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Women and Cash Transfers

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ABSTRACT

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How Program Design and Local Conditions Relate to Causal Estimates of Impact*

In this paper, we conduct a systematic review of the literature on the impact of cash transfers on women's employment and empowerment. We construct a dataset of 265 impacts of cash transfers on adult women across 56 studies and 30 programs in Lower and Middle-income countries. Our dataset is the first that matches estimated treatment effects with harmonised information on the design of cash transfer programs, including the transfer size, payment methods and frequencies, and program conditionalities. Across studies, we find that cash transfers have a positive yet insignificant impact on women's employment and empowerment. We use our data to explore how the impact of cash transfers differs by program design features and baseline country conditions, including local labor market structures and gender social norms. We find that cash transfers have a larger impact on women's labor force participation when they are larger in size, and when there is a higher proportion of women who work in formal employment before the program evaluation. Overall, our results suggest that cash transfers have more meaningful impacts on women's employment and empowerment when pre-existing gender constraints are low. Our findings highlight the importance of interpreting estimated program impacts in the context of country-level conditions and program design.

JEL Classification:
J16, O15, J22, I38

Keywords:
conditional cash transfers, unconditional cash transfers, gender, labor force participation, empowerment

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1 Introduction

Gender equality and women's empowerment are central to growth and development (Jayachandran, 2015; Duflo, 2012). In lower and middle-income countries, women are more likely to be victims of gender-based violence, are less likely to be in paid employment, and are more likely to get married and have children before the age of eighteen. Against this backdrop, to assess the full potential of any poverty alleviation program, it is key to understand its impact on women.

In this paper, we study the gendered impact of one of the most prevalent policies for poverty alleviation: cash transfers. Cash transfers are often labeled as 'gender-sensitive' since the majority of these programs transfer money to women in the household. However, the evidence on the impact of cash transfers on women's outcomes is mixed (e.g. Bastagli et al., 2016; Baranov et al., 2021) and very few cash transfer programs are explicitly designed to target women's constraints. Compared to men, women have less access to finance and social safety nets and are more likely to be subject to discriminatory laws and gender social norms – all of which imply that the impacts of cash transfers on women are likely to be more sensitive to design features and local conditions.

This is the focus of our study. We conduct a systematic review of the literature on the impact of cash transfers on women's employment and empowerment outcomes. Importantly we explore how the impacts on women differ by the design of the programs and the conditions in which they were administered.

We begin by constructing a novel dataset of 265 estimates of the causal impact of cash transfers on adult women, with harmonized and comparable information on the institutional and design characteristics of the evaluated programs. The estimates are from 30 experimental and 26 non-experimental program evaluations of 30 cash transfers, published in working and peer-reviewed journals from 2000 to 2015. We map the years of the program evaluations to local economic conditions and proxies of social norms using data from the Jobs of the World Database[1]. Our dataset allows us to explore how the impacts of cash transfers on adult women differ by (1) the characteristics of the cash transfer program; and (2) the baseline

[1]The Jobs of the World Database (JWD) is the core component of the Jobs of the World Project (JWP) available at `http://jwp.iza.org` that harmonizes data from National Censuses (IPUMS) and Demographic and Health Surveys (DHS). The project is part of the data-building activities of the G^2LMLIC program from the IZA—Institute of Labor Economics.

country characteristics, including labor market conditions, and social norms at the starting year of the program evaluation.

Overall, we find that across 56 studies and 265 estimates, cash transfers have positive and statistically insignificant impacts on women's employment and empowerment outcomes. The majority of papers in our study find that cash transfers have a positive and insignificant impact on labor force participation; and positive and insignificant impacts across three categories of empowerment outcomes, including decision-making, autonomy in sex, reproductive and marital decisions, and reductions in gender-based violence. These patterns are consistent with existing meta-analyses on the impact of cash transfers on women's employment and empowerment across contexts (e.g. Banerjee et al., 2017; Bastagli et al., 2016; Buller et al., 2018; Peterman et al., 2019).

We then use our dataset to explore how these program impacts systematically correlate with characteristics of program design and country-level conditions. The impact of cash transfers on women's labor force participation is larger for cash transfers that are larger in size, and in countries where the proportion of women in formal employment at baseline is higher. Similarly, for non-economic measures of empowerment, we find larger impacts on empowerment in places with more equal gender social norms at baseline. Taken together, these results suggest that cash transfers are more impactful when they are larger and when they are implemented in places with lower baseline constraints for women - namely, better labor market conditions, and more equal gender social norms.

Our main contribution is to provide one of the largest and broadest systematic reviews of the impact of cash transfers on adult women. By including granular information on the program evaluation (e.g. years of evaluation, age and gender of the recipient) and collecting characteristics of the design of cash transfer programs (e.g. transfer size, payment methods, conditionalities, etc), our data is one of the most comprehensive datasets on the impacts of cash transfers on women.

Furthermore, we contribute to the literature by exploring the systematic relationship between estimated treatment effects on women and characteristics of program design. There is some experimental literature considering differential cash transfer impacts on women across design features. For example, Haushofer and Shapiro (2016) find that one-off cash transfers are associated with higher empowerment and lower stress levels for women, when compared to lump sum transfers. Aker et al. (2016) finds that transferring cash through mobile money

payments increases women's intra-household bargaining power. Our paper complements these studies by exploring how design features of cash transfers can explain differential treatment effects across studies.

Lastly, we contribute to the literature on cash transfers by exploring how the impact of cash transfers interacts with pre-existing characteristics at the country level. The literature on CCTs has analyzed the heterogeneity of the effects across other dimensions such as household and village poverty levels (e.g. Dammert, 2009; Maluccio and Flores, 2005), household characteristics (e.g. Djebbari and Smith, 2008; Handa et al., 2010) and family networks (Angelucci et al., 2010). Yet, interactions with pre-existing market conditions and local labor market structures remain relatively unexplored.

Most closely related to our study are Bandiera et al. (2022) and Molina and Vidiella-Martin (2021). Bandiera et al. (2022) explore how training interventions targeted to women correlate with their economic participation. Similar to our setting, Bandiera et al. (2022) find that the estimated impact of interventions on women is higher in countries with a higher share of women working in paid activities. Molina and Vidiella-Martin (2021) explore the interaction between local labor market conditions and the effectiveness of Mexico's landmark cash transfer program, PROGRESA. The authors find that PROGRESA had a smaller impact on schooling in areas with higher exposure to export manufacturing jobs.

The remainder of the paper is structured as follows. We begin by describing the theoretical channels for how cash transfers may affect women's employment and empowerment outcomes; and how these impacts may differ by program design and country-level conditions (section 2). In section 3, we lay out our methodology for collecting data on program evaluations of cash transfers on adult women, characteristics of program design, and baseline country-level conditions. In section 4, we describe trends in cash transfers and the literature on women's outcomes. In sections 5 and 6, we explore sources of heterogeneity, including differences in treatment effects by design characteristics and country-level conditions, respectively. Lastly, we discuss the implications of the findings (section 7) and conclude (section 8).

2 Conceptual framework

In this section, we lay out the conceptual framework for firstly, why cash transfers may affect women's employment and empowerment outcomes (section 2.1); and secondly, why the

impacts on women may differ across programs and contexts (section 2.2). These theoretical channels inform our data collection and empirical approach for the rest of the paper.

2.1 Effects of cash transfers on women's employment and empowerment

Although the majority of cash transfer programs in low and middle-income countries typically do not explicitly target women's empowerment as an objective, there are various theoretical reasons why cash transfers may improve women's employment and empowerment outcomes.

Women are often the main recipients of cash transfer programs and, therefore, should have the most direct control over how a cash transfer is used[2] This, in turn, has the potential to increase women's bargaining power within the household, and thus, improvements in common measures of non-economic empowerment, including control over decisions of the household and self (e.g. Handa et al., 2014b; Merttens and Jones, 2014); sex, marital, and reproductive decisions (e.g. Todd et al., 2010; Stecklov et al., 2006; Baird et al., 2011); and reductions in the rates of gender-based violence (e.g. Bobonis and Castro, 2010; Perova and Reynolds, 2017). Conversely, another line of empirical evidence suggests that transferring cash to women can potentially backfire, thus worsening outcomes for women and increasing the prevalence of gender-based violence. Baranov et al. (2021) identify two channels: men may be threatened by the control of women's resources; or they may use instrumental violence to gain control over household resources.

These effects could also extend to changes in the economic empowerment of women, most notably through labor market outcomes. On the one hand, an influx of cash can lead to an income effect that reduces the supply of labor and the number of hours worked. On the other hand, cash transfers can improve labor market outcomes by helping the poor overcome individual income constraints. Baird et al. (2018) outline some main channels that could explain increases in women's participation. First, the *Health and productivity channel* suggests that individuals who eat a more nutritious diet are productive and achieve better labor outcomes. Second, the *Self-employment liquidity effect* channel hypothesizes that additional income can enable individuals to establish or expand businesses, thereby

[2]Many governments advocate for delivering cash transfers to women or primary caregivers, assuming that women are best placed to use cash funds to meet children's needs.

increasing their income. Third, the *Investment in better job-search* channel posits that cash transfers give individuals more time for job search, which improves the quality of matches and, in turn, increases the probability of working in the future. This decreases labor force participation in the short run, but increases it in the long run.

Lastly, cash transfers could improve labor market outcomes for mothers through its impact on children's outcomes. Since women tend to take on the main care responsibilities within the household, the positive impacts of cash transfers on children's health and education outcomes may free up time for mothers that can be dedicated to the labor market. Cash transfers could also translate into increased women's labor force participation through a decrease in child labor. Child labor may decrease as a consequence of conditioning the transfer on school attendance, which conversely decreases household income. As a consequence, there may be a substitution effect, wherein women work more to offset income losses. Conversely, conditionalities that are time-consuming, such as taking children to health check-ups, could also reduce women's probability of working by increasing the time taken for care.

Disentangling the factors that drive changes in these categories of outcomes, both theoretically and empirically, is key to designing better social protection programs that improve women's welfare.

2.2 Understanding heterogeneous effects of cash transfers

Beyond their absolute impacts on women, cash transfers may have a different impact across programs and contexts. We categorize drivers of heterogeneity in impacts into two broad categories:

1. Differences in the **program design** of cash transfers (outlined below in section 2.2.1);
2. Differences in baseline **country conditions**, including underlying social norms and labor market conditions (outlined below in section 2.2.2).

2.2.1 Program design

Cash transfers differ across various program characteristics that are likely to affect women's outcomes. For example, the policy's target population is likely to correspond with the subpopulation for whom we are most likely to see the largest welfare impacts. Moreover, the

conditionalities of the cash transfer likely shape the behavior of program beneficiaries and the decisions they can make after receiving the cash transfer.

We focus on four components of the design of cash transfers that may affect their scope and efficacy across contexts: (1) Transfer values and frequencies; (2) Payment methods and digital ID systems; (3) Program conditionalities; and (4) Gender of the cash transfer recipient. We describe the theoretical channels through which each of the design features may affect women's outcomes, and give an overview of where these features have been studied in the literature.

1. Transfer value and frequencies: The size of the cash transfer matters for the types of decisions that women can make in response to a cash injection. If households are in a poverty trap, larger transfers can push households across a minimum threshold to have longer-term, transformative effects on welfare (Balboni et al., 2021; Banerjee et al., 2022). This effect could be happening through multiple channels. First, cash transfers can increase the workers' productivity and capacity by improving their nutritional status and living standards (Dasgupta, 1997). Second, a large infusion of cash could reduce credit constraints for starting a business (e.g. Gertler et al., 2012), or could yield productive investments and thus lead to changes in occupational choice (Collins, 2017). Third, large cash transfers can reduce migration frictions and facilitate job matches (Ardington et al., 2009). Across all of these channels, larger transfers are likely to have more transformative effects on women's economic outcomes.

Holding constant the size of transfers, less frequent, lump sum payments may also be more beneficial for women's outcomes. Large lump sum payments increase the ability to invest in costly assets. This is likely to benefit women, who are more likely to be credit-constrained due to a lack of capital and access to financial services (Araujo et al., 2017). The frequency of transfers can also affect outcomes through its impact on mental health. For instance, Haushofer and Shapiro (2016) find that monthly transfers are associated with higher stress levels for women when compared to lump sum annual transfers.

The evidence on the importance of cash transfer frequency on women's outcomes is mixed. Haushofer and Shapiro (2013) find no differences in the impact of cash transfers on household consumption for households receiving monthly transfers compared to a one-off lump sum. Bazzi et al. (2015) find that the timing of transfer disbursements affects the expenditure

and labor supply responses of beneficiary households[3]. Two studies examine the impacts of large payments versus small payments, with conflicting results. Angelucci (2008) find that large payments, unlike small payments, were associated with increased gender-based violence; whereas Haushofer and Shapiro (2016) find that large transfers improved female empowerment. Related to employment, there is no conclusive evidence on the impact of larger versus smaller transfers on labor force participation. However, the literature on graduation programs and in-kind transfers (e.g. Banerjee et al., 2022; Bandiera et al., 2020) are suggestive of the importance of bundled interventions – including cash and employment training programs – on improving labor force participation and outcomes for women-owned firms.

2. Payment Methods and Digital ID systems: Beyond physical cash, cash transfer programs administer payments to recipients via a range of methods including pre-paid cards, vouchers, bank deposits, and digital money payments. Each of these payment methods affords women different levels of privacy and control over the cash transfer. For instance, direct deposit transfer payments are more easily concealable and have been found to increase women's financial independence, especially among the rural poor (Field et al., 2022). Similarly, Aker et al. (2016) find that administering cash transfers through mobile money payments reduces costs of accessing money by shortening travel times, and increases women's intra-household bargaining power.

The method of payment also matters for whether or not the cash transfer reaches the women for whom they are intended. In rural and marginalised areas, there tend to be higher delivery costs and less existing infrastructure to verify the identities of recipients – and therefore, there may be higher chances for transfer leakages. The use of biometric verification at the point of cash withdrawal could ensure that women receive the transfer instead of their spouses or family members (Clark et al., 2022) [4]. Taken together, we should therefore expect stronger impacts on empowerment outcomes – particularly in the decision-making of women – when cash transfers are administered in more direct, private, and concealable ways to ensure that transfers reach women [5]

[3]Timely receipt of the second transfer had a null effect on the labor supply per adult, but a delayed receipt of the second transfer was associated with a decline of hours worked and very low expenditure grow rates

[4]This may not be feasible or desirable in every context. Iqbal et al. (2021) and Clark et al. (2022) argue that because of women's limited geographical mobility and access to financial services, implementing these options could be too costly and reduce the overall take-up of programs.

[5]There is very little causal evidence on the impacts of cash transfers across different delivery methods.

3. Program Conditionalities: Program conditionalities can affect women's employment indirectly through their impact on children. In poor settings, Unconditional Cash Transfers (UCTs) and Conditional Cash Transfers (CCTs) relax budget constraints for investing in children's human capital. However, CCTs can go one step further by conditioning the transfer on children's outcomes. As a result, Conditional Cash Transfers may have a larger impact on children's health and schooling outcomes. This, in turn, frees up time for mothers and thus can lead to better employment outcomes. On the other hand, meeting conditionalities can be time-consuming for caregivers - thus dampening the potential for impact. For instance, Parker and Skoufias (2000) find that PROGRESA had no impact on labor force participation of women, but instead increased the time demands for women by increasing the time spent taking children to schools and clinics.

Empirically, the extent to which conditionalities affect women's employment is relatively unexplored but several papers do suggest that conditionalities may lead to better outcomes for children. Baird et al. (2011) find that CCTs are more effective than UCTs for increasing girls' schooling in Malawi. Similarly, Asfaw et al. (2014) find that CCTs are more effective than UCTs for marginal children in Malawi, while UCTs are equally as effective as CCTs for non-marginal children. In contrast, Akresh et al. (2013) find no differences in child schooling outcomes between unconditional and conditional cash transfers in Burkina Faso. If improved outcomes for children help alleviate time constraints for mothers in a way that offsets the time demands to meet these conditionalities, then we would also expect CCTs to have larger impacts on women's employment outcomes than UCTs.

For empowerment, a branch of the literature investigates how conditional cash transfers affect the incidence of gender-based violence compared with other transfer types, such as UCTs and in-kind transfers. Using a structural model of household decision-making, Ramos (2016) estimate the impacts of an in-kind transfer versus a cash transfer on intimate partner violence. While a cash transfer equivalent to 10% of the average household income would decrease violence by 7 percentage points, an in-kind transfer would decrease violence by 12 percentage points. When the transfer is in-kind, there is less utility that the male can extract from violence compared to when the transfer is in cash.

4. Gender of the cash transfer recipient: The typical cash transfer provides cash to

Nonetheless, some programs are experimenting with delivery methods to tackle women specific constraints of receiving money, such as distance to withdrawal points, and security factors that may affect the probability of women mobilizing the cash transfer (Banerjee et al., 2022).

mothers under the assumption that transferring money to women (vs. men) leads to larger improvements in outcomes for children (e.g. Duflo, 2003; Haddad et al., 1997; Maluccio et al., 2003). The underlying argument is that transferring money to mothers induces a redistribution of resources that increases women's bargaining power, and hence affects household decisions for the child.

Empirically, however, the evidence on the impact of transferring cash to women on the outcomes of the children is mixed. In the early literature, the evidence found that transferring money to women increased the nutrition and health outcomes of the children (e.g. Duflo, 2003). In the recent literature, this is more contested. Olney et al. (2022) and Armand et al. (2020) find that targeting women positively impacts children's food consumption and health outcomes. However, Akresh et al. (2016) find that giving transfers to fathers significantly affected children's nutrition as well. In systematic reviews of the evidence on non-contributory programs in Africa and South Asia, respectively, Peterman et al. (2019), and Tebaldi and Bilo (2019) find no significant differences in children's outcomes across the gender of the recipient. In contrast, Yoong et al. (2012) concludes that transfers to women can improve children's well-being.

There is less empirical work on the impact of transferring money to women (vs. men) on *women's* empowerment outcomes (Yoong et al., 2012). The only known study, Haushofer et al. (2019), compares outcomes across treatment arms with men versus women as the transfer recipients. The authors find large increases in women's empowerment for women recipient households relative to control households; and no changes in women's empowerment for men recipient households. However, they cannot reject equality of impacts across men and women recipient households. Women's receipt of transfer was associated with significant reductions in experienced physical and sexual violence. Yet, there was a small but significant decrease in physical violence in men recipient households as well. Heath et al. (2020) examine the impact of transfers targeted primarily to men on intimate partner violence. They find positive but insignificant effects on reducing physical violence and small decreases in emotional violence and controlling behaviors for monogamous couples in Mali.

2.2.2 Country level conditions

Social protection programs do not operate in isolation. Instead, they interact and are complementary to existing country-level conditions. Across the programs that we study, there is

large heterogeneity in the baseline conditions at which cash transfers were administered. We outline two main categories of country-level characteristics that could affect the effectiveness of cash transfers: (1) Local market conditions; and (2) Social norms.

1. Local market conditions: The structure of labor markets affects the ability of cash transfer recipients to secure employment opportunities and enter the labor market. While cash transfers can free up time for women to participate in the labor force, this is unlikely to translate into observed changes in outcomes absent local employment opportunities.

Interactions with pre-existing local labor market structures remain an under-explored area in the cash transfer literature. To our knowledge, Molina and Vidiella-Martin (2021) are the first ones to empirically study this interdependence. The authors explore the interaction between the effectiveness of PROGRESA/Oportunidades, and local labor market conditions at the time of the program. They find that the schooling impacts of PROGRESA/Oportunidades were lower for recipients living in areas with higher exposure to export manufacturing opportunities. This was particularly true for recipients who were eligible to work in the manufacturing industry at the starting year of the program.

Similarly, local labor market conditions shape beliefs and hence are likely to affect decisions to enter into employment. Poor labor market conditions can anchor downward expectations and hence affect job seekers' present labor decisions. For example, Spears (2012) shows that in South Africa, job seekers who expect to be unemployed are less likely to accept hypothetical job offers. The possibility for reference-dependent decision-making within the labor force means that job seekers are more likely to choose outcomes that they expect to receive, based on their lived experiences. Hence, weaker labor market conditions can instill a pessimistic view of the labor market, leading individuals to place less emphasis on employment-related decisions.

2. Gender social norms: Gender social norms play an important role in women's economic decisions, and thus can also be an important dimension of heterogeneity in program impacts. Economically disadvantaged women are less likely to participate in paid employment outside their homes (Bandiera et al., 2022). A broad body of literature finds that this is largely attributed to strong social norms and beliefs on the acceptability of women working outside the home (e.g. Alesina et al., 2013; Bernhardt et al., 2018; Jayachandran, 2015). If low economic participation stems from individual barriers to work, interventions should be more effective in countries with initially low women's labor force participation rates. However, if

low labor force participation is due to entrenched social norms, smaller-scale interventions may struggle to succeed in regions with low participation rates, as they do not address the underlying norms that drive low engagement in work activities. As a result, lower treatment effects would be observed in countries with more traditional gender social norms.

3 Data and methodology

We construct a dataset to explore the impact of cash transfers on women across countries and contexts, in line with the theoretical channels we outline in section 2. Our dataset maps:

1. Estimated impacts of cash transfers on employment and empowerment outcomes for adult women; to
2. Program-level characteristics; and
3. Country characteristics at the baseline of the program evaluation.

Using this data, we explore the systematic relationship between estimated treatment effects and design characteristics of cash transfers (section 5); and pre-existing country-level conditions (section 6). In the sections below, we describe the methodology and data sources for variables within each of these categories.

3.1 Selection of studies and data on treatment effects

We collect data on studies (published and/or working papers) available between 2000 to 2015 that evaluate the impact of cash transfers on employment and empowerment outcomes for adult women in lower and middle-income countries. Our dataset focuses on studies that estimate the causal impact of cash transfers, compared to a relevant counterfactual outcome. We include papers that use non-experimental and/or experimental variation to identify the causal impact of cash transfers on employment outcomes and empowerment for women.

As a starting point for our literature search, we use Bastagli et al. (2016) to identify relevant studies on the impact of cash transfers on empowerment and employment outcomes. Bastagli et al. (2016) covers 165 studies on the impact of 56 cash transfers. The authors collect data on the estimated treatment effects of cash transfers across a range of poverty-related outcomes.

Out of the studies identified in Bastagli et al. (2016), we find 47 studies that report outcomes separately for adult women, related to empowerment and/or employment. To supplement this analysis, we conduct a keyword search on Google Scholar to check for any studies not included in Bastagli et al. (2016) but fit our search criteria. Using this method, we identify an additional 9 studies to be included in our sample.

In table 1, we outline the set of outcomes included in our study. For each study identified, we identify the main specification estimate of the impact of cash transfers for a range of empowerment and employment outcomes for adult women. When the study includes more than one econometric specification on the same estimator, we use the authors' preferred specification from the study for the identified outcome.

Table 1: Outcomes included in the dataset, with the study counts and number of estimators

Outcomes	N Studies	N Estimates	N Main Estimates	Total Countries
Panel A: Employment				
Labor Force Participation for Women	25	75	31	15
Intensity of labor for women	16	37	20	13
Others (income, unemployment)	4	9	4	3
Panel B: Empowerment				
Prevalence of Gender-Based Violence	8	31	22	5
Marriage, Sex, and Reproduction	16	75	35	10
Decision Making	9	38	24	6

Note: Breakdown of the number of studies and treatment effects estimates in our study, by outcome type. Main estimates are defined as the treatment effect estimate pertaining to the most aggregated population within each indicator-study pair.

For each of these outcomes, we extract the estimated treatment effects from the main specification. We collect data on the precision of the estimated effect, including information on the sample size and the standard error[6]. We also collect information on the characteristics of the program evaluation, including the starting and ending year of the evaluation, characteristics of the sample (e.g. age range of the recipient), and, importantly, the methodology of the study.

[6]When the authors do not report the standard error, we impute the value based on the reported information, such as the significance category or the t-statistic.

We include in our dataset any estimates of heterogeneous treatment effects across subgroups of the population, such as impacts on women living in rural versus urban regions. As only some studies provide estimates for these subgroups, we define a 'main estimate' indicator to allow comparability across studies. The 'main estimate' indicator variable takes a value of one for the most general or aggregated population estimated for each indicator-study pair.

Classifying outcomes for Adult Women: As seen in Table 1, we broadly categorize the measured outcomes for women into two categories: employment and empowerment. We find 32 studies that estimate the impact of cash transfers on labor market outcomes for women, including 25 studies on labor force participation, 16 studies on the number of hours worked, and 4 studies on other employment indicators[7]. On the extensive margin, Daidone et al. (2014); Barrientos and Villa (2013); Alzúa et al. (2013) study the impact of cash transfers on the probability that women work in the labor force. On the intensive margin, Ferro and Nicollela (2007); Ospina (2010); Maluccio and Flores (2005) study the impact of cash transfers on the number of hours worked outside the home.

The second set of studies focuses on the impact of cash transfers on measures of empowerment. We group empowerment outcomes into three domains: (i) decision-making power (9 studies), (ii) sex, marriage, and reproduction (16 studies), and (iii) gender-based violence (8 studies). Within decision-making, the literature analyses the impact of cash transfers on whether women are sole or joint decision-makers on work or matters relating to children (e.g. Handa et al., 2009), expenditure decisions (e.g. Adato et al., 2000) or investment (e.g. Merttens and Jones, 2014). Marriage, sex, and reproduction outcomes are the broadest measure of empowerment. Todd et al. (2010) consider the impact of cash transfers on the probability of giving birth; Stecklov et al. (2006) consider the impact of cash transfers on the probability of using contraception; and Andaleeb et al. (2011); Baird et al. (2011) consider the impact of cash transfers on marital status. Lastly, authors measure the impact of cash transfers on gender-based violence, by considering the probability of physical, emotional, or sexual abuse (e.g. Bobonis et al., 2013; Hidrobo and Fernald, 2013; Hidrobo et al., 2012).

[7]Some studies study more than one category of employment outcome

3.2 Characteristics of the cash transfer programs

The studies in our sample estimate the impact of 30 cash transfer programs. These cash transfer programs differ in their design and the environments in which they were implemented. Although most meta-analyses are agnostic towards these differences (and generally assume that programs are similarly designed across contexts), our dataset allows us to consider more explicitly the importance of program characteristics for the heterogeneity in estimated treatment effects.

We collect information on the characteristics and design of the 30 programs in our sample of studies. In table 2, we outline the definitions for the key program characteristics that are in our dataset. We include key variables related to the design of the cash transfer programs, including the frequency and method of cash payments, the conditionalities of the cash transfer program, the target recipient, and the minimum and maximum household transfer sizes. For our main analysis, we express the transfer sizes as a percentage of the national food poverty lines, using data from Development Initiatives food poverty report (Development Initiatives, 2020). This gives us a measure of cash transfer sizes that is comparable across countries.

Table 2: Definition of variables collected on program characteristics

Variable	**Definition**
Conditionalities	The conditions that need to be met for a household to be eligible for the cash transfer.
Payment frequency	The frequency at which the cash transfer is administered to the recipient.
Payment method	The means by which the cash transfer is delivered to the recipient.
Target recipient	The stated target recipient for the cash transfer program.
Minimum HH transfer size	The minimum transfer that a household can receive per month for a cash transfer program, conditional on being eligible for the transfer. Where transfers vary according to the characteristics of the member, the variable takes the smallest transfer size.
Maximum HH transfer size	The maximum transfer that a household can receive per month for a cash transfer program, conditional on being eligible for the transfer.

Note: Main cash transfer program characteristics variables in our dataset.

3.3 Baseline country-level characteristics

Lastly, we map the results from each study to measures of labor market conditions and social norms in the country at the starting year of the program evaluation.

We use data from the Jobs of the World Database to capture measures of labor market conditions and social norms for women across countries in our dataset. The Jobs of the World is built from individual-level data created by harmonizing National Censuses (IPUMS) and Demographic and Health Surveys (DHS). Both are representative at the subnational level, and its coverage is high for the study years of this review. Due to variations in survey and census collection timelines across countries, the dataset contains different years of information for each country. We match each study estimate to the JWD observation of its respective country with the year closest to the baseline year of the program evaluation.

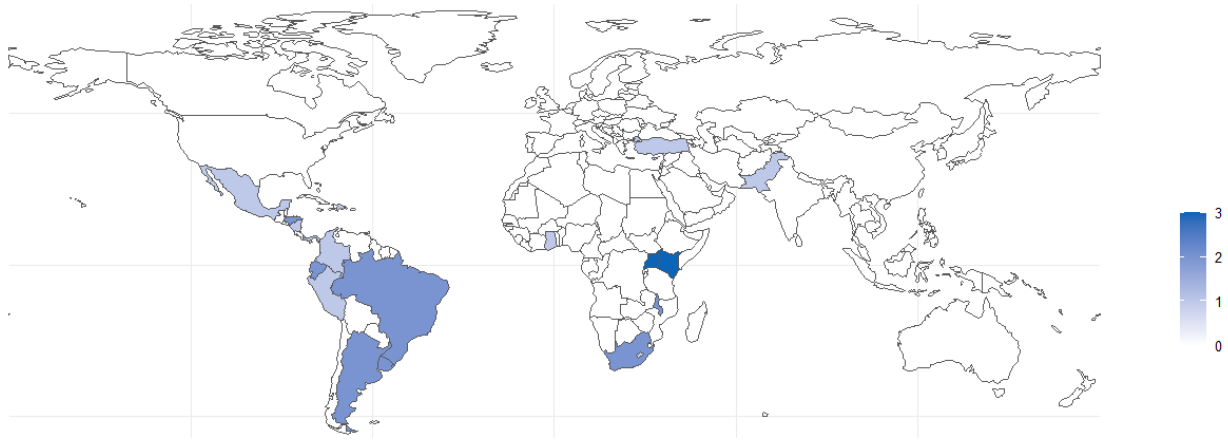
Lastly, we collect country-level information from the World Bank Development Indicators database on gender social norms. This data was matched precisely to the baseline evaluation year of each study.

4 Summary of studies and Cash Transfers

In total, we identify a sample of 56 studies with 265 estimated treatment effects on the impact of cash transfers on women's employment and empowerment. Our studies span 30 cash transfer programs across 19 Lower and Middle-income countries, published between 2000-2015. 64% of studies are focused on cash transfers in countries in Latin America and the Caribbean, followed by 33% in sub-Saharan Africa and the rest in Central Asia, Middle East and North Africa. The distribution of studies across countries can be seen in Figure 2.

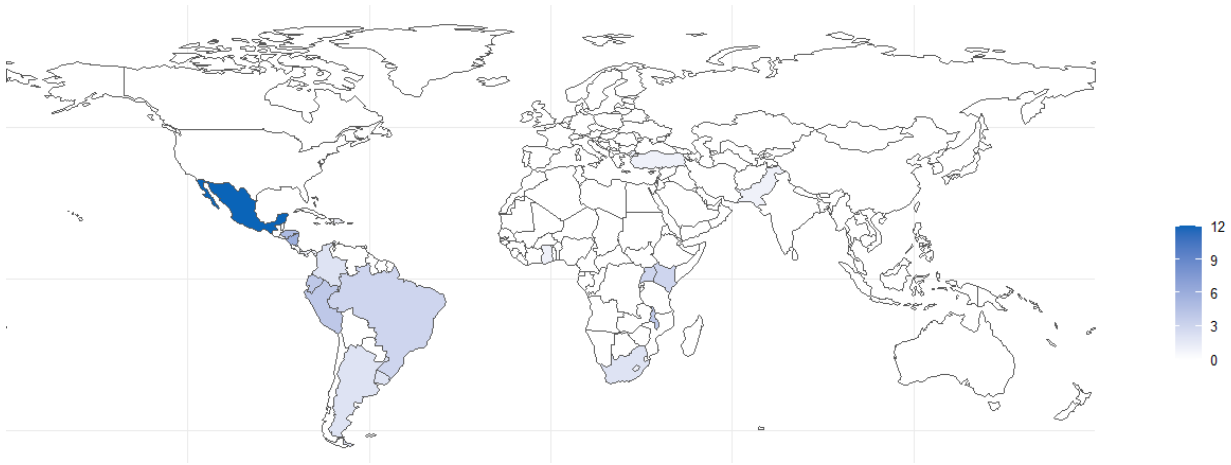
The period in which the cash transfer programs were evaluated is between 1997 (the first start year) to 2014 (the last end year). On average, each paper has a study length of 2.58 years and at most, a 7-year evaluation window, as shown in Figure 3. More than half (n=30) of the studies use random variation to estimate the causal effect of interest. Of the studies that use non-experimental variation to estimate the causal impact, the most common identification strategy is that of Propensity Score Matching.

Figure 1: Distribution of Evaluated Cash Transfer programs, by country



Note: Distribution of the number of cash transfer programs that have associated program evaluations on the impact of cash transfers on women's employment and empowerment outcomes.

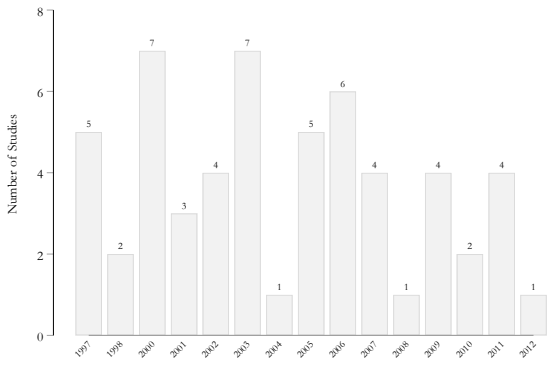
Figure 2: Distribution of cash transfer program evaluations on women, by country



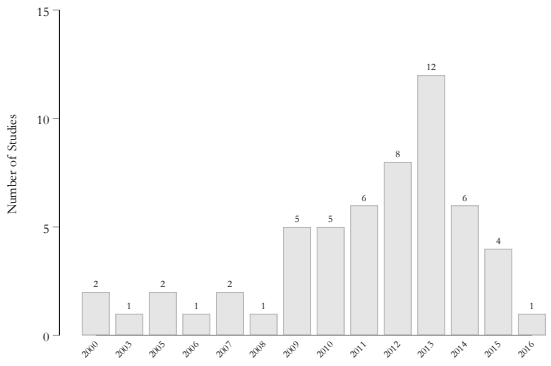
Note: Distribution of the number of program evaluations on the impact of cash transfers on women's employment and empowerment outcomes.

Figure 3: **Start and Publication years of studies**

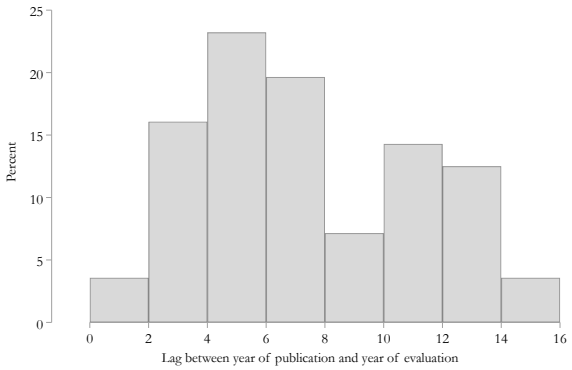
(a) Number of studies by start year of evaluation



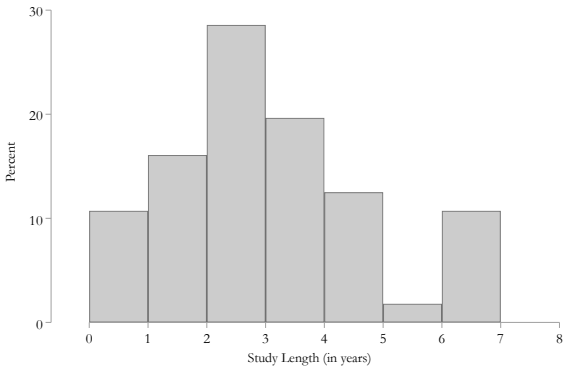
(b) Number of studies by publication year



(c) Lag: Year of publication - Evaluation year



(d) Study Length



Note: Panel A shows a frequency graph of the number of studies by the starting year of the evaluation. Panel B shows the number of studies by publication year of each study. Panel C shows the lag between the year of publication and the evaluation year. Lastly, Panel D is calculated as the study length in years. This is the difference in years between baseline and end-line surveys for each study.

Characteristics of Cash Transfers: The majority of cash transfer programs in our sample are administered at the household level and have the woman or caregiver as the main recipient of the cash transfer. Despite this, only 6 of these programs have gender equality or empowerment as an explicit goal, and only 4 have the explicit aim of employment generation. The focus of these programs is, instead, reducing poverty: 19 (63%) of the cash transfers in our sample are implemented as part of the country's national poverty eradication program.

The cash transfer programs that are studied tend to be Conditional Cash Transfer programs, with conditionalities attached to the education and health outcomes of children. 12 of the cash transfer programs studied are Unconditional Cash Transfers or labeled Cash Transfers. 6 out of 30 programs studied in our sample are cash transfers that are bundled with skills and training support or employment assistance for beneficiaries. [8] Of the 24 remaining, 16 are cash transfers delivered with no additional support (e.g. in-kind transfers, family support, health support). We outline other characteristics of the cash transfers in our study in Table 3.

[8] *Bono Vida Mejor (Honduras)* provides employment assistance, *YOP (Uganda)* provides planning support and training, *Programa Jefes de Hogar (Argentina)* employment assistance and training *WINGS (Uganda)* skills training, in-kind transfers, employment assistance *Plan de Atencion Nacional a la Emergencia Social - PANES (Uruguay)* provides in-kind transfers, training and support, employment assistance and family support, and lastly, *Red de Oportunidades (Panama)* provides Training, family support, and free access to health services for pregnant women.

Table 3: Characteristics of Cash Transfers (CTs) in our review

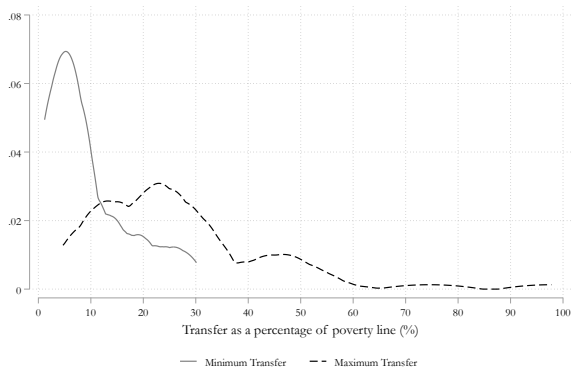
	Number of CTs studied	Share of CTs studied (%)
Recipient		
Only women as recipient of CT	12	40
Household head as recipient of CT	10	33
Primary caregiver recipient of CT	5	17
Pensioner recipient	1	3
Complementarities		
Cash + In-kind	7	23
Cash + Skills and training	6	20
Cash + Employment assistance	5	17
Cash + Health support	4	13
Cash + Family/community support	6	20
Main objectives of CT		
Implemented as part of a national poverty eradication program	19	63
Focus Women empowerment or gender equity	6	20
Focus on employment generation	4	13
Conditionalities		
Utilization of social services	14	47
Children enrolled in school	16	53
Children school attendance	16	53
Periodic health check-ups	15	50
Nutritional activities	7	23
Immunization of children	3	10
Supply of labor	2	7
CT treated as UCT	12	40
Targeting strategies		
Geographical	21	70
Income test	10	33
Means test	15	50
Proxy means test	17	57
Payment methods		
Only Cash	8	27
Only Pre-Paid Card/Voucher	8	27
Only Bank Deposit	2	7
Only Digital Money	1	3
Cash + Bank Deposit	6	20
Cash + Digital money	1	3
Cash + Pre-Paid Card/Voucher	1	3
Bank Deposit + Pre-Paid Card/Voucher	3	10
Payment frequency		
Monthly	22	73
Bimonthly	3	10
Yearly	4	13
Quarterly	1	0
Randomization		
CT randomized at any point of the design stage	18	60
Observations	30	

Note: Breakdown of design characteristics for the programs in our sample. Characteristics include information on the (i) **Recipient** of the cash transfer; (ii) **Complementarities**: whether the cash transfer was delivered with any other additional support; (iii) **Main objectives of CT**: the objective or population target for each cash transfer; (iv) **Conditionalities**: whether the cash transfer was conditional on any activities; (v) **Targeting strategies**: the main targeting instrument used to classify eligibility to the program; (vi) **Payment Method**; (vii) **Payment frequency**; and (viii) **Randomization**: whether the program was randomized at any stage.

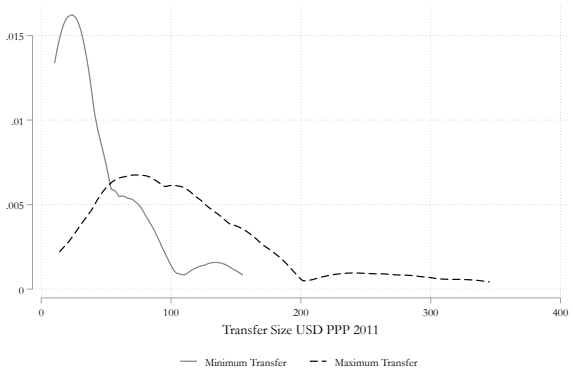
An important feature of the programs we study is the size of the cash transfer. In figure 4, we plot the distributions of the minimum and maximum monthly household transfer size, as a percentage of the household poverty line and in 2011 USD PPP. The distribution of the minimum transfer size is skewed to the left and concentrated around 0.05% of the poverty line. In contrast, we see much more variation in the maximum transfer size across programs.

Figure 4: **Distribution of minimum and maximum size of cash transfers**

(a) As a percentage of poverty line



(b) USD PPP 2011



Note: Distribution of minimum and maximum cash transfer sizes as a percentage of the food poverty line (left), and in USD PPP 2011 (right)

Measures of employment and empowerment: As seen in Table 4, our sample includes 265 measures of the impact of cash transfers on the economic and non-economic empowerment of women.

Table 4: Number of studies and treatment effects, by methodology and outcomes

	Studies (S)	Treatment Effects (N)
Aggregate	56	265
Outcome of Interest		
Empowerment	29	144
Employment	32	121
Methodology		
Experimental	30	166
Non-experimental	26	99

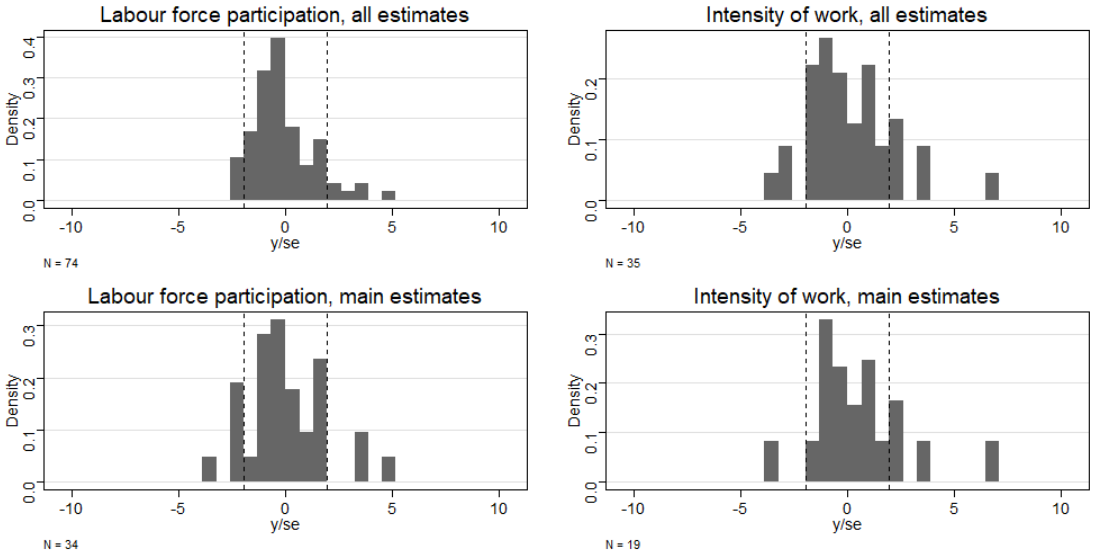
Note: Breakdown of number of different studies and treatment effects by outcome of interest and methodology

However, there is large heterogeneity in the types of outcomes that authors use to capture empowerment. In total, our dataset includes 121 effects on the effect of cash transfers on employment outcomes, including 75 on the labor force participation of women (the extensive margin); 37 on the number of hours worked (the intensive margin); and 9 on other dimensions of employment outcomes (e.g. income). In addition, we have 144 estimates capturing non-economic measures of empowerment, including 75 estimates on the effect on sex, marriage, and reproductive outcomes; 31 estimates on the effect on gender-based violence; and 38 estimates on the effect on decision making.

Distribution of treatment effects: In figures 5 and 6 we plot the distribution of the precision-weighted treatment effects (the z-statistic) of the impact of cash transfers on adult women for employment and empowerment. We split the density plots by outcomes and by estimate type. In particular, we include density plots of 'all estimates', i.e. all estimates of the given outcome variable that is in our dataset; and 'main estimates', which takes the broadest and most general treatment effect estimate on adult women within each study outcome and excludes the set of estimates that are on heterogeneous populations within papers (e.g. urban vs. rural; age group breakdowns).

As seen in figure 5, the impact of cash transfers on the employment of women tends to be small in magnitude and statistically insignificant across studies. Within employment, the mean of the 'main estimates' is 1.8 percentage points, with 75% of estimates lying between a -1.8 and 3.9 percentage point increase in labor force participation. Taken in context, the average national share of female labor force participation in our sample of countries is 45.1%. Thus, taking the mean estimated treatment effect on labor force participation, a cash transfer can contribute to around 4% of the labor force participation of women. Regarding labor intensity, the mean impact on weekly hours worked within the 'main estimates' is a 0.087 hour increase. 75% of effects lie between -1.5 and 1.46 weekly hours worked. Our distribution of treatment effects in employment is consistent with findings from existing meta-analyses of cash transfers. For instance, Banerjee et al. (2017) conduct a meta-analysis of 7 randomized controlled trials of cash transfers, and find no significant effects of cash transfers on women's labor supply.

Figure 5: Employment z-stat distribution across categories

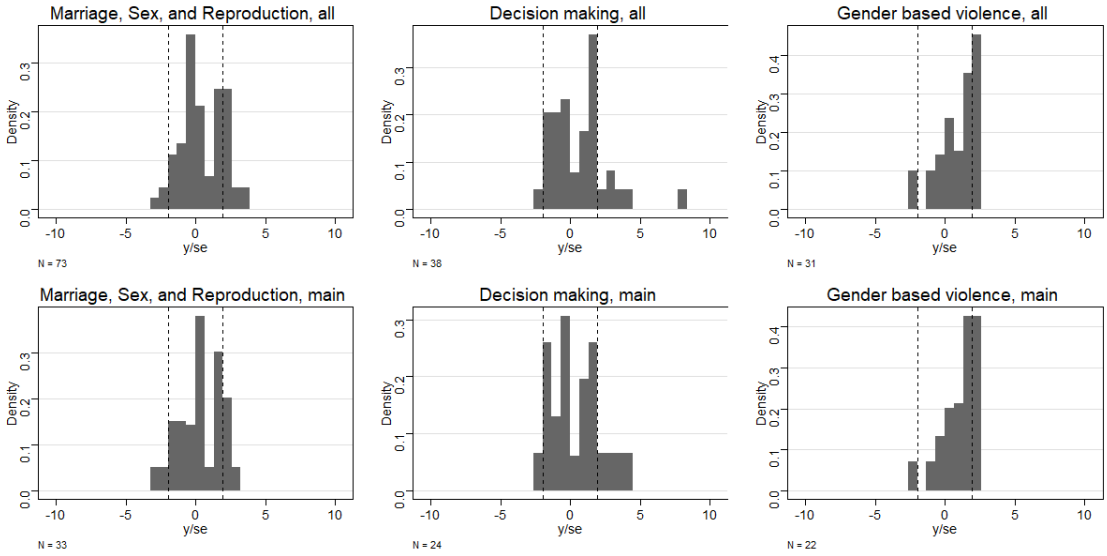


Note: Distribution of estimated z-statistics across studies and outcome types. The z-statistic is calculated as the estimated treatment effect divided by the standard error. The 'main estimates' subsample takes the most general treatment effect estimate for adult women within each study outcome. The 'All estimates' is the distribution of our full sample. Dotted vertical lines indicate thresholds of 5% significance, i.e. where the z-statistic is equal to -1.96 and 1.96.

In figure 6 we plot the distribution of the estimated impact of cash transfers across the three categories of non-economic measures of empowerment. We reweight treatment effects here to be positive when there is an improvement in welfare – i.e. a positive treatment effect on gender-based violence indicates a reduction in the prevalence of gender-based violence.

The impact of cash transfers on women differs largely across the categories of decision-making; gender based violence; and marriage, sex, and reproduction. However, across all three categories, there are very few studies that find negative and significant impacts of cash transfers on empowerment outcomes. We find that on average, the impacts of cash transfers on decision-making and gender-based violence are positively skewed and concentrated around positive and insignificant effects. This is consistent with existing meta-analyses of cash transfers and gender based violence (e.g. Baranov et al., 2021; Buller et al., 2018).

Figure 6: Empowerment z-stat distribution across categories



Note: Distribution of estimated z-statistics across studies and outcome types. The z-statistic is calculated as the estimated treatment effect divided by the standard error. The 'main estimates' subsample takes the most general treatment effect estimate for adult women within each study outcome. The 'All estimates' is the distribution of our full sample. Dotted vertical lines indicate thresholds of 5% significance, i.e. where the z-statistic is equal to -1.96 and 1.96.

5 Heterogeneity by design characteristics

In this section, we explore how differences in the design features of cash transfer programs (as outlined in section 2.2.1) correlate with the impact of cash transfers on the employment and empowerment of women. In table A.1, we include a full breakdown of the distribution of design characteristics across outcome categories. We do not have sufficient variation across all design features outlined in our conceptual framework (section 2.2.1).[9] Thus in this section, we focus on exploring heterogeneity across some key dimensions that differ sufficiently across programs and studies in our sample.

Transfer Sizes: We first consider the relationship between treatment effects and the size of the cash transfer. In figures 7 and 8, we plot the relationship between the maximum transfer size of the cash transfer, and the estimated treatment effects on the labor force participation of women and other non-economic empowerment measures of women, aged 15 and over.[10] We include in these graphs the 'main' treatment effects only. That is, the treatment effects corresponding to the most aggregated population of women in each paper.[11]

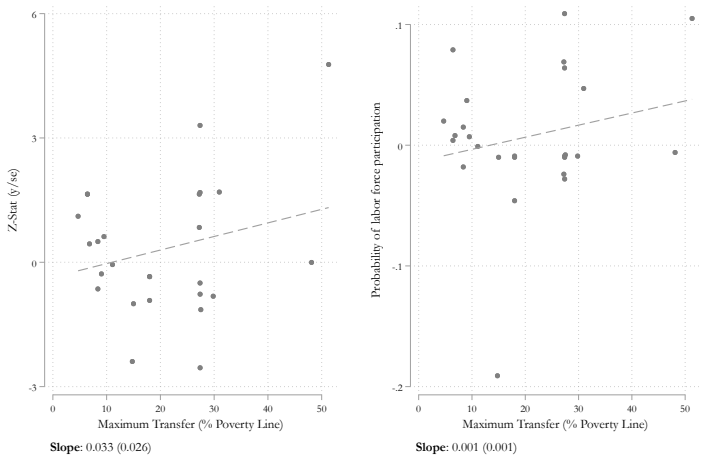
While the effects on labor force participation tend to be small and insignificant, the largest estimated impacts are concentrated around studies of cash transfers with higher transfer sizes, observed in the upward relationship between the precision-weighted treatment effects (the z statistic) and the maximum transfer size (figure 7). Within the sample of studies that evaluate employment outcomes for women, the maximum transfer size ranges from 5 to 250 USD per month, representing 0.1 to 0.52 percent of the national food poverty lines (mean 0.43, median 0.09). In contrast, there is no strong relationship between the transfer size and non-economic measures of empowerment, as seen in figure 8. In the Appendix, we explore the relationship between the impact of cash transfers on hours worked and transfer sizes (see figure A.3).

[9] For example, of the 20 studies that study decision-making outcomes, 75% of the observations on maximum transfer size are within 6 percentage points difference, between 21% and 27%.

[10] We focus on the maximum transfer size of the program, since this measure has more dispersion across cash transfers and captures the maximum willingness to pay for each beneficiary (see figure 4.)

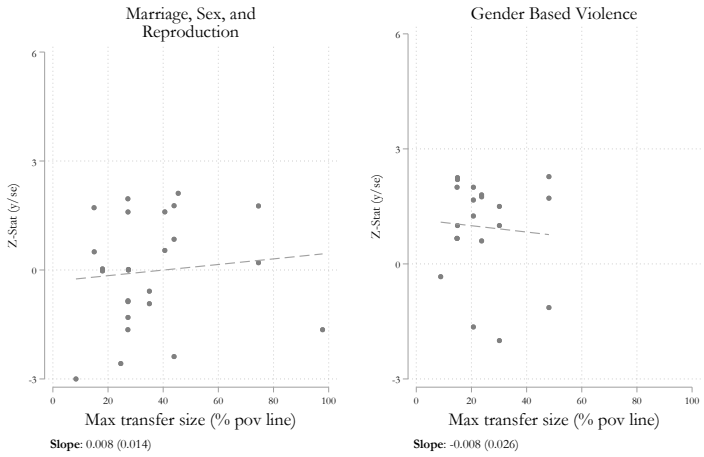
[11] For example, if a paper reports estimated treatment effect for all adult women and further reports treatment effects across different age brackets of adult women, the 'main' treatment effect of the paper will be the aggregated treatment effect for all adult women.

Figure 7: **Treatment effects on women's labor force participation, by transfer size.**



Note: Scatter with linear fit plot of the relationship between maximum transfer size, and the main effect estimates of the impact of cash transfers on women's labor force participation. Effect estimates are summarised in two ways. Left panel: precision-weighted treatment effect (z-statistic); Right panel: change in women's labor force participation.

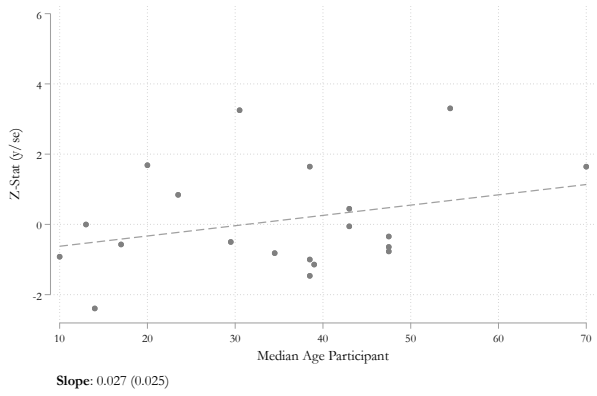
Figure 8: **Treatment effects on other empowerment measurements, by transfer size**



Note: Scatter with linear fit plot of the relationship between maximum transfer size, and the main effect estimates of the impact of cash transfers on empowerment, by empowerment category. We exclude decision-making outcomes since we have insufficient variation in the maximum transfer size across these studies (see table A.1).

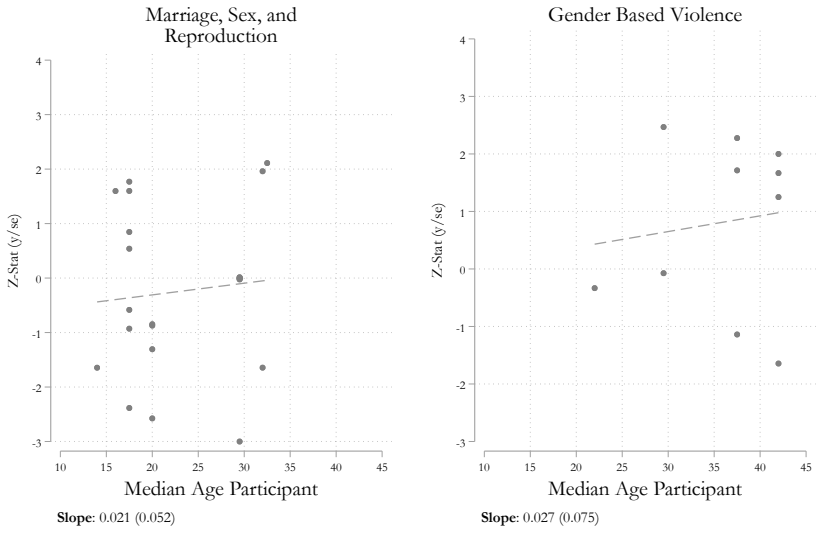
Age ranges of the treated women: Beyond transfer size, there is large heterogeneity across studies in the ages of recipients for programs, ranging from a median age of 15 to 70 years, with an average median age of 31 years. In Figures 9 and 10, we capture the relationship between the median age of the evaluated individuals in each point estimate and the estimated treatment effects for labor force participation and empowerment. We find that a higher median age is weakly correlated with more positive treatment effects.

Figure 9: **Median age and treatment effects on women's labor force participation**



Note: Scatter with linear fit plot of the relationship between the median age of the cash transfer recipient, and the main effect estimates of cash transfers on women's labor force participation. The median age is defined as the median of the age range corresponding with the treatment effect in the study.

Figure 10: **Median age and treatment effects on empowerment**



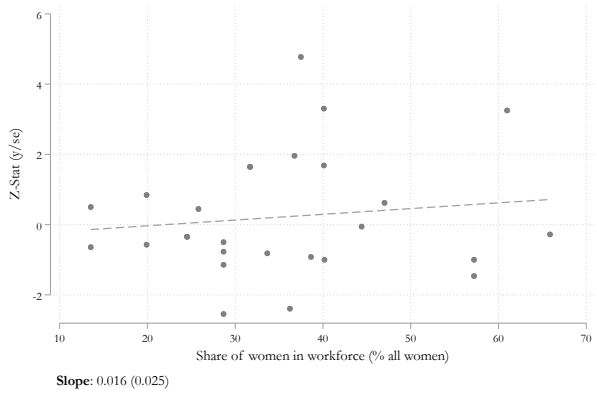
Note: Scatter with linear fit plot of the relationship between the median-age of the cash transfer recipient, and the the main effect estimates of cash transfers on empowerment outcomes. The median-age is defined as the median of the age-range corresponding with the treatment effect in the study. We exclude estimates on decision-making in this figure since there is an insufficient number of treatment effects for this outcome category that report the age range of the recipient (N=3).

Other sources of heterogeneity in design features: We explore other sources of heterogeneity in the design characteristics in figures A.1 and A.2. We document heterogeneity in treatment effects across outcome categories by (i) payment method; (ii) frequency of the disbursement of the cash transfer, (iii) if the cash transfer has an explicit objective of empowering women; (iv) whether the cash transfer is conditional or unconditional, and lastly (v) by the beneficiary's length of exposure to the program. For these characteristics, we have limited variation in the design features across the programs and outcomes studied. Therefore we are under-powered to make conclusions on the relationship between treatment effects and design characteristics along these dimensions.

6 Heterogeneity by cross country characteristics

We now turn to considering the relationship between the estimated impact of cash transfers on women, and baseline characteristics at the country level. As outlined in section 2.2.2, we consider two aspects of cross-country characteristics at the starting year of the program evaluation: gender social norms, and pre-existing labor market conditions at baseline. For cross-country characteristics, we use data from the Jobs of the World Database for labor market conditions and early marriages, and data from the World Bank Development Indicators database for indicators on adolescent fertility rates (details in section 3). We match data on the pre-existing labor market characteristics by the urban-rural classification of the population for which the treatment effect was estimated. For example, for treatment effects of women living in urban areas, we match the treatment effect to the baseline labor market conditions in urban areas from the JWD.

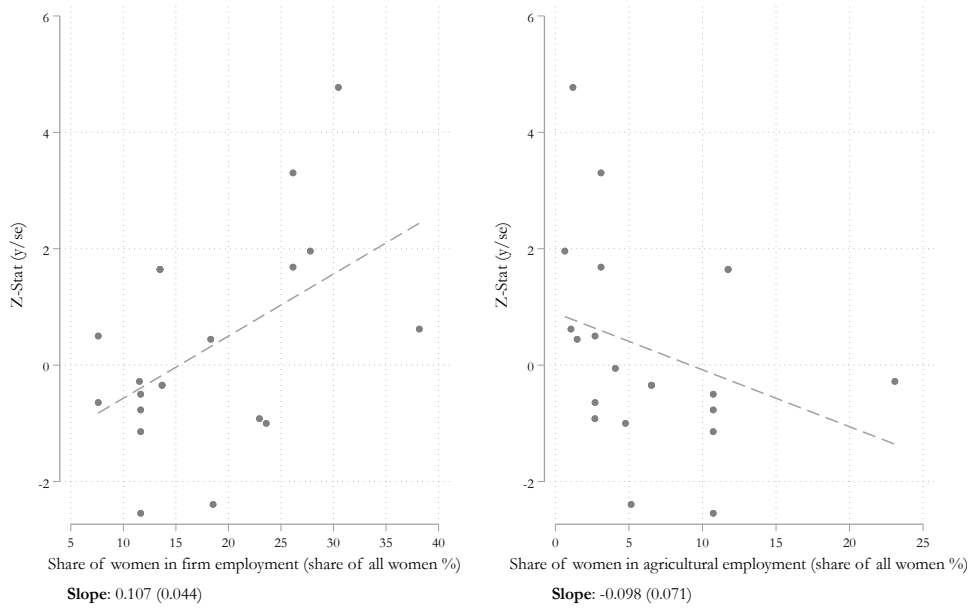
Figure 11: **Treatment effects on women's labor force participation, and baseline share of women working**



Note: Scatter with linear fit plot of the main effect estimates of the impact of cash transfers on women's labor force participation and the share of women in work at the starting year of the evaluation. We match each effect estimate to the labor force participation of the corresponding urban-rural classification for the population for which the treatment effect was estimated. Data: Treatment effects (authors' collected data from papers); Employment data (JWD).

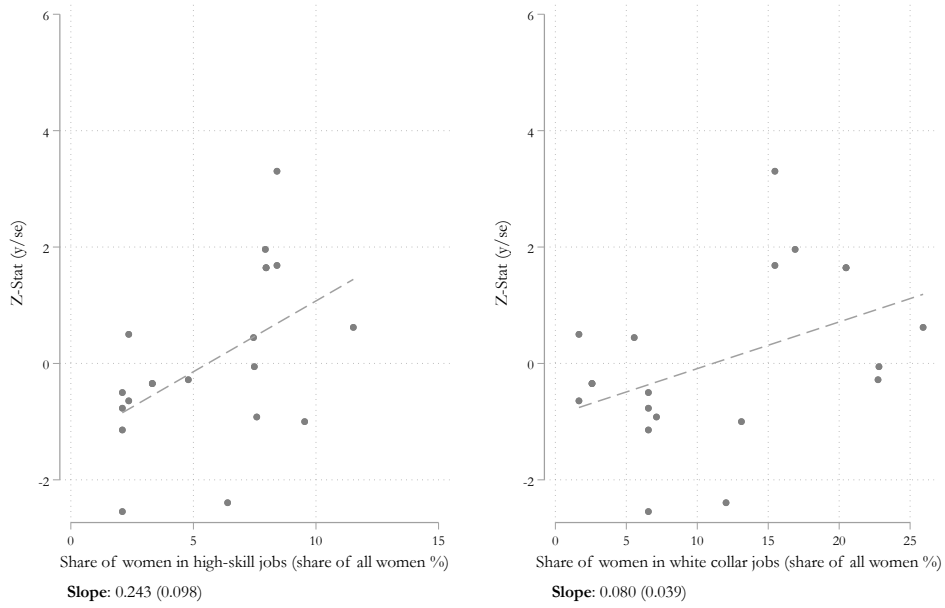
Employment and baseline country conditions: For employment, the strongest predictors of the causal impact of cash transfers on women's labor force participation are measures of existing labor market conditions before the starting year of the evaluation. In general, we find stronger estimated impacts of cash transfers on women's labor force participation in countries with a higher proportion of women already working in the labor force before the program evaluation (see figure 11). This relationship is primarily driven by the gender composition of the labor market across sectors: a higher proportion of women working in formal employment is associated with a higher estimated impact of cash transfers on women's employment. Conversely, a higher proportion of women in agricultural employment is associated with smaller estimated impacts of cash transfers on women (figure 12). The same upward relationship is found between treatment effects on labor force participation and the share of women in high-skill jobs and white-collar jobs, as shown in figure 13.

Figure 12: **Treatment effects on women's labor force participation and baseline share of women in firm vs agricultural employment**



Note: Left panel: Scatter with linear fit plot of the main effect estimates of cash transfers on women's labor force participation and the share of women working in firms at the starting year of the evaluation. Right panel: Scatter with linear fit plot of the main effect estimates of cash transfers on women's labor force participation and the share of women working in agricultural employment at the starting year of the evaluation. We match each effect estimate to the labor force participation of the corresponding urban-rural classification for the population for which the treatment effect was estimated. Data: Treatment effects (authors' collected data from papers); Employment data (JWD).

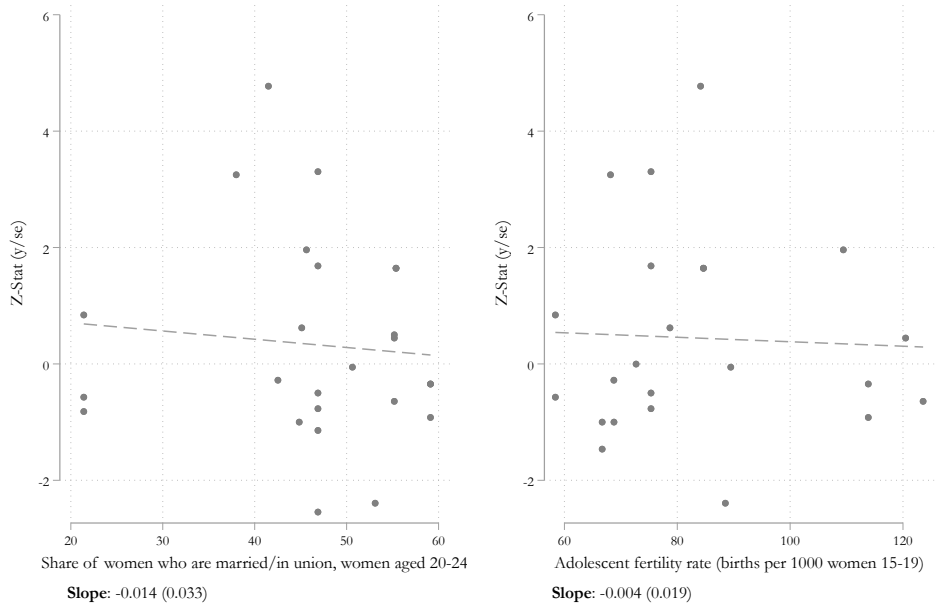
Figure 13: **Treatment effects on women's labor force participation and baseline share of women in high-skill jobs and white collar jobs**



Note: Left panel: Scatter with linear fit plot of the main effect estimates of cash transfers on women's labor force participation and the share of women working in high-skill jobs at the starting year of the evaluation. Right panel: Scatter with linear fit plot of the main effect estimates of cash transfers on women's labor force participation and the share of women working in white-collar jobs at the starting year of the evaluation. We match each effect estimate to the labor force participation of the corresponding urban-rural classification for the population for which the treatment effect was estimated. Data: Treatment effects (authors' collected data from papers); Employment data (JWD).

In contrast, the impact of cash transfers on women's employment are not strongly correlated with other baseline measures of women's equality and gender social norms. In figure 14 we plot the relationship between estimated treatment effects and the prevalence of young marriages (ages 20-24) and adolescent fertility rates. There is no systematic relationship between these measures of social norms and the treatment effects on employment.

Figure 14: **Treatment Effects on women's labor force participation, and fertility & marital norms**



Note: Scatter with linear fit plot of the main effect estimates of cash transfers on women's labor force participation and share of women married between 20-24 (left panel), and adolescent fertility rates (right panel). Data: Treatment effects (authors' collected data from papers); Share women married/in union between 20-24 (JWD); Adolescent fertility rate (World Bank Development Indicators).

Empowerment and baseline country conditions: We now explore how the impact of cash transfers on non-economic measures of empowerment differ by baseline proxies for gender social norms at the country level. Similar to section 5, we do not have sufficient variation across all baseline country decisions. For instance, of the studies that report the impact on decision-making, 75% of the observations on the share of women married between 20-24 lie within 5 percentage points difference, between 45% and 50%. Thus we are underpowered to explore the trends within this dimension[12].

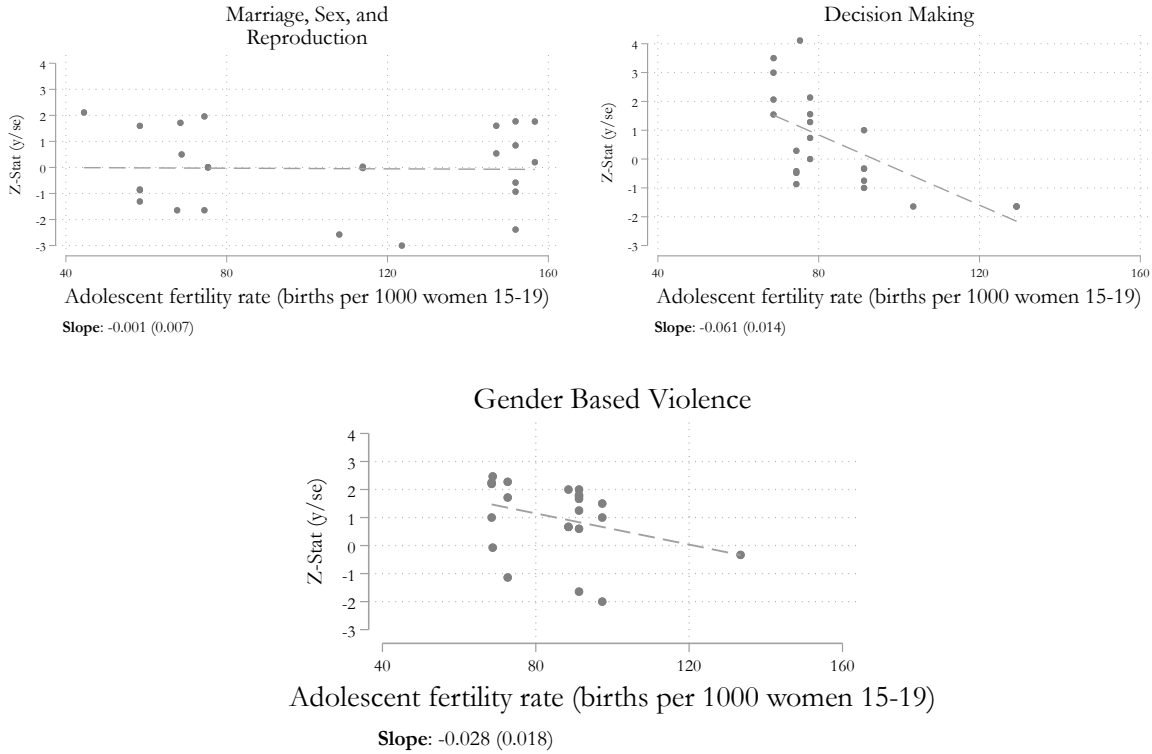
In figure 15 and figure 16 we plot the relationship between non-economic measures of empowerment and the country-level rates of adolescent fertility and marriage. We find mixed evidence of the importance of these social norms across the subcategories of outcome measures of empowerment.

First, higher rates of adolescent birth and young marriages are not correlated with the estimated cash transfer impact on marriage, sex, and reproduction. Second, lower adolescent fertility and young marriages are predictive of higher improvements in decision-making power for women. Lastly, lower rates of young marriages and adolescent births are associated with larger improvements on gender-based violence.

Robustness to other data sources: Across the measures of employment and non-economic empowerment, we consistently find that places with better conditions at baseline have larger impacts. In the Appendix (figures A.5a and A.5b), we test for the sensitivity of our results to the use of different measures of country-level characteristics from the World Bank Development Indicators database. Our results remain robust to measures of economic and social conditions from different data sources.

[12]See table A.1 for a full breakdown of the distribution in characteristics across outcomes

Figure 15: **Treatment effects on empowerment, and adolescent fertility rates**



Note: Scatter with linear fit plot of the main effect estimates of cash transfers on women's empowerment outcomes and adolescent fertility rates. Data: Treatment effects (authors' collected data from papers); Adolescent fertility rate (World Bank Development Indicators).

Figure 16: **Treatment effects on empowerment and marital norms**

Note: Scatter with linear fit plot of the main effect estimates of cash transfers on women's empowerment outcomes and share of women married or in union, aged 20-24. Data: Treatment effects (authors' collected data from papers); Share women married/in union between 20-24 (JWD). We exclude decision-making outcomes since we have insufficient variation in marital norms for these studies (see table A.1).

7 Discussion

Overall, our findings suggest that more equal gender social norms and stronger initial labor market conditions are systematically correlated with higher estimated impacts of cash transfers on adult women. In a world with no labor market frictions and equal gender social norms, we would expect cash transfers to increase women's labor force participation and empowerment by relieving individual constraints. Instead, we find that the impacts of cash transfers on women's employment and empowerment are smaller in places where women work

less, get married at a younger age, and where the adolescent fertility rate is higher. Our results suggest that societal, rather than individual barriers, are the more binding constraint to women's employment and empowerment. Cash transfers are more effective at improving women's outcomes in areas where the preexisting structural and social barriers for women are lower.

To some extent, this is not surprising. Although women are often the main recipients of cash transfer programs, the majority of cash transfer programs are not explicitly designed to improve outcomes for adult women. Moreover, given that the transfer sizes are small (an average maximum transfer size of 27 % of the per capita food poverty line), the average cash injection is not sufficiently large to overcome constraints to women's equality. Thus, we do not observe transformative impacts on women's employment and empowerment. Rather, higher impacts of cash transfers on adult women are concentrated in programs with high transfer sizes, and in countries where the existing economic and cultural barriers to improving the set of empowerment outcomes are not very high.

This does not mean that cash transfers cannot be a helpful tool for improving economic empowerment for women. As we outline in section 2.2.1, there are various theoretical underpinnings for how cash transfers can be designed to specifically address women's constraints. Our empirical analysis in section 5 suggests that larger transfer sizes correspond with larger impacts on women's labor force participation. We have insufficient variation in design features across the evaluated programs in our sample to explore all the design dimensions we outline in 2.2.1. However, the existing empirical literature does suggest that other features, such as direct payment methods, are important. For instance, Field et al. (2022) find that direct deposit transfers allow women to retain control over cash injections and thus have larger impacts on women's empowerment. Identity authentication at withdrawal points may also help reduce leakages and allow transfers to reach women, especially in areas with high corruption (Muralidharan et al., 2016).

Moreover, the largest impacts we find on adult women's employment are for cash transfer programs that are bundled with employment assistance and skills training (e.g. Programas Jefes de Hogar in Argentina and WINGS in Uganda). These programs yield impacts that are, on average, more than 10 times stronger than cash transfers without an employment focus. Beyond bundled interventions, systems linkages to gender-sensitive complementary services (such as to existing health or financial services) or providing complementary activities (such as training on savings, financial literacy, or nutrition) could further improve

women's outcomes.

To be truly gender transformative, programs should address biased gender norms that are often the key drivers of gender inequalities. For instance, Bursztyn et al. (2020) find that correcting men's beliefs on the support for women working outside the home can increase the probability that women look for jobs outside the home, which are often higher paid. Complementary programs can also indirectly challenge restrictive gender norms within the household and community, by promoting activities for women that differ from traditional gender roles. Without addressing these structural inequalities, targeting women with cash transfers is less likely to translate into better economic opportunities, status, and well-being.

Lastly, the limited effects we find in empowerment could be driven by the fact that in the standard literature, measures of empowerment are too noisy and hence, difficult to generalize. As we outline in section 4, there is a large degree of heterogeneity in the way empowerment is captured as an outcome variable. We show in our analysis that the correlations between these outcome variable categories and baseline characteristics differ depending on the category of empowerment we consider[13]. Hence, better defining what is meant when referring to improvements in women's empowerment would go a long way to improving the usefulness of these studies, and our understanding of the exact policy design needed to improve specific outcomes.

8 Conclusion

In this paper, we conducted a systematic review of 56 papers that studied the impact of cash transfers on adult women between 2000 and 2015. We collected information on 265 treatment effects on adult women and the corresponding characteristics of the program's design, including transfer sizes, conditionalities, payment methods, and evaluation period. We use this data to explore the extent to which design features and country-level conditions can explain the heterogeneity in effect estimates across studies.

We find that cash transfers are more impactful when they are larger in size, and when they

[13]An interesting extension of this would be to consider how the impact of cash transfers on empowerment relates to the impact on employment outcomes. However, only 4 out of 56 studies in our sample measure impacts across both outcome categories. Hence we have insufficient power to explore this dimension of heterogeneity.

are administered in areas with better labor market conditions and more equal gender social norms. These findings are consistent with the literature on big-push policies (Banerjee and Newman, 1993; Bandiera et al., 2020; Bouguen et al., 2019), and the growing literature studying complementarities between cash transfer programs and local economic conditions (Bandiera et al., 2022; Molina and Vidiella-Martin, 2021). Our results highlight the importance of design features and country-level conditions when understanding the effectiveness of programs.

To design optimal policies, it is important to systematically evaluate how design characteristics and local market conditions affect and interact with program outcomes. To do this, we need more rigorous and systematic data collection of program characteristics, evaluation outcomes, and local economic conditions. Our paper provides a useful first step to this and illustrates how collecting this data can improve our understanding of the impact of programs across contexts.

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A Appendix

A.1 Distribution of design and study features by study outcome

As seen in table A.1, there is large variation in the design characteristics and local conditions across study outcomes. In the main analysis, we focus on relationships between treatment effects and characteristics that have sufficient variation within the outcome category.

Table A.1: Design characteristics and local conditions across study outcomes

	Mean	P25	P50	P75	Min	Max	N
Panel A: Employment (LFP)							
Max Transfer Size (% HH PP line)	0.21	0.09	0.18	0.27	0.05	0.51	26
Average Age	34.82	20.00	38.50	47.50	10.00	70.00	17
Adolescent fertility rate (births per 1000 women 15-19)	85.99	74.03	81.42	99.46	58.40	123.57	20
Share married 20-24	0.47	0.45	0.47	0.55	0.21	0.59	24
Panel B: Empowerment							
Decision Making							
Max Transfer Size (% HH PP line)	0.23	0.21	0.24	0.27	0.11	0.50	20
Average Age	29.50	29.50	29.50	29.50	29.50	29.50	3
Adolescent fertility rate (births per 1000 women 15-19)	86.31	74.45	77.86	91.28	68.76	129.21	23
Share married 20-24	0.50	0.45	0.47	0.50	0.45	0.67	23
Sex, Marriage and Fertility							
Max Transfer Size (% HH PP line)	0.35	0.25	0.27	0.44	0.08	0.98	27
Average Age	23.00	17.50	20.00	29.50	14.00	32.50	22
Adolescent fertility rate (births per 1000 women 15-19)	103.62	68.49	108.00	151.85	44.51	156.65	27
Share married 20-24	0.54	0.45	0.55	0.75	0.21	0.80	27
Gender Based Violence							
Max Transfer Size (% HH PP line)	0.24	0.15	0.21	0.30	0.09	0.48	20
Average Age	36.15	29.50	37.50	42.00	22.00	42.00	10
Adolescent fertility rate (births per 1000 women 15-19)	85.95	72.67	89.90	91.28	68.49	133.41	22
Share married 20-24	0.51	0.45	0.50	0.53	0.45	0.67	19

Note: Distribution of design characteristics (maximum transfer size, average age of recipient) and local market conditions (adolescent fertility rate and share of married women) across study outcome categories.

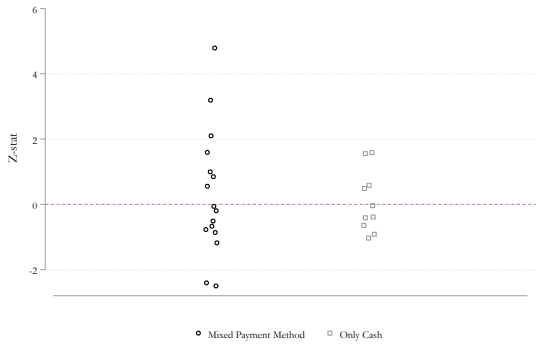
A.2 Heterogeneity across other design features

In figures A.1 and A.2, we plot the relationship between treatment effect estimates on employment and empowerment, respectively, and other cash transfer design features. In panel (a), we consider the distribution in precision-weighted treatment effects between cash transfers that only disburse cash vs ones that deliver transfers with mixed payment methods. In panel (b), we explore heterogeneity across cash transfer payments that are disbursed monthly versus less frequently than monthly (i.e. bimonthly, one-off yearly payments, quarterly). Panel (c) explores heterogeneity by whether the program has an explicit focus on empowering women in the program objectives. Panel (d) explores differences in treatment effects by whether the cash transfer was attached to any conditionality or if it was delivered unconditionally. Lastly, panel (e) illustrates treatment effects by the length of exposure to treatment[14]

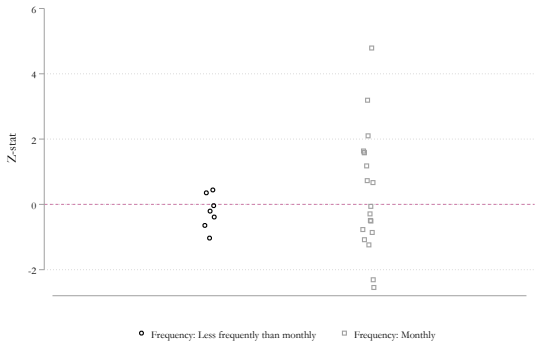
[14]We proxy the length of exposure to treatment using the number of years between the starting and ending year of the program evaluation. 9 out of the 56 studies in our sample also study the impact of cash transfer exposure to treatment effects directly, comparing treatment effects up to three years after the intervention. The evidence is inconclusive of whether longer exposure to cash transfers leads to larger welfare impacts.

Figure A.1: **Treatment Effects by Design Features, Employment**

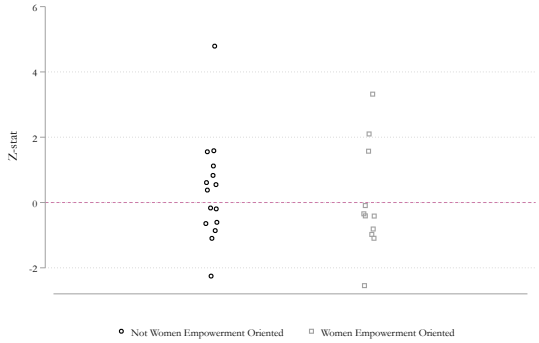
(a) Payment Method



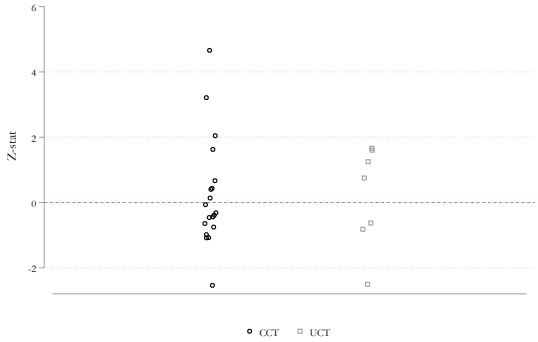
(b) Payment Frequency



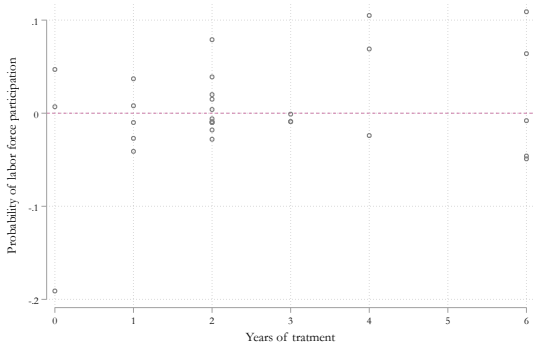
(c) Women Focused



(d) UCT vs CCT



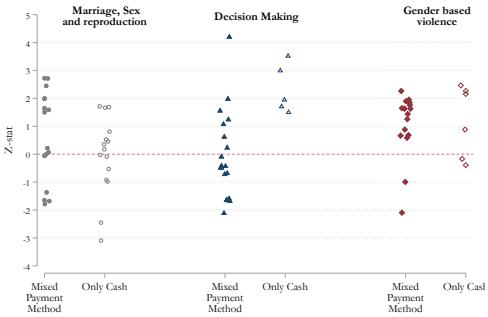
(e) Exposure to Treatment



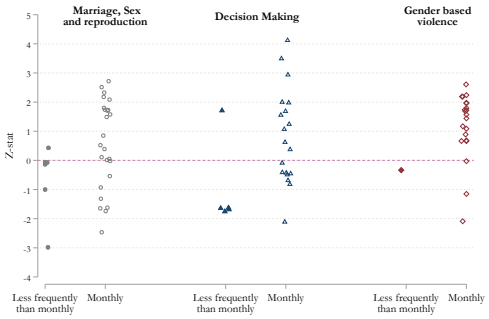
Note: Jitter plots of the variation in precision weighted treatment effects (z-statistics) on employment outcomes by design features. Main estimates only.

Figure A.2: **Treatment Effects by Design Features, Empowerment**

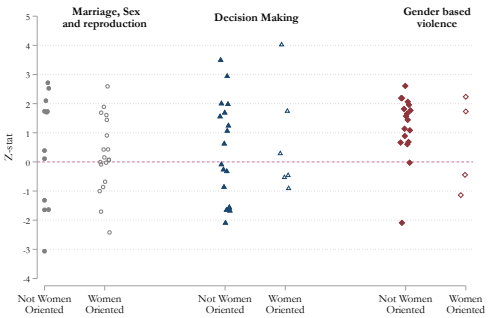
(a) Payment Method



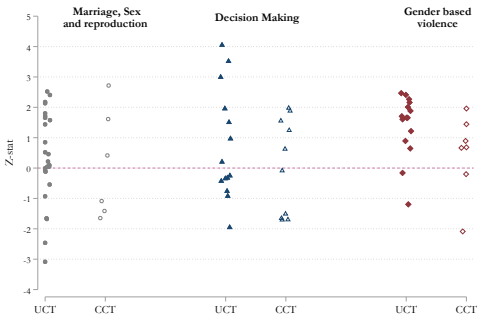
(b) Payment Frequency



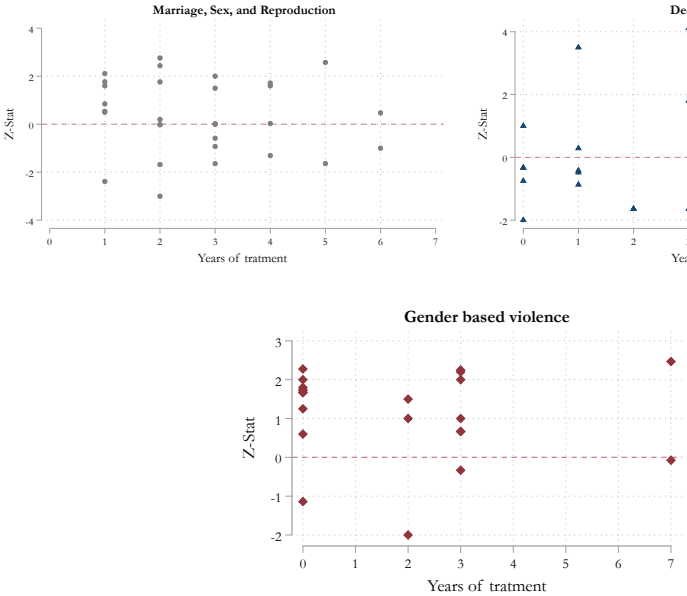
(c) Women Focused



(d) UCT vs CCT



(e) Exposure to Treatment

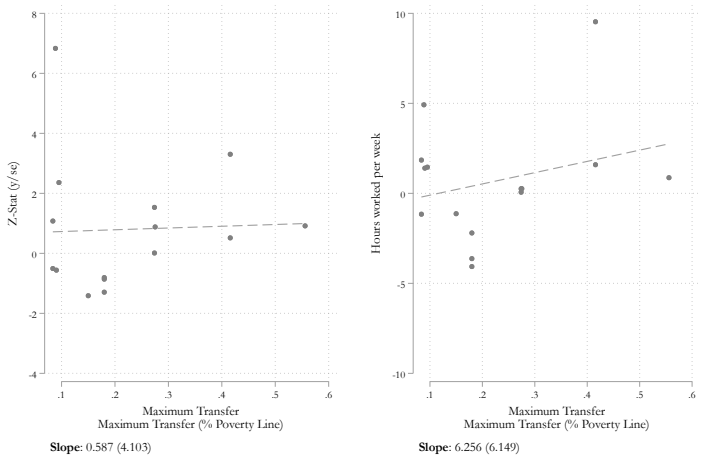


Note: Jitter plots of precision weighted treatment effects (z-statistics) on empowerment outcomes. Main estimates only.

A.3 Transfer size and the intensive margin of employment

In Figure A.3, we consider the relationship between the impact of cash transfers on hours worked (intensive margin) and the cash transfer size. Across the 14 studies that estimate the impact of cash transfers on hours worked, we observe a weakly positive relationship between hours worked per week and transfer size.

Figure A.3: Treatment effects on hours worked per week by transfer size



Note: Scatter with linear fit plot of the main effect estimates of cash transfers on women's hours worked and maximum transfer size as a percentage of the poverty line. Effect estimates are summarised in two ways. Left panel: precision-weighted treatment effect (z-statistic); Right panel: change in hours worked per week.

A.4 Robustness to other data sources

We collect data on (i) Female Labor Force Participation and (ii) Women who were first married by age 18, as a percentage of women ages 20-24 from the World Bank Development Indicators database. [15]

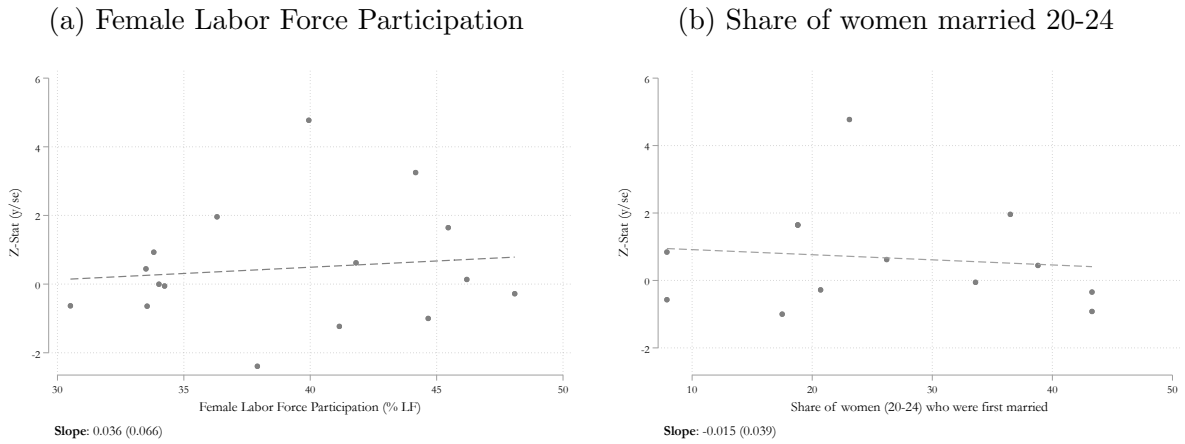
The findings for employment and empowerment are shown in figures A.4 and A.5. Panel (a) shows the Share of women in the labor force retrieved by the World Bank Development

[15]The World Bank Development Indicators database uses several sources for its data. (i) Estimates are based on data obtained from the International Labor Organization and the United Nations Population Division. (ii) Shares are calculated with data gathered from multiple sources (UNICEF Data; Demographic Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS), and other household surveys).

Indicators Database for each country-year in our sample. In Panel (b), we plot the share of women who were first married by age 18 as a share of women between ages 20-24) against the estimated treatment effect of labor force participation. The trends remain consistent with that from our main analysis.

Importantly, the JWD presents some advantages over the World Bank data, which is why we this data source for the bulk of our analysis. The World Bank Development Indicators Database is from multiple surveys that vary in both their questionnaires and recall periods for unemployment (e.g., "employment in the past 7 days" vs. "employment in the last 3 months"). The JWD harmonizes data from comparable census data (namely IPUMS and DHS) which allows for more accurate tracking of changes in the nature of employment and occupational structures over time. In addition, the JWD has better geographical coverage for Sub-Saharan Africa.

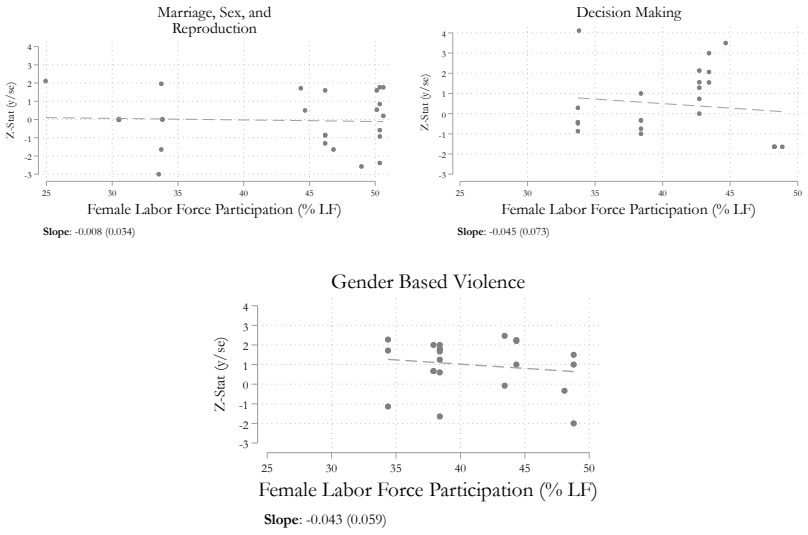
Figure A.4: **Treatment effects on women's labor force participation with cross country data from the World Bank Development Indicators**



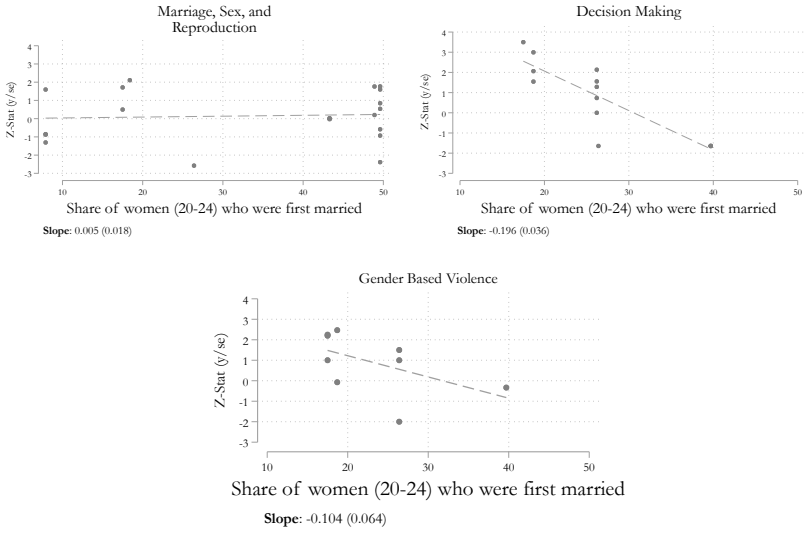
Note: Scatter with linear fit plot of the main effect estimates of cash transfers on women's empowerment outcomes and estimates of labor force participation from the World Bank Indicator Catalog Data: Treatment effects (authors' collected data from papers); Female Labor Force Participation (World Bank Indicator Catalog).

Figure A.5: **Treatment effects on women's empowerment with cross country data from the World Bank Development Indicators**

(a) Female Labor Force Participation



(b) Share of women 20-24 who were first married



Note: Scatter with linear fit plot of the main effect estimates of cash transfers on women's empowerment outcomes and share of women who were first married by the age of 18, as a share of all women aged 20-24 Data: Treatment effects (authors' collected data from papers); Share women married by age 18, as a share aged 20-24 (World Bank Indicator Catalog).

B Cash transfer programs in the meta-analysis

	Program	Country	Number of studies	Minimum transfer as % of the food poverty line	Maximum transfer % food poverty line	Minimum transfer USD	Maximum transfer USD	Randomization	Program conditionalities	Targeted population	Start year Program
1	Bono de Desarrollo Humano (BDH)	Ecuador	2	0.15	0.15	37.54	37.54	Yes		Households with children, People in old age, People with disabilities, Poor households	2003
2	Bolsa Escola	Brazil	1	0.03	0.10	13.87	41.61	No	Social services, School enrollment, School attendance	Households with children, Poor households	2001
3	Bolsa Familia	Brazil	2	0.03	0.21	12.71	77.08	No	Social services, School enrolment, School attendance, Health, Nutritional activities	Households with children, Poor households	2003
4	Bono Vida Mejor	Honduras	1	0.06	0.11	43.36	86.71	Yes	Social services, School enrolment, School attendance, Health, Children immunization	Poor households	2010
5	Child Support Grant - Foster Child Grant (CSG-FG)	South Africa	1	0.17	0.98	54.31	310.68	No		Households with children, Poor households	1998
6	Familias en Accion	Colombia	2	0.04	0.56	17.88	222.07	No	Social services, School enrollment, School attendance, Health, Nutritional activities	Poor households	2001
7	Give Directly	Kenya	1	0.30	0.30	78.60	78.60	Yes		Poor households	2009
8	The Hunger Safety Net Pilot Programme (HSNP)	Kenya	1	0.25	0.50	69.96	139.92	Yes		Households with children, People in old age, People with disabilities, Poor households	2009
9	Juntos	Peru	4	0.15	0.15	73.66	73.66	No	Social services, School enrolment, School attendance, Health, Nutritional activities	Households with children, Poor households	2005
10	Child Grants Programme (CGP)	Lesotho	1	0.06	0.06	14.01	14.01	Yes		Households with children, Poor households	2011
11	Livelihood Empowerment Against Poverty programme (LEAP)	Ghana	1	0.05	0.09	10.27	19.26	No	Social services, School enrollment, School attendance, Health, Children immunization	People in old age, People with disabilities, Poor households	2010
12	Malawi Incentives Project (MIP)	Malawi	1	0.09	0.75	11.00	87.99	Yes	Health	People of reproductive age, Poor households	2003

Note: NA=Missing food poverty line.

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13	Cash Transfer for Orphans and Vulnerable Children (CT-OVC)	Kenya	2	0.25	0.25	63.56	63.56	Yes		Households with children, People with disabilities, Poor households	2004
14	Punjab Female School Stipend Program (PFSSP)	Pakistan	1	NA	NA	18.11	51.27	No	School enrollment, School attendance	Households with children, Women	2003
15	Plan de Atencion Nacional a la Emergencia Social (PANES)	Uruguay	2	NA	NA	125.54	125.54	No	Social services, School enrollment, School attendance, Health	Poor households	2005
16	Programa de Asignación Familiar II (PRAF II)	Honduras	5	0.01	0.08	11.61	66.48	Yes	Social services, School enrollment, School attendance, Health, Nutritional activities	Households with children, People with disabilities, Poor households	1990
17	Programa Jefes de Hogar	Argentina	1	NA	NA	131.00	262.01	No	Social services, School enrolment, School attendance, Health, Labour supply	Households with children, Disabled people, People of working age	2002
18	Progresa	Mexico	13	0.05	0.28	24.33	148.68	Yes	Social services, School enrolment, School attendance, Health, Nutritional activities	Households with children, Women, Poor households	1997
19	Red de Oportunidades (RdO)	Panama	1	NA	NA	80.35	80.35	No	Social services, School enrolment, School attendance, Health	Households with children, People in old age, People with disabilities, Poor households	2006
20	Red de Proteccion Social (RPS)	Nicaragua	7	0.06	0.18	30.68	92.04	Yes	Social services, School enrollment, School attendance, Health, Children immunization	Households with children, Women, Poor households	2000
21	Old Age Pension / State Old Age Pension (SOAP)	South Africa	2	0.27	0.27	141.68	141.68	Yes		People in old age, Poor households	1928
22	Uganda Social Assistance Grants for Empowerment (SAGE)	Uganda	1	0.11	0.11	23.22	23.22	Yes		Households with children, People in old age, People with disabilities, Poor households	2015

Note: NA=Missing food poverty line.

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23	Programa Solidaridad	Dominican Republic	1	0.09	0.31	36.54	119.96	No	Social services, School enrolment, School attendance, Health	Households with children, Women, Poor households	2012
24	Social Risk Mitigation Project (SRMP)	Turkey	1	0.04	0.45	23.96	303.95	No	School enrolment, School attendance, Health	Households with children, poor households	2005
25	Universal Child Allowance	Argentina	1	NA	NA	69.09	345.43	No	School enrolment, Health, Children immunization	Households with children	2009
26	World Food Programme Cash Transfer (WFP-CT)	Ecuador	2	0.24	0.24	73.03	73.03	Yes	School attendance, Nutritional activities	Poor households, Households that suffered shocks	2010
27	Women's Income Generating Support (WINGS)	Uganda	1	0.09	0.09	24.51	24.51	Yes		Women, Poor households	2009
28	Youth Opportunities Program (YOP)	Uganda	2	0.18	0.42	51.20	117.03	Yes	Social services	People of working age	2005
29	Zomba Cash Transfer Program	Malawi	3	0.10	0.35	12.11	42.04	Yes	School enrollment, School attendance	Households with children, Women	2007
30	Programa Apoyo Alimentario (PAL)	Mexico	1	0.05	0.05	23.47	23.47	Yes	School enrollment, School attendance	Households with children, Poor households	2007

Note: NA = No data available on the food poverty line.

C Studies and programs in the meta-analysis

	Country	Program	Study	Methodology	Eval. start year	Eval. end year	Labor force participation	Intensity of work	Decision making	Sex, marriage, reprod.	Gender based violence	Others
1	Argentina	Programa Jefes de Hogar	Galasso and Ravallion (2003)	Observational	2001	2002	1	0	0	0	0	1
2	Argentina	Universal Child Allowance	Maurizio and Vázquez (2014)	Observational	2010	2009	6	3	0	0	0	6
3	Brazil	Bolsa Escola	Ferro and Nicollela (2007)	Observational	2003	2003	4	2	0	0	0	0
4	Brazil	Bolsa Familia	Teixeira (2010)	Observational	2006	2003	1	1	0	0	0	0
5	Brazil	Bolsa Familia	de Brauw et al. (2014)	Observational	2009	2005	0	0	8	0	0	0
6	Colombia	Familias en Accion	Barrientos and Villa (2013)	Observational	2006	2010	1	0	0	0	0	0
7	Colombia	Familias en Accion	Ospina (2010)	Observational	2006	2002	0	1	0	0	0	0
8	Dominican Republic	Programa Solidaridad	Canavire-Bacarreza and Vásquez-Ruiz (2013)	Observational	2010	2010	3	0	0	0	0	0
9	Ecuador	BDH	Edmonds and Schady (2012)	Experimental	2003	2003	4	0	0	0	0	0
10	Ecuador	BDH	Hidrobo and Fernald (2013)	Experimental	2006	2003	0	0	0	0	3	0
11	Ecuador	WFP cash transfer	Hidrobo et al. (2012)	Experimental	2011	2011	0	0	6	0	6	0
12	Ecuador	WFP cash transfer	Hidrobo et al. (2013)	Experimental	2011	2011	0	0	0	0	5	0
13	Ghana	Livelihood Empowerment Against Poverty programme (LEAP)	Handa et al. (2014b)	Observational	2012	2011	1	2	0	0	0	0
14	Honduras	Bono Vida Mejor	Benedetti et al. (2016)	Experimental	2010	2013	1	0	0	0	0	
15	Honduras	PRAF II	Alzúa et al. (2013)	Observational	2000	2002	1	1	0	0	0	0
16	Honduras	PRAF II	Galiani and McEwan (2013)	Experimental	2001	2002	2	0	0	0	0	0
17	Honduras	PRAF II	Stecklov et al. (2006)	Observational	2000	2002	0	0	0	3	0	0
18	Honduras	PRAF II	Stecklov et al. (2007)	Observational	2000	2002	0	0	0	4	0	0
19	Honduras	PRAF II	Novella et al. (2012)	Observational	2000	2002	1	1	0	4	0	0

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20	Kenya	Cash Transfer for Orphans and Vulnerable Children (CT-OVC)	Asfaw et al. (2014)	Experimental	2007	2011	1	1	0	1	0	0
21	Kenya	Cash Transfer for Orphans and Vulnerable Children (CT-OVC)	Handa et al. (2014a)	Experimental	2007	2009	0	0	0	1	0	0
22	Kenya	Give Directly	Haushofer et al. (2015)	Experimental	2011	2013	0	0	0	0	3	0
23	Kenya	The Hunger Safety Net Pilot Programme (HSNP)	Merttens et al. (2013)	Both	2009	2012	0	0	3	0	0	0
24	Lesotho	Child Grants Programme	Daidone et al. (2014)	Observational	2011	2013	3	0	0	0	0	0
25	Malawi	M-IP	Kohler and Thornton (2011)	Experimental	2006	2004	0	0	0	3	0	
26	Malawi	Zomba Cash Transfer Program	Baird et al. (2009)	Observational	2007	2008	0	0	0	6	0	0
27	Malawi	Zomba Cash Transfer Program	Baird et al. (2011)	Observational	2007	2010	0	0	0	11	0	0
28	Malawi	Zomba Cash Transfer Program	Baird et al. (2012)	Experimental	2008	2009	0	0	0	4	0	0
29	Mexico	Progresa	Adato et al. (2000)	Observational	1998	1999	0	0	7	0	0	0
30	Mexico	Progresa	Alzúa et al. (2013)	Observational	1997	1999	3	2	0	0	0	0
31	Mexico	Progresa	Behrman and Parker (2013)	Observational	1997	2003	3	0	0	0	0	0
32	Mexico	Progresa	Behrman et al. (2011)	Observational	1997	2003	3	0	0	0	0	0
33	Mexico	Progresa	Behrman et al. (2012)	Observational	2002	2004	4	0	0	0	0	0
34	Mexico	Progresa	Bobonis et al. (2013)	Observational	2003	2003	0	0	0	0	3	0
35	Mexico	Progresa	Feldman et al. (2009)	Observational	1998	2003	0	0	0	3	0	0
36	Mexico	Progresa	Handa et al. (2009)	Observational	1997	2000	0	0	2	0	0	0
37	Mexico	Progresa	Parker and Skoufias (2000)	Observational	1997	1999	9	0	0	0	0	0
38	Mexico	Progresa	Rubio-Codina (2009)	Experimental	1997	2003	8	8	0	0	0	0
39	Mexico	Progresa	Stecklov et al. (2006)	Observational	1997	2000	0	0	0	4	0	0
40	Mexico	Progresa	Stecklov et al. (2007)	Observational	1997	2000	0	0	0	3	0	0
41	Mexico	Progresa	Novella et al. (2012)	Observational	1997	1999	1	1	0	3	0	0

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42	Nicaragua	Red de Proteccion Social	Novella et al. (2012)	Observational	2000	2003	1	1	0	0	0	0
43	Nicaragua	Red de Proteccion Social	Alzúa et al. (2013)	Observational	2000	2002	2	2	0	0	0	0
44	Nicaragua	Red de Proteccion Social	Bustelo (2011)	Observational	2000	2006	2	0	0	0	0	0
45	Nicaragua	Red de Proteccion Social	Maluccio and Flores (2005)	Observational	2000	2002	0	2	0	0	0	0
46	Nicaragua	Red de Proteccion Social	Stecklov et al. (2006)	Observational	2000	2002	0	0	0	4	0	0
47	Nicaragua	Red de Proteccion Social	Stecklov et al. (2007)	Observational	2000	2002	0	0	0	2	0	0
48	Nicaragua	Red de Proteccion Social	Todd et al. (2010)	Both	2000	2004	0	0	0	2	0	0
49	Pakistan	PFSSP	Andaleeb et al. (2011)	Observational	2003	2009	2	2	0	5	0	0
50	Panama	Red de Oportunidades	Arraiz and Rozo (2011)	Observational	2006	2008	0	0	0	6	0	0
51	Peru	Juntos	Alcázar-Valdivia and Espinoza-Iglesias (2017)	Observational	2002	2009	0	0	4	0	6	0
52	Peru	Juntos	Perova (2010)	Observational	2005	2008	0	0	0	0	3	0
53	Peru	Juntos	Perova and Vakis (2010)	Observational	2006	2007	1	1	1	2	0	0
54	Peru	Juntos	Perova and Vakis (2012)	Observational	2009	2005	0	0	0	1	0	0
55	South Africa	CSG - FG	Cluver et al. (2013)	Observational	2009	2012	0	0	0	2	0	0
56	South Africa	Old Age Pension / State Old Age Pension (SOAP)	Ardington et al. (2009)	Observational	2001	2004	1	0	0	0	0	0
57	South Africa	Old Age Pension / State Old Age Pension (SOAP)	Siaplay (2012)	Observational	2002	2006	4	0	0	8	0	0
58	Turkey	SRMP	Ahmed et al. (2006)	Observational	2005	2006	0	0	0	1	0	0
59	Uganda	Uganda Social Assistance Grants for Empowerment (SAGE)	Merttens et al. (2015)	Observational	2012	2014	0	0	6	0	0	0
60	Uganda	WINGS	Green et al. (2015)	Observational	2009	2012	1	1	1	0	2	0
61	Uganda	YOP	Blattman et al. (2012)	Experimental	2006	2008	1	1	0	0	0	0
62	Uganda	YOP	Blattman et al. (2013)	Experimental	2006	2008	0	1	0	0	0	0
63	Uruguay	Plan de Atencion Nacional a la Emergencia Social (PANES)	Borraz and González (2009)	Observational	2006	2007	0	1	0	0	0	0
64	Uruguay	Plan de Atencion Nacional a la Emergencia Social (PANES)	Amarante et al. (2016)	Observational	2005	2007	1	0	0	0	0	1