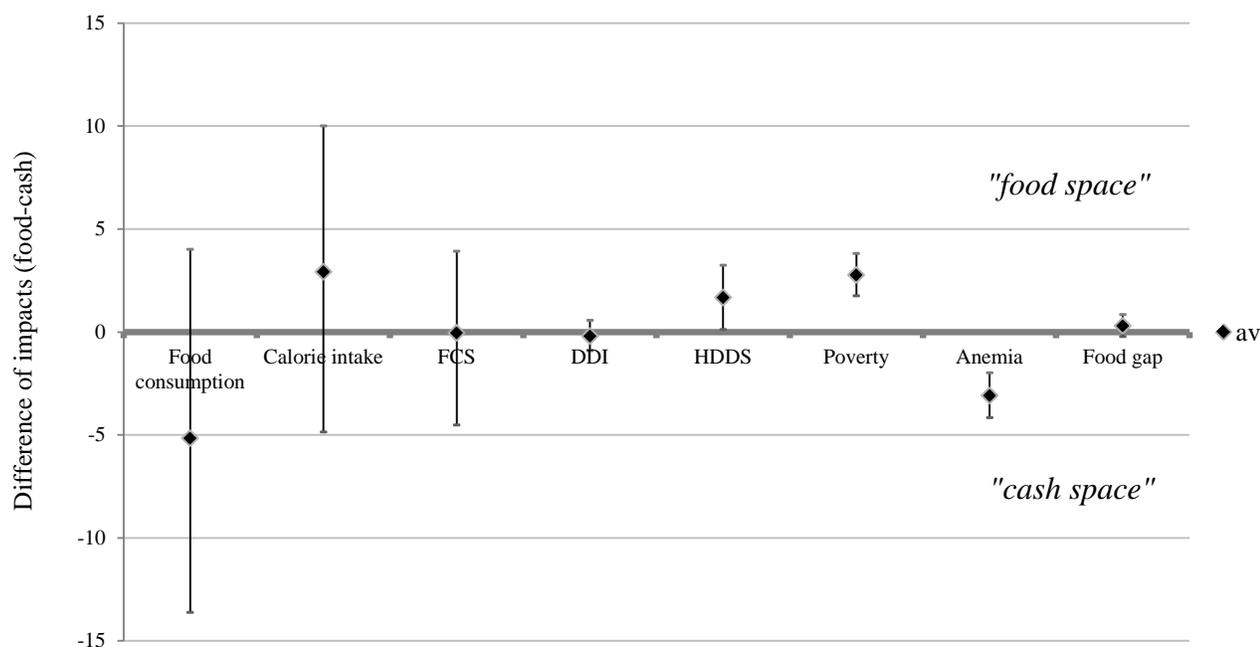
Based on the results presented in this section, figure 11 summarizes impacts by transfers and indicators, including dimensions for which the difference was statistically significant in at least one country. On average, impacts tend to be balanced across modalities, with no systematic dominance of one transfer over the other (see figure 12 for summary of ranges and averages of differences in impacts).

Figure 11. Summary of differences in impacts by transfer modality and indicator



Note: bars in dark-gray refer to difference in percentage points, light-gray bars refer to changes in specific indicator values. Level of significance in differences is indicated by the asterisks (* at 90 percent level, ** at 95 percent level, *** at 99 percent level).

Figure 12. Summary of differences in impacts by indicator, ranges and averages



3.3 Costs

Most of the examined evaluations also conducted a cost analysis, including Mexico, Niger, Ecuador, Democratic Republic of Congo, Yemen and Bangladesh. In Mexico, logistics costs of moving commodities from warehouses to villages have been estimated to be about 30 pesos per box: this is equivalent to nearly 20 percent of the wholesale cost of the transfer (which is 150 pesos, or approximately 15 U.S. dollars). Using delivery cost for Mexico's *Oportunidades* program (which deploys similar delivery mechanisms as PAL), Cuncha (2012) estimated that it costs 2.4 percent of the transfer amount in order to deliver cash to recipients. From this generic estimate, food is roughly seven times more costly than cash transfer. Table 4 sets out the cost estimates emerging from the studies.

Table 4. Costs (USD) per transfer and transfer ratios

Country	Food	Cash	Vouchers	Food-cash ratio	Food-vouchers ratio	Vouchers-cash ratio
Dem. Rep. of Congo	-	11.34	14.35	-	-	1.2
Ecuador	11.46	2.99	3.27	3.8	3.5	1.09
Mexico	2.29	0.31	-	7.3	-	-
Niger	10.27	2.89	-	3.5	-	-
Uganda	6.41	3.24	-	1.9	-	-
Yemen	9.84	2.65	-	3.7	-	-

Source: Cunha (2014), Margolies and Hoddinott (2014), Aker (2013)

Some of the initial cost estimates and methods presented for Ecuador, Niger, Uganda and Yemen were updated in the preliminary analysis by Margolies and Hoddinott (2014). Using Activity Based Costing

– Ingredients method³⁸ (ABC-I), the authors show that the cost for single cash transfer ranged between USD 2.65 to USD 3.24; the cost per food transfer, instead, varied between USD 6.41 to USD 11.46, with food-cash cost ratios ranging from 1.9 to 3.8. These estimates include modality-specific costs accruing to food, cash and vouchers, and not the costs that are common across all transfer modalities (e.g., assessments, targeting, etc.). Note that figures do not include the value of the transfers, which we’ll discuss later in this section.

There are various reasons for those cost differences. As noted by Margolies and Hoddinott (2014), the largest cost item for cash transfers is their payments, with transaction fees of about 3 percent in Ecuador, Uganda and Yemen, while these increased to 6 percent in Niger. In the case of food transfers, their major cost stems, not surprisingly, from logistics activities (storage, handling, transport, distribution and insurance, etc.)³⁹.

In Niger, food was 3.5 times more expensive to implement than cash. However, the estimate excluded costs that were common to both the food and cash payments, such as expenses associated with implementing the public works, identifying the beneficiaries, program sensitization, identification of implementing partners and contract negotiations with partners selected to implement this intervention. Some cash-specific costs were not considered, like fixed costs associated with setting up the cash delivery system (e.g., costs associated with computer programs needed to dispense payments through mobile ATMs).

Interestingly, Margolies and Hoddinott (2014) noted that food logistics costs also hinge on location of food distribution points – that is, higher costs can be in part explained by delivering food directly to beneficiaries’ communities, such as for security reasons in Yemen; yet cash beneficiaries in Yemen had to collect the transfer at post offices, which meant higher transaction costs (table 5). In Ecuador, food distribution sites were located farther than cash and voucher payment points, hence increasing private costs (time and money); in Uganda and Niger, there appears to be no difference in transaction costs since both transfers were distributed at village-level. In general, there appears to be a trade-off between costs for the implementer and those for beneficiaries: as payment or distribution points get closer to beneficiaries, costs for the implementer get higher, while the transaction costs for beneficiaries dwindle. In other words, programs that seem less expensive could be so because the cost of obtaining benefits had been shifted from the implementer to the beneficiary.

³⁸ The method combines activity-based accounting methods with the ‘ingredients’ method, which calculates program costs from inputs, input quantities, and input unit costs. In particular, since all programs were implemented by the WFP, for each modality the authors considered (a) ‘cost of WFP staff time’, and (b) ‘materials, services, transport and other non-WFP staff costs’. The ABC-I was not applied to Niger, where the project’s cost structure didn’t allow for separating staff and other cost items. In table 5, estimates for Niger are based on costing broad project items.

³⁹ In Ecuador, taking bulk items and repackaging them for distribution accounted for approximately 30 percent of the cost of distributing the food ration (Hidrobo et al. 2014).

Table 5. Beneficiary transaction costs for obtaining transfers (time and monetary)

Cost	Ecuador			Niger		Uganda		Yemen	
	Food	Cash	Vouchers	Food	Cash	Food	Cash	Food	Cash
Time for travel and waiting (hours)	2.2	1.2	1.8	1	1	2.6	2.6	1.9	2.7
Transport costs (% of transfer value)	5.3	3.7	4.1	0.8	0	0	0	2	8.6

Source: Margolies and Hoddinott (2014)

In Bangladesh, Ahmed et al. (2010) considered the costs for delivery of cash and food transfers. For cash, only the bank transaction cost was considered, hence generating a costs for cash transfers very low (0.00115 per taka delivered). In the case of food, the analysis considered procurement costs as well as costs incurred at ports, losses, internal transport, storage and handling, for a total cost of 1.2 taka per 1 taka transferred. In the Democratic Republic of Congo, vouchers were 1.2 times more expensive than cash transfers. Note that the program is implemented in a humanitarian context, which tends to alter cost structures. The cost breakdown shows that staff time represents the largest percentage of costs for both interventions, followed by transport and coupon printing (for the voucher intervention) and account-opening fees (for the cash intervention). Yet since the account-opening fees are a one-time, fixed cost, if the program were to continue the cost for cash transfer would have been USD 6-8 less expensive than vouchers (Aker 2013). In the case of vouchers in Ecuador, the cost of physical materials associated with printing was trivial. However, significant staff costs were associated with supermarket selection and contracting, as well as with financial reconciliation and payments. These staff costs account for nearly 90 percent of the cost of implementing the voucher component. Yet the costs for cash and vouchers were very similar, with a vouchers-cash ratio of about 1.1⁴⁰. Few studies have explicitly considered comparative costs *and* impacts (or cost-effectiveness) of a program, and quantifying the possible trade-offs between the two (Das et al. 2005; Rogers and Coates 2002). In Bangladesh, Ahmed et al. (2010) estimated that the cost to increase 100kcal to beneficiaries is roughly similar for cash and food transfers (USD3.28 and USD3.21 respectively), while the cost for increasing household income by 100 taka is lower for food (USD0.68) than cash transfers (USD1.27). In Ecuador, it was estimated that, on average, food transfers cost about twice as cash transfers to increase a given indicator by 15 percent (food-cash ratio was 2.16) (Hidrobo et al. 2014a). Table 6 illustrates results for Ecuador more in detail.

Table 6. Cost (USD) of increasing a given indicator by 15 percent in Ecuador

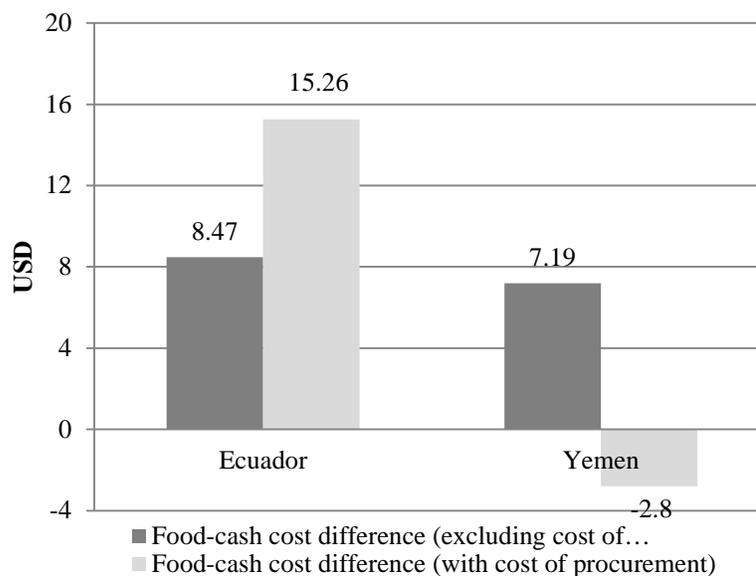
Indicator	Food	Cash	Voucher
Consumption	10.78	3.79	3.81
Calories	10.78	7.58	4.50
Food consumption score	17.25	4.13	3.09
Dietary diversity index	15.68	3.25	2.91
Household dietary diversity score	28.75	11.36	8.25

Source: Hidrobo et al. (2014a)

⁴⁰ Cash involved similar set-up costs for selecting and contracting banks.

As mentioned, the estimates hitherto discussed don't include transfer values. This raises the question of how to measure the value of food, whether at local market prices or procurement costs, with the latter being a more realistic cost (including for the different commodities that compose the basket). For two cases, Ecuador and Yemen, Margolies and Hoddinott (2014) estimated the full cost of cash and food transfers, with costs for food taken at procurement level. In Ecuador, the procurement costs for food were higher than their local market value: indeed, accounting for the local procurement of most of canned fish, rice, lentils and oil, and including the international procurement of some oil and lentils, it turns out that it cost USD 46.76 to provide a transfer that is locally-valued at USD 40. This led to a total cost of providing food of USD 58.25 (USD 46.76 plus 11.46 as reported in table 5), which even exacerbated the cost differences reported in table 5 – that is, total cost for cash is USD 42.99 while for vouchers is USD 43.27 (the value of both voucher and cash transfer is, by definition, USD 40). Indeed, the difference between food and cash is now USD 15.26 per transfer compared to USD 8.47 (i.e., USD 11.46 minus USD 2.99) when transfer values were excluded. In Yemen, instead, the market conditions were such that it was possible to procure for USD 39 a food basket locally valued at USD 49. In this case, the cost difference between food and cash cost even reversed, with cash being USD 2.8 more expensive than food (figure 13).

Figure 13. Difference in total costs (USD) between transfer modalities, with and without procurement (food minus cash costs)



Source: Margolies and Hoddinott (2014)

In general, cost analysis is a critical area that, compared to the standards used to gauge impacts, may require further analytical work. Yet some of the results and approaches here discussed are based on promising practices, including a fuller account of specific implementation practices (e.g., location of distribution sites), private transaction costs faced by beneficiaries, and the use of procurement-level prices for food operations. On the latter, estimates show that economies of scale in procurement can

indeed make a difference in determining program efficiency; but these don't happen automatically and may likely occur in contexts of large purchases in relatively small markets, like in the context of Yemen.

4. Discussion

The evaluations reviewed in the previous section prompt a key question: are those studies helping to advance the debate meaningfully? Yes, definitely so, including by providing credible evidence, fresh perspectives and gearing the discussion toward results-oriented perspectives. In line with Hoddinott (2013, p.30), “policy and interventions design discussion need to shift from their current ideological and political focus to one that emphasizes greater precision in interventions objectives, more nuanced understanding of context, and greater emphasis on costing”. The evaluations examined in this paper are not only providing solid evidence based on counterfactuals, but they are also offering a platform for discussing other decision-making issues in social protection.

The reviewed evidence suggests that the effectiveness of cash and food seems, on balance, similar in attaining the intended objectives. In most cases, differences in impacts were not statistically significant. When significant, there is a mild tendency of cash transfers to be more effective than food in enhancing food consumption, while food seems to outperform cash in increasing household caloric intake. Evidence on dietary diversity is more mixed. Such results can be attributed to issues such as beneficiaries' profiles (e.g., their marginal propensity to consume food, or their 'starting point' in terms of food security status), the ability of local markets to provide affordable commodities in adequate quantities and quality, and design parameters. Indeed, practical features can shape impact pathways in direct ways, such as when defining the specific nutritional and monetary value of food baskets, or more indirectly. The latter may operate through, for example, saved waiting time due to faster delivery which could be re-invested in other food security-related activities (Aker et al. 2013); in other cases, the frequency and duration of transfers also matter, e.g., in the Sri Lanka people receiving cash temporarily seemed to use it differently (for higher-quality foods) than if received more regularly; perceived risks also matter in influencing consumption behaviors (e.g., price-related risks in the context of Niger). Transfer performance seems ultimately, and largely, a function of those direct and indirect factors, instead of a-priori superiority of one modality over the other.

In terms of comparability, it should be noted that transfer comparisons were possible in contexts with some basic level of functionality in implementation conditions (e.g., in markets, etc.). This somewhat obscures an important feature of food transfers, which centers on their ability to operate in more extreme circumstances (e.g., absence of markets, etc.). This was the case, for example, in Mexico where, with the exception of cash provided for the discussed pilot, the PAL program was implemented in remote areas not being reached by national cash-based programs.

The paper also shows that results on effectiveness (impacts) seem more robust than those on efficiency. The available studies show that cash transfers are between about 2 to 7 times more efficient than food. While it is likely that cash and vouchers would be, *ceteris paribus*, less costly than food, conclusions should be drawn cautiously. Some studies have focused on narrow distribution costs, while others, such as Margolies and Hoddinott (2014), present a more comprehensive and nuanced approach. In this

vein, it'd be important that cost calculations are based on a more detailed understanding of supply chains and agricultural markets. Indeed, implementation models can vary considerably pending on the specific approaches and actors involved at different points. In the case of school feeding, for instance, Gelli and Suwa (2014) noted that "... different approaches can even co-exist within the same country, where, for instance, programme implementation is owned by decentralised institutions (e.g. individual states in Brazil or India), or where agencies (...) are complementing the national programmes (e.g. Ghana and Kenya), [or models] linking the provision of goods and services for school feeding to smallholder farmers and the community". Those nuances need to be taken into account for credible cost analyses. Following Gelli et al. (2012), "... a holistic, system wide analysis of the goods, funds and information flows between the involved stakeholders and helps to identify the opportunities to achieve cost-effective and sustainable programs". More applied research is also required to understand cost structures over time, including set-up and variable costs (Caldes et al. 2006).

Importantly, food security is a key policy priority in many developing countries and the evidence presented in this paper is generally geared, because of program objectives and rationale, toward that purpose. However, more research is required to understand the comparative performance of transfer modalities on other dimensions, especially human capital (particularly health, education and nutrition) as well as poverty. The evidence is also somewhat inconclusive about the sustainability of impacts in the medium and long run: this may call for revisiting some of the discussed findings over longer timeframes. From another standpoint, value-based vouchers as a modality seem underexplored relative to their proven and likely performance⁴¹. Similarly, the combinations of cash and food transfers under the same program framework seem to hold considerable potential: as demonstrated by the PSNP Ethiopia, a rightly-calibrated mix of transfers could help manage implementation and livelihood risks posed by high and volatile food prices, as well as by more predictable but marked seasonal patterns.

Finally, there are caveats and limitations to paper's analysis. Like any evaluation method, experiments have inherent advantages and limitations. While not all the studies were RCTs, findings from those methods are particularly relevant when interpreted in light of the very specific circumstances that define a given setting, hence limiting extrapolations and lessons for different scenarios (external validity). As discussed, the fact that transfer performance hinge upon a range of endogenous and exogenous factors suggest particular attention and prudence when examining results and comparing them across countries. Also, the evidence presented in the paper addresses only one sub-debate of the wider in-kind versus cash dilemma. Indeed, we only examined the specific 'cash versus food' quandary and mostly from a food security perspective. In this regard, there seems to be limited evidence exploring relative performance of alternative modalities beyond food-based interventions, including investments-oriented interventions (e.g., large cash grants versus equivalent in-kind transfers) provided as part of charting broader development pathways.

⁴¹ From an operational perspective, the use of technology in voucher programs – e.g., mobile phones, smart cards, etc. (Omamo et al. 2010) – has made their delivery model similar to that of cash transfers and drastically reduced most of the traditional arguments against such modality (e.g., cumbersome administration).

5. Conclusions

This paper reviewed key issues in the cash versus food debate, including as they relate to political economy, theory, evidence, and practice. In doing so, we benefited from a new generation of impact evaluations deliberately comparing alternative transfer modalities. The analysis and discussion of issues and results prompted a number of reflections. These should be interpreted bearing in mind the caveats of the analysis, including making cautious cross-country comparisons.

Differences in effectiveness of cash and food transfers vary by indicator, although they tend to be moderate on average. There are cases where differences are more marked (e.g., cash being more effective in enhancing food consumption, while food seems to outperform cash in increasing household caloric intake), although in most cases they are not statistically significant. In general, transfers' performance and their difference seem a function of the organic and fluid interactions among a number of factors (e.g., profile and 'initial conditions' of beneficiaries, capacity of local markets, and program objectives and design), instead of inherent merits of one modality over the other.

The paper also discussed the need for more nuanced and rigorous cost-effectiveness analyses. The reviewed studies show that cash transfers tend to be at least twice more efficient than food-based interventions. Yet methods for cost analyses vary in scope, breadth and depth. For example, only in two cases it was possible to examine a fuller measure of program efficiency that account for food procurement costs. Such approach led to widely different results than those based on sole implementation costs. In some cases, efficiency gains may have been achieved by shifting costs to beneficiaries in the form of higher travel costs and waiting time to obtain transfers. It is also likely that both costs and effects are fairly dynamic (e.g., set-up and variable costs), and may follow seasonal patterns, for example. While the challenges in undertaking robust cost analyses should not be underplayed, it is important that future cost-effectiveness studies are more standardized and nuanced.

Conceptually, there will likely be enduring debate around a set of hard-core issues, including the trade-offs between fungibility and promoting a desired outcome, as well as the interpretation of concepts such as 'choice' and 'empowerment'. Also, the political economy of transfer provision would most probably continue to play an important role in influencing what is provided to recipients. Yet those issues should not substitute for the central motive of designing and advocating for assistance based on contextual evidence and performance.

Finally, a dozen evaluations are just a new beginning, not the end of the debate – while promising, they are dwarfed by, for example, the level of empirical attention devoted to programs like SNAP or conditional cash transfers. While the review has shown the growing knowledge on transfer debate, it also exposed a number of information gaps. For instance, about half of the evaluations included short-term interventions; also, evidence largely based on food consumption, calories and dietary diversity data may tell us little, for example, about chronic malnutrition. Yet, the reviewed studies are already succeeding in triggering a more fundamental change, namely to shifting the terms of the debate from one largely shaped by ideology, political economy and 'inference' of evidence to one centering on robust and context-specific results.

References

- Abdulai, A., Barrett, C., and Hazell, P. 2004. "Food Aid for Market Development in Sub-Saharan Africa". IFPRI, *DSGD Discussion Paper 5*. Washington DC.
- ACF (Action Contre la Faim). 2012. "Meta-Evaluations of ACF Fresh Food Voucher Programmes". Paris.
- Adato, M., and Bassett, L.. 2008. "Social Protection and cash Transfers to Strengthen Families Affected by HIV and AIDS". IFPRI, *Research Monograph*. Washington DC.
- Adelman, S., Gilligan, D., and Lehrer, K. 2008a. "The Education and nutrition impacts of alternative food for education programs in Northern Uganda". Paper Presented at the Conference *Social Protection for the Poorest in Africa: Learning from Experience* (8-10 September, Entebbe).
- Adelman, S., Gilligan, D., and K. Lehrer, K. 2008b. "How Effective are Food for Education Programs? A Critical Assessment of the Evidence from Developing Countries". IFPRI, *Food Policy Review 8*. Washington DC.
- Ahmed, A., Quisumbing, A., Nasreen, M., Hoddinott, J. and Bryan, E. 2010. "Comparing Food and Cash Transfers to the Ultra Poor in Bangladesh". IFPRI, *Research Monograph 163*. Washington, DC.
- Ahmed, A., Hoddinott, J., Quabili, W., Roy, S., Shaba, F. and Sraboni, E. 2013. "Which Form of Safety Net Transfer is Most Beneficial? Impacts on Income, Food Security, and Child Nutrition". IFPRI, presentation at Stakeholder Workshop (December 3). Dhaka.
- Aker, J. 2013. "Cash or Coupons? Testing the Impacts of Cash versus Vouchers in the Democratic Republic of Congo." CGD, *Working Paper 320*. Washington DC.
- Aker, J., Boumnijel, R., McClelland, A., and Tierney, N. 2013. "How Do Electronic Transfers Compare? Evidence From a Mobile Money Cash Transfer Experiment in Niger". Tufts University. Boston.
- Alderman H. 2002. "Subsidies as Social Safety Nets: Effectiveness and Challenges." World Bank, *Social Protection Discussion Paper 0224*. Washington DC.
- Alderman, H. and Bundy, D. 2012. "School Feeding Programs and Development: Are We Framing the Question Correctly?" *World Bank Reserach Observer 27(2):204-221*.
- Alderman, H. 2014 "Can Transfer Programs Be Made More Nutrition Sensitive?" IFPRI, *Discussion Paper 1342*. Washington, DC.
- Andrews, C., Lopez, A., and J. Baez. 2014. "What Are We Learning on Safety Net Impacts? Reviewing Evidence from 2010-2013." World Bank. Washington DC.
- Asfaw, A. 2006. "The Role of Food Price Policy in Determining the Prevalence of Obesity: Evidence from Egypt". *Review of Agricultural Economics 28(3): 305-312*.
- Attanasio, O., E. Battistin, and Mesnard, A. 2012. "Food and Cash Transfers: Evidence from Colombia." *The Economic Journal 122(559): 92-124*.
- Baird, S., C. McIntosh, and Özler, B. 2011. "Cash or Condition? Evidence from a Cash Transfer Experiment." *Quarterly Journal of Economics 126(4): 1709-1753*.

- Baird, S., Ferreira, F. H., Ozler, B. and Woolcock, M. 2013. "Relative Effectiveness of Conditional and Unconditional Cash Transfers for Schooling Outcomes in Developing Countries: A Systematic Review". Campbell Systematic Reviews.
- Barham, T., and Maluccio J. 2009. "Eradicating Diseases: The Effect of Conditional Cash Transfers on Vaccination Coverage in Rural Nicaragua." *Journal of Health Economics* 28(3): 611-621.
- Barker, M., D. Filmer, and Rigolini, J. 2014. "Evaluating Food versus Cash Assistance in Rural Cambodia." World Bank. Washington, DC.
- Barrett, C. 2013. "*Food Security and Sociopolitical Stability*". Oxford University Press. New York.
- Barrett, C. 2010. "Measuring Food Security". *Science* 327(5967): 825-828.
- Barrett, C. 2007. "Displaced Distortions: Financial Market Failures and Seemingly Inefficient Resource Allocation in Low-Income Rural Communities". In Bulte, E., and Ruben, R. (eds.), *Development Economics Between Markets and Institutions: Incentives for Growth, Food Security and Sustainable Use of the Environment*. Academic Publishers.
- Barrett, C. 2002. "Food Security and Food Assistance Programs." In Gardner B. and G. Rausser (eds.) *Handbook of Agricultural Economics*. Elsevier. Amsterdam.
- Barrett, C., Bell, R., Lentz, E., and Maxwell, D. 2009. "Market Information and Food Insecurity Response Analysis". *Food Security* 1(2): 151-168.
- Barrett, C., and Maxwell, D. 2006. "Towards a Global Food Aid Compact." *Food Policy* 31(2): 105-118.
- Barrett, C., and Maxwell, D. 2005. "*Food Aid After Fifty Years: Recasting Its Role*". Routledge. New York.
- Barrett, C., A. Binder, and Steets, J. 2012. "*Uniting on Food Assistance: The Case for Transatlantic Cooperation*". Routledge. London.
- Basu, K. 1996. "Relief Programs: When It May Be Better to Give Food Instead of Cash". *World Development* 24(1): 91-96.
- Bageant, E., Barrett, C., and Lentz, E. 2010. "Food Aid and Agricultural Cargo Preference". *Applied Economic Perspectives and Policy* 32(4): 624-641.
- Blackorby, C., and Donaldson, D. 1988. "Cash versus kind, self-selection, and efficient transfers." *American Economic Review* 78(4): 691-700.
- Blattman, C. 2014. "Let Them Eat Cash". *The New York Times*, June 29. Op-ed available at: http://www.nytimes.com/2014/06/30/opinion/let-them-eat-cash.html?ref=opinion&_r=3&referrer=.
- Blattman, C. and Niehaus, P. 2014. "Show Them the Money: Why Giving Cash Helps Alleviate Poverty." *Foreign Affairs* 93(3): 117-126.
- Breunig, R., and Dasgupta, I. 2005. "Do Intra-Household Effects Generate the Food Stamp Cash-out Puzzle?" *American Journal of Agricultural Economics* 87(3): 552-568.
- Breunig, R., Dasgupta, I., Gundersen, C., and P. Breuning. 2001. "Explaining the Food Stamp Cash-Out Puzzle." USDA, *Food Assistance and Nutrition Research Report* 12. Washington DC.
- Braido, L., Olinto, P., and Perrone, H. 2012. "Gender Bias in Intrahousehold Allocation: Evidence From An Unintentional Experiment." *Review of Economics and Statistics* 94(2): 552-565.

- Caldes , N., Coady, D., and Maluccio, J. 2006. “The Cost of Poverty Alleviation Programs: A Comparative Analysis of Three Programs in Latin America”. *World Development* 34(5): 818-837.
- CaLP (Cash Learning Partnership). 2013. “Cash Learning Partnership Strategy January 2013-December 2014”. Oxford.
- Committee for World Food Security (CFS). 2012. “Social Protection for Food Security: A Report by the High-Level Panel of Experts on Food Security and Nutrition”. *HLPE Report 4*. Rome.
- Clay, E. 2006. “Food Aid Tying is the Real Problem: A Response to the Barrett and Maxwell Proposal.” *Food Policy* 31(2):119-122.
- Coate S. 1989. “Cash versus Direct Food Relief.” *Journal of Development Economics* 30(2): 199-224.
- Creti, P. 2011. “The Voucher Programme in the Gaza Strip: Mid-Term Review,” WFP and Oxfam. Jerusalem and Oxford.
- Cunha, J. 2014. “Testing Paternalism: Cash versus In-kind Transfers”. *American Economic Journal: Applied Economics* 6(2): 195-230.
- Currie, J., and Gahvari, F. 2008. “Transfers in Cash and In-Kind: Theory Meets the Data.” *Journal of Economic Literature* 46(2): 333-383.
- Dary, O. and Imhoff-Kunsch, B. 2012. “Measurement of Food Consumption to Inform Food Fortification and Other Nutrition Programs: An Introduction to Methods and Their Application”. *Food and Nutrition Bulletin* 33(2): 141S-145S.
- Das, J., Do, Q., and Ozler, B. 2005. “Reassessing Conditional Cash Transfer Programs”. *World Bank Research Observer* 20(1): 57-80.
- Davies, S., and Davey, J. 2008. "A Regional Multiplier Approach to Estimating the Impact of Cash Transfers: The Case of Cash Transfers in Rural Malawi." *Development Policy Review* 26(1): 91-111.
- Davies, M., Bene, C., Arnall, A., Tanner, T., Newsham, A.J., and Coirolo, C. 2013. “Promoting Resilient Livelihoods through Adaptive Social Protection: Lessons from 124 Programmes in South Asia.” *Development Policy Review* 31(1): 27-58.
- Davis, B. 2013. “From Protection to Production: Measuring the Impact of Social Cash Transfers on Local Economic Development in Africa.” Presentation at the *Scoping Conference: The Links between Social Inclusion and Sustainable Growth in Africa* (October 30-31, The Hague).
- Davis, B., Gaarder, M., Handa, S. and Yablonski, J. 2012. “Evaluating the Impact of Cash Transfer Programmes in Sub-Saharan Africa: An Introduction to the Special Issue.” *Journal of Development Effectiveness* 4(1):1-8.
- De Brauw, A., Gilligan, D., Hoddinott, J., Moreira, V., and Roy, S. 2012. “The Impact of Bolsa Familia on Child, Maternal, and Household Welfare”. IFPRI. Washington, DC.
- Del Ninno, C., and Dorosh, P. 2003. “Impacts of In-Kind Transfers on Household Food Consumption: Evidence from Targeted Food Programmes in Bangladesh”. *Journal of Development Studies* 40(1): 48-78.
- Del Ninno, C., Dorosh, p., and Subbarao, K. 2007. "Food Aid, Domestic Policy and Food Security: Contrasting Experiences from South Asia and Sub-Saharan Africa." *Food Policy* 32(4): 413-435.

- Dercon, S., Park, A., and Singh, A. 2012. "School Meals as a Safety Net: An Evaluation of the Midday Meal Scheme in India." *Economic Development and Cultural Change* 62(2): 275-306.
- Devaney, B., and Moffitt, R. 1991. "Dietary Effects of the Food Stamp Program." *American Journal of Agricultural Economics* 73(1): 202-211.
- Devarajan, S. 2013. "Let Them Eat Cash." *Future Development*, blog post available at: <https://blogs.worldbank.org/futuredevelopment/let-them-eat-cash>.
- Devereux, S. 2012. "Social Protection for Enhanced Food Security in Sub-Saharan Africa." UNDP, *Working Paper* 2012-010. New York.
- Devereux, S. 2008. "Innovations in the Design and Delivery of Social Transfers: Lessons Learned from Malawi". IDS and Concern Worldwide. Brighton and Dublin.
- Devereux, S. 1988. "Entitlements, Availability and Famine". *Food Policy* 13(3): 270-282.
- Devereux, S. and Jere, P. 2008. "Choice, Dignity and Empowerment? Cash and Food Transfers in Swaziland. An evaluation of Save the Children's Emergency Drought Response, 2007/08". IDS and Save the Children. Brighton and Mbabane.
- DFID (Department of International Development). 2011. "DFID Cash Transfers Evidence Paper." London.
- Doss, C. 2013. "Intrahousehold Bargaining and Resource Allocation in Developing Countries." *World Bank Research Observer* 28(1): 52-78.
- Dreze, J. 2011. "The Cash Mantra". *Indian Express* commentary, available at: <http://archive.indianexpress.com/news/the-cash-mantra/788791/>.
- Dreze, J., and A. Sen. 1989. "*Hunger and Public Action*". Clarendon Press. Oxford.
- Duflo, E. 2003. "Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation in South Africa." *World Bank Economic Review* 17(1): 1-25.
- Elliott, K., and McKitterick, W. 2014. "Food Aid for the 21st Century: Saving More Money, Time, and Lives". CGD, *Brief*. Washington DC.
- Ellis, F. and Manda, E. 2012. "Seasonal Food Crises and Policy Responses: A Narrative Account of Three Food Security Crises in Malawi". *Food Policy* 40(7): 1407-1417.
- Evans, D. and Popova, A. 2014. "Cash Transfers and Temptation Goods. A Review of Global Evidence." World Bank, *Policy Research Working Paper* 6886. Washington DC.
- Evans, D., Hausladen, S., Kosec, K. and Reese, N. 2014. "Community-Based Conditional Cash Transfers in Tanzania: Results from a Randomized Trial". World Bank. Washington DC.
- Faminow, M. 1995. "Issues in Valuing Food Aid: The Cash or In-Kind controversy." *Food Policy* 20(1): 3-10.
- Fiszbein, A. and Schady, N. 2009. "Conditional Cash Transfers: Reducing Present and Future Poverty". World Bank. Washington DC.
- Fraker, T., Martini, A., and Ohls, J. 1995. "The effect of Food Stamp Cashout on Food Expenditures: An Assessment of the Findings from Four Demonstrations." *Journal of Human Resources* 30(4): 633-649.
- Fraker, T. 1990. "The Effects of Food Stamps on Food Consumption: a Review of the Literature". USDA. Washington DC.

- Garcia, M., and Moore, C. 2012. "The Cash Dividend: The Rise of Cash Transfer Programs in Sub-Saharan Africa". World Bank. Washington, DC.
- Garnsey, P. 1988. "*Famine and Food Supply in Graeco-Roman World: Responses to Risk and Crisis.*" Cambridge University Press. Cambridge.
- Gelli, A., Kretschmer A, and Molinas, L. 2012. "A Comparison of Supply Chains for School Food: Exploring Operational Trade-offs across Implementation Models". PCD, *HGSF Working Paper*. London.
- Gelli, A., and Suwa, Y. 2014. "Investing in Innovation: Trade-offs in the Costs and Cost-efficiency of School Feeding Using Community based Kitchens in Bangladesh". *Food and Nutrition Bulletin*, in press.
- Gentilini, U. 2007 "Cash and Food Transfers: A Primer". WFP, *Occasional Paper* 18. Rome.
- Gentilini, U., Ansar, S., and Herbinger, W. 2010. "Planning and Implementing Cash Transfers in Emergencies: Practical Insights from Pakistan". WFP. Islamabad.
- Gertler, P., Martinez, S., Premand, P., Rawlings, L., and Vermeersch, C. 2011. "Impact Evaluation in Practice". World Bank. Washington DC.
- Gilligan, D., and Roy, S. 2013. "Resources, Stimulation, and Cognition: How Transfer Programs and Preschool Shape Cognitive Development in Uganda". Paper presented at the *Agricultural & Applied Economics Association's 2013 AAEA & CAES Joint Annual Meeting* (August 4-6, Washington DC).
- Gilligan, D., and Hoddinott, J. 2007. "Is There Persistence in the Impact of Emergency Food Aid? Evidence on Consumption, Food Security, and Assets in Rural Ethiopia." *American Journal of Agricultural Economics* 89(2): 225-242.
- Glaeser, E. 2012. "Cash Is Better Than Food Stamps in Helping the Poor". *Bloomberg* commentary, available at: <http://www.bloomberg.com/news/2012-02-28/cash-better-than-food-stamps-in-helping-poor-commentary-by-edward-glaeser.html>.
- GoI (Government of India). 2005. "Performance Evaluation of Targeted Public Distribution System (TPDS)". Planning Commission. New Delhi.
- Hanlon, J., Barrientos, A., and Hulme, D. 2011. "*Just Give Money to the Poor: the Development Revolutions from the Global South.*" Kumarian. Sterling.
- Harvey P., and Savage, K. 2006. "No Small Change. Oxfam GB Malawi and Zambia Emergency Cash Transfer Projects: a Synthesis of Key Learning." ODI. London.
- Harvey, P., and Bailey, S. 2011. "Cash Transfer Programming in Emergencies." ODI, *Good Practice Review* 11. London.
- Headey, D. 2014. "Food Prices and Poverty Reduction in the *Long Run*". IFPRI, *Discussion Paper* 1331. Washington, DC.
- Hidrobo, M., Hoddinott, J., Peterman, A., Margolies, A., and Moeira, V. 2014a. "Cash, Food, or Vouchers? Evidence from a Randomized Experiment in Northern Ecuador." *Journal of Development Economics* 107: 144-156.
- Hidrobo, M., Hoddinott, J., Kumar, N., and Olivier, M. 2014b. "Social Protection and Food Security". Background paper prepared for FAO's SOFA report. Washington DC.

- Hoddinott, J. 2013. "Cash, Food, or Vouchers? Evidence from a Four-Country Experimental Study". Presentation at IFPRI-WFP event (October 23, Washington DC).
- Hoddinott, J., Sandstrom, S., and Upton, J. 2014. "The Impact of Cash and Food Transfers: Evidence from a Randomized Intervention in Niger." IFPRI, *Discussion Paper* 1341. Washington, DC.
- IEG (Independent Evaluation Group). 2011. "Evidence and Lessons Learned from Impact Evaluations on Social Safety Nets". World Bank. Washington DC.
- Josling, T. 2011. "Global Food Stamps: An Idea Worth Considering?" ICTSD, *Issues Paper* 36. Geneva.
- Kazianga, H., de Walque D. and Alderman, H. 2014. "School Feeding Programs, Intrahousehold Allocation and the Nutrition of Siblings: Evidence from a Randomized Trial in Rural Burkina Faso." *Journal of Development Economics* 106: 15-34.
- Kenny, C. 2013. "For Fighting Poverty, Cash Is Surprisingly Effective". *Bloomberg Business Week* (June 3), available at: <http://www.businessweek.com/articles/2013-06-03/for-fighting-poverty-cash-is-surprisingly-effective>.
- Khera, R. 2011. "Revival of the Public Distribution System: Evidence and Explanations". *Economic and Political Weekly* XLVI(44 & 45): 36-50.
- Lentz, E., Barrett C., Gómez M., and D. Maxwell. 2013. "On The Choice and Impacts of Innovative International Food Assistance Instruments." *World Development* 49(C): 1-8.
- Leroy, J., Gadsden, P., Rodriguez-Ramirez, S., and Gonzales de Cossio, T. 2010. "Cash and In-kind Transfers in Poor Rural Communities and Mexico Increase Household Fruit, Vegetable and Micronutrient Consumption but also Lead to Excess Energy Consumption." *Journal of Nutrition* 140(3): 612-617.
- Levedahl, J. 1995. "A Theoretical and Empirical Evaluation of the Functional Forms Used to Estimate the Food Expenditure Equation of Food Stamp Recipients". *American Journal of Agricultural Economics* 77(4): 960-968.
- Levedahl, J. 1991. "The Effect of Food Stamps and Income on Household Food Expenditures." USDA, *Technical Bulletin* 1794. Washington DC.
- Lindert, P. 2005. "Growing Public: Social Spending and Economic Growth Since the Eighteenth Century." Cambridge University Press. Cambridge.
- Lopez-Rodriguez, D. 2011. "The Political Economy of In-Kind Redistribution." MPRA, *Paper* 44152. Munich.
- MacAuslan, I. and Riemenschneider, N. 2011. "Richer but Resented: What Do Cash Transfers Do To Social Relations?" *IDS Bulletin* 42(6): 60-66.
- Margolies, A., and Hoddinott, J. 2014. "Costing Alternative Transfer Modalities". IFPRI, mimeo. Washington DC.
- Maunder, N. 2006. "The Impact of Food Aid on Grain Markets in Southern Africa: Implications for Tackling Chronic Vulnerability. A Review of the Evidence". RHVP. Johannesburg.
- Meyer, J. 2007. "The Use of Cash and Vouchers in Response to Vulnerability and Food Insecurity". WFP. Maseru.

- Michelson, H., Lentz, E., Mulwa, M., Morey, M., Cramer, L., McGlinchy, M., Barrett, C. 2012 "Cash, Food, or Vouchers? An Application of the Market Information and Food Insecurity Response Analysis Framework (MIFIRA) in Urban and Rural Kenya." *Food Security* 4(3): 455-469.
- Moss, T. 2013. "Oil-to-Cash Lessons from Alaska – Or Why Anchorage Isn't So Different from Accra". *CGD Blog: Views from the Center*, blog post available at: <http://www.cgdev.org/blog/oil-cash-lessons-alaska%E2%80%94or-why-anchorage-isn%E2%80%99t-so-different-accra>.
- Muralidharan, K., Niehaus, P., and Sukhtankar, S. 2014. Payments Infrastructure and the Performance of Public Programs: Evidence from Biometric Smartcards in India." NBER, *Working Paper* 19999. Cambridge.
- Muralidharan, K. 2011. "Piloting and Evaluating e-PDS and Cash Transfer Options for Improved Food Security in Bihar." Presentation at the *Bihar Growth Conference* (Patna, 14 December).
- OECD. 2005. "The Development Effectiveness of Food Aid: Does Tying Matter?" Paris.
- Omano, S.W., Gentilini, U and Sandström, S. 2010. "Revolution: From Food Aid to Food Assistance. Innovations in Overcoming Hunger." (Eds) WFP. Rome.
- Ozler, B. 2013a. "Cash Transfers: Sorting Through the Hype". *Development Impact*, blog post available at: <https://blogs.worldbank.org/impacetevaluations/cash-transfers-sorting-through-hype>.
- Ozler, B. 2013b. "Defining Conditional Cash Transfer Programs: An Unconditional Mess". *Development Impact*, blog post available at <http://blogs.worldbank.org/impacetevaluations/defining-conditional-cash-transfer-programs-unconditional-mess>.
- Pinstrup-Andersen, P. 1988. "Food Subsidies in Developing Countries: Costs, Benefits and Policy Options." (Ed). Johns Hopkins University Press. Baltimore and London.
- Pritchett, L. 2012. "Impact Evaluation and Political Economy: What Does the "Conditional" in "Conditional Cash Transfers" Accomplish?" *CGD blog: Views from the Center*, blog post available at: <http://www.cgdev.org/blog/impact-evaluation-and-political-economy-what-does-%E2%80%9Cconditional%E2%80%9D-%E2%80%9Cconditional-cash-transfers%E2%80%9D>.
- Pritchett, L. 2005. "A Lecture on the Political Economy of Targeted Safety Nets". World Bank, *Social Protection Discussion Paper* 0501. Washington DC.
- Quisumbing, A. 2003. "Food Aid and Child Nutrition in Rural Ethiopia." *World Development* 31(7): 1309-1324.
- Reed, B., and Habicht, J-P. 1998. "Sales of Food Aid As Sign of Distress, Not Excess". *The Lancet* 351(9096): 128-130.
- Reinhart, U. 2013. "On the Economics of Benefits In-Kind." Princeton University. Princeton.
- Rogers, B. L., and J. Coates. 2002. "Food-Based Safety Nets and Related Programs." World Bank, *Social Protection Discussion Paper* 223. Washington DC.
- Ryckembusch, D., Frega, R., Da Silva, M. B., Sanogo, I., Gentilini, U., Grede, N. and Brown, L. 2013. "Enhancing Nutrition: A New Tool for Ex-Ante Comparison of Commodity-Based Vouchers and Food Transfers." *World Development* 49(C): 58–67.
- Sabates-Wheeler, R., and Devereux, S. 2012. "Cash Transfers and High Food Prices: Explaining Outcomes on Ethiopia's Productive Safety Net Programme." *Food Policy* 35(4): 274-285.

- Schwab, B. 2013. "In the Form of Bread? A Randomized Comparison of Cash and Food Transfers in Yemen." Paper presented at the *Agricultural & Applied Economics Association's 2013 AAEA & CAES Joint Annual Meeting* (August 4-6, Washington, DC).
- Senauer, B., and N. Young. 1986. "The Impact of Food Stamps on Food Expenditures: Rejection of the Traditional Model." *American Journal of Agricultural Economics* 68(1): 37-43.
- Sharma, M. 2006. "An Assessment of the Effects of the Cash Transfer Pilot Project on Household Consumption Patterns in Tsunami-Affected Areas of Sri Lanka". IFPRI. Washington, DC.
- Skoufias, E., Unar, M., and Gonzalez-Cossio, T. 2008. "The Impacts of Cash and In-Kind Transfers on Consumption and Labor Supply: Experimental Evidence from Rural Mexico." World Bank, *Policy Research Working Paper 4778*. Washington, DC.
- Southworth, H. 1945. "The Economics of Public Measures to Subsidize Food Consumption." *Journal of Farm Economics* 27(1):38-66.
- Tannahill, R. 1988. *"Food in History"*. Crown Publishers. New York.
- The Economist. 2014. "Feeding Expectations: Why Food Vouchers Are a Policy Worth Considering in Developing Countries." Print edition, February 22-28.
- Tirivayi, N., Knowles, M. and Davis, B. 2013. "The Interaction between Social Protection and Agriculture: A Review of Evidence." FAO. Rome.
- Vincent, K. and Cull, T. 2011. "Cell Phones, Electronic Delivery Systems and Social Cash Transfers: Recent Evidence and Experiences from Africa." *International Social Security Review* 64(1): 37-51.
- Webb, P., Lorge Rogers, B., Rosenberg, I., Schlossman, N., Wanke, C., Bagriansky, J., Sadler, K., Johnson, Q., Tilahun, J., Reese Masterson, A., and Narayan, A. 2011. "Improving the Nutritional Quality of U.S. Food Aid: Recommendations for Changes to Products and Programs". Tufts University. Boston.
- Webb, P., Coates, J., Frongillo, E., Rogers, B., Swindale, A., and Bilinsky, P. 2006. "Measuring Household Food Security: Why It's So Important and Yet So Difficult to Do". *Journal of Nutrition* 136(5): 1404S-1408S.
- WFP (World Food Programme). 2011. "Update on the Implementation of WFP's Policy on Vouchers and Cash Transfers." Rome.
- Wilde, P. and Ranney, C. 1996 "The Distinct Impact of Food Stamps on Food Spending". *Journal of Agricultural and Resource Economics* 21(1):174-185
- White, P., A. Hodges and Greenslade, M. 2013. "Guidance on Measuring and Maximising Value for Money in Social Transfer Programmes: Toolkit and Explanatory Text". DFID. London.
- Wisemann, D., Bassett, L., Benson, T., and J. Hoddinott. 2009. "Validation of the World Food Programme's Food Consumption Score and Alternative Indicators of Household Food Security". IFPRI, *Discussion Paper 870*. Washington, DC.
- World Bank. 2014. *"The State of Social Safety Nets 2014"*. Washington DC.
- Yamano, T., H. Alderman, and Christiaensen, L. 2005. "Child Growth, Shocks, and Food Aid in Rural Ethiopia." *American Journal of Agricultural Economics* 87(2): 273-288.

Annex 1. Summary of impacts

Food Consumption		Impact			Percentage Change			Relative impact compared to baseline (percentage points)	
		Cash	Food	Voucher	Cash	Food	Voucher	Food - cash	Food - voucher
(Ahmed et al. 2010)	Bangladesh	113	89	taka	21.24%	17.84%		-3.40	
(Skoufias et al. 2008)	Mexico				18.30%	17.60%		-0.70	
(Hidrobo et al. 2014a)	Ecuador				12.00%	16.00%	13.00%	4.00	3.00
(Sharma 2006)	Sri Lanka	754.87	650.68	Rs.	66.22%	52.60%		-13.62	
<i>Reported relative impact (food vs cash)</i>									
(Barker et al. 2014)	Cambodia		-33.64	USD.				-13.40	
(Schwab 2013)	Yemen							-12.00	
Calorie In-take									
(Hidrobo et al. 2014a)	Ecuador				6.00%	16.00%	11.00%	10.00	5.00
(Cunha 2014)	Mexico	61.4	103.16	kcal	7.42%	12.27%		4.86	
(Ahmed et al. 2010)	Bangladesh	271	164	kcal	12.80%	7.94%		-4.86	
(Schwab 2013)	Yemen							4.00	
<i>Reported relative impact (food vs cash)</i>									
(Sharma 2006)	Sri Lanka		-37.4	kcal				-1.47%	
In-take of Micronutrients									
(Cunha 2014)	Mexico	1.1	1.61	mg	21.70%	31.32%		9.62	
Anemia Prevalence									
(Cunha 2014)	Mexico	-0.04	-0.02		-4.00%	-2.00%		-2.00	
(Gilligan and Roy 2013)	Uganda	-0.1	0.017		-10.00%	1.70%		-8.30	
Headcount Ratio									
(Skoufias et al. 2008)	Mexico	-0.089	-0.102		-13.48%	-15.22%		1.74	
(Ahmed et al. 2010)	Bangladesh				-15.90%	-19.70%		3.80	
Poverty Gap									
(Skoufias et al. 2008)	Mexico	0.055	0.07		18.90%	22.30%		3.40%	
Labor market participation (non-agricultural)									
(Skoufias et al. 2008)	Mexico				7.10%	5.80%		-1.30%	

Food Consumption Score		Cash	Impact		Relative impact compared to baseline (difference in index values)		
			Food	Voucher	Food - cash	Food - voucher	Voucher - cash
(Hidrobo et al. 2014a)	Ecuador	6.48	6.1	9.41	-0.38	-3.31	2.93
(Barker et al. 2014)	Cambodia				0.52		
(Hoddinott et al. 2014)	Niger				3.53		
(Hoddinott et al. 2014)	Niger (October)				3.91		
(Schwab 2013)	Yemen				-4.52		
Dietary Diversity Index		Cash	Food	Voucher			
(Hidrobo et al. 2014a)	Ecuador	2.39	1.98	2.89	-0.41	-0.91	
(Hoddinott et al. 2014)	Niger				0.38		
(Hoddinott et al. 2014)	Niger (October)						
(Hoddinott et al. 2014)	Niger (July)				0.56		
(Schwab 2013)	Yemen				-0.63		
Household Dietary Diversity Score		Cash	Food	Voucher			
(Hidrobo et al. 2014a)	Ecuador	0.4	0.51	0.51	0.11	0	0.11
(Aker 2013)	Republic of Congo	0.13		3.36			3.23
(Schwab 2013)	Yemen				-0.41		
Food Gap		Cash	Food	Voucher			
(Gilligan and Roy 2013)	Uganda	-0.36	-0.58		-0.23		
(Sabates-Wheeler and Devereux 2012)	Ethiopia	0.42	1.25		0.83		

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Abstract

This paper reviews key issues in the 'cash versus food' debate, including as they relate to political economy, theory, evidence, and practice. In doing so, it benefited from a new generation of 12 impact evaluations deliberately comparing alternative transfer modalities. Findings show that differences in effectiveness vary by indicator, although they tend to be moderate on average. In some cases differences are more marked (i.e., food consumption and calorie availability), but in most instances they are not statistically significant. In general, transfers' performance and their difference seem a function of the organic and fluid interactions among factors like the profile and 'initial conditions' of beneficiaries, the capacity of local markets, and program objectives and design. Costs associated with cash transfers and vouchers tend to be substantially lower relative to food. Yet methods for cost-effectiveness analysis vary and need to be more standardized and nuanced. The reviewed evaluations are helping to shift the debate from one shaped by ideology, political economy and 'inference' of evidence to one centering on robust and context-specific results.

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